

Türkiye dossier summary

Irrigation water, climate, fertilisers and crops. The essentials of the 24-page dossier.

Key figures

Figure	What it means
8.63 bn m³	Water saved per year in the central scenario, or 15.4% of agricultural withdrawals. Range of 4.3 to 17.3 billion m³ a year.
756 000 ha	Extra irrigable area with the same water, at 11,404 m³ per irrigated hectare.
6.82 Mt	Production gain in the central scenario, for the crops where a trial is cited.
4.91 M ha	Area actually irrigated in 2024 (FAOSTAT); DSİ puts the irrigable area at 8.5 million hectares.
56.0 km³	Water withdrawn by agriculture (2022), or 87% of total withdrawals.
30.7 bn$	Agricultural exports in 2024, including $1,503 million of shelled hazelnuts; imports: $23.1 bn.
1.92 Mt	Mineral nitrogen used in agriculture (FAOSTAT, latest year).

Bn = billion · M = million · Mm³ = million cubic metres · t = tonnes. The water savings are scenarios built from the trials cited.

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 water as a gel, near the roots.	Trials on maize (Türkiye), 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.	Published certificate; potato trial with EVERGREEN®. Levels A and C.
Paulownia ALTIFOLIA®	Fast-growing tree for agroforestry.	Website figures; no trial in Türkiye. Level C.

Key points

- **Wheat dominates the land.** 6.93 million hectares harvested in 2024, almost always without irrigation.
- **Maize has its trial in Türkiye itself.** At the TIGEM state farm in Konya (2025): Irrigation −38.9%, yield +17.1%. Maize accounts for 20% of the central saving.
- **Vegetables give the largest saving.** 2,524 Mm³ a year in the central scenario, on 732 000 ha.
- **A very contrasted climate.** Konya, on the central plateau, gets three times less rain than Bursa or Samsun; the Southeast has the largest water deficit.

- **Importing from Switzerland.** 0% customs duty for goods originating in EFTA (6.5% under the general tariff); 20% VAT; registration with the Ministry of Agriculture (BÜGEM).

The regions at a glance

Region (city)	Rainfall (mm/yr)	Deficit (mm/yr)	Temperature (°C)
Thrace (Edirne)	540	606	14.1
Marmara (Bursa)	861	177	15.0
Aegean (Manisa)	698	609	16.9
Mediterranean (Adana)	718	615	18.4
Central Anatolia (Konya)	299	1,029	12.5
Black Sea (Samsun)	856	68	13.8
Eastern Anatolia (Erzurum)	624	369	5.8
Southeastern Anatolia (Şanlıurfa)	491	1,181	18.2

How to read the figures

Each figure refers to a source with a confidence level. A: Official statistics or international database (World Bank, FAO, Turkish 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.

Water saved by crop group (central scenario)

Crop group	Irrigated area (ha)	Water saved (Mm^3/yr)	Trial or assumption
Vegetables and melons	731,538	2,524	Watermelon, Mexico (2023)
Grain maize	789,379	1,755	Maize, Türkiye (TIGEM, 2025)
Orchards and vineyards (apple, apricot, citrus, cherry, grape…)	1,140,917	1,301	Generic assumption
Other irrigated crops (wheat, sunflower, fodder, olives…)	1,026,900	1,171	Generic assumption
Potato and onion	261,437	775	Potato, South Africa (2025)
Cotton	466,927	533	Generic assumption
Sugar beet	324,286	370	Generic assumption
Rice (paddy)	128,904	147	Generic assumption
Soybean	43,712	50	Yield: Soybean, China

Trade

- **First products exported.** Shelled hazelnuts ($1,503 million), crude sunflower oil and wheat flour, out of $30.7 bn of agricultural exports.
- **Main imports.** Soybeans ($1,766 million), cotton lint, wheat and crude sunflower oil, for the processing industry.

Full dossier: 24 pages, with the sources (Annex A) and the calculation method (Annex B). Green Solutions · contact@green-solutions-group.com · green-solutions-group.com