

Peru dossier summary

Water, climate, fertilisers and crops. The essentials of the 29-page dossier.

Key figures

Figure	What it means
+30,628 t	Of extra potato per 10,000 ha treated, central scenario (15,314 to 61,256 t depending on the scenario).
+3,126 t	Of extra maize per 10,000 ha treated, central scenario (1,563 to 6,251 t depending on the scenario).
461,207 ha	Of maize (corn) harvested in 2024, the main crop (FAOSTAT).
2,579,770 ha	Equipped for irrigation, out of 6,197,050 ha of cropland (FAOSTAT).
2,443.7 Mm³	Irrigation water saved per year in the central scenario, enough to irrigate about 298,613 more ha.
222,210 t	Mineral nitrogen used in 2024, all imported.
12,426 M$	Of agricultural exports in 2024, for $6,515 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 Peru.

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 Peru. Level C.

Key points

- **Irrigation, a pillar of production.** 2,579,770 ha equipped for irrigation, or 41.6% of cropland: Every cubic metre saved frees water for other plots.
- **Where water is scarcest.** National water stress is 4.8%; Piura gets 191 mm of rain for 2,158 mm of evapotranspiration.
- **Rainfed crops quantified.** For potato and maize, a published trial makes it possible to quantify a yield gain.
- **In irrigation.** The "other irrigated land" group gives 50% of the water saved (generic assumption, no trial).

- **Importing into Peru.** Duty of 0 to 6% depending on the line of subheading 3906.90 (average 4.5%), often zero under trade agreements; 18% IGV; a draft fertiliser regulation published in 2023, not yet adopted according to the sources consulted.

The regions at a glance

Region (city)	Rainfall (mm/yr)	Deficit (mm/yr)	Temperature (°C)
Tumbes (Tumbes)	433	1,133	24.7
Piura (Piura)	191	1,967	25.4
Lambayeque (Chiclayo)	89	1,023	20.5
La Libertad (Trujillo)	195	1,237	17.9
Cajamarca (Cajamarca)	476	807	14.3
Amazonas (Chachapoyas)	571	578	17.0
San Martín (Moyobamba)	1,080	55	22.1
Loreto (Iquitos)	2,837	-1,628	25.7
Áncash (Huaraz)	429	720	8.1
Huánuco (Huánuco)	659	288	9.7
Pasco (Cerro de Pasco)	347	666	7.1
Ucayali (Pucallpa)	1,424	-166	26.8
Lima Region (Huacho)	71	1,291	19.3
Lima Province (Lima)	25	1,345	18.2
Junín (Huancayo)	383	737	8.7
Huancavelica (Huancavelica)	359	629	5.2
Ica (Ica)	73	1,659	18.6
Ayacucho (Ayacucho)	560	589	9.2
Apurímac (Abancay)	731	415	11.9
Cusco (Cusco)	696	316	8.3
Madre de Dios (Puerto Maldonado)	1,948	-752	25.3
Arequipa (Arequipa)	138	1,439	10.9
Puno (Puno)	406	953	7.9
Moquegua (Moquegua)	124	1,317	7.2
Tacna (Tacna)	48	1,525	15.0

How to read the figures

Each figure refers to a source with a confidence level. A: Official statistics or international database (World Bank, FAO, Peruvian public bodies (INEI, MIDAGRI, SENASA, National Water Authority ANA)). 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)
Potato	19.51	15,314	30,628	61,256
Maize	3.66	1,563	3,126	6,251

Trade

- **Main products exported.** Other berries, grapes and avocados, out of $12,426 million of agricultural exports in 2024.
- **Main imports.** Maize (corn), soya bean cake and wheat, out of $6,515 million of agricultural imports.

Full dossier: 29 pages, with the sources (Annex A) and the calculation method (Annex B). Green Solutions · contact@green-solutions-group.com · green-solutions-group.com