

Agriculture

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An overview

INDICATORS	Year	Agricultural land (sq. km)		Agricultural land (% of land area)		Able land (% of land area)		Permanent cropland (% of land area)		Fertilizer consumption (kilograms per hectare of arable land)		Agricultural methane emissions (thousand metric tons of CO ₂ equivalent)		Agricultural nitrous oxide emissions (thousand metric tons of CO ₂ equivalent)		Livestock production index (2014-2016 = 100)		Crop production index (2014-2016 = 100)		Food production index (2014-2016 = 100)		
		2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022
PRT	Portugal	39,198	428	10.2	9.5	116.3	5,270	1,790	104.8	137.0	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2	123.2
ESP	Spain	266,634	53.4	23.4	10.2	110.6	27,350	13,400	114.2	85.2	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
FRA	France	283,045	51.7	34.1	1.9	119.0	42,510	25,410	91.5	98.8	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
ITA	Italy	130,008	44.0	24.0	8.1	113.9	23,190	9,810	100.5	89.6	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
SVN	Slovenia	6,107	30.3	8.9	2.7	215.9	1,110	500	103.3	81.7	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
HRV	Croatia	14,480	25.9	15.2	1.4	188.6	1,350	1,060	92.0	84.7	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
GRC	Greece	57,120	44.3	14.1	8.0	146.7	4,090	2,820	94.6	95.5	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
MLT	Malta	88	27.3	24.4	3.0	100.6	60	20	95.2	52.7	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
CYP	Cyprus	1,230	13.3	10.3	2.8	127.7	220	210	121.7	81.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3
SRB	Serbia	34,680	41.3	30.9	2.5	141.4	3,380	2,870	104.5	104.0	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3
XKX	Kosovo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
BIH	Bosnia and Herzegovina	22,630	44.2	19.7	2.1	59.3	1,400	760	75.2	122.5	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7
MNE	Montenegro	2,540	18.9	0.7	0.4	191.0	280	80	107.6	84.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
MKD	North Macedonia	12,570	49.8	16.5	1.6	44.7	740	310	77.1	82.1	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
ALB	Albania	11,366	41.5	21.8	3.2	38.4	1,620	640	77.8	115.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
TUR	Turkey	384,820	50.0	26.2	4.8	114.6	28,020	26,040	134.7	123.3	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.6
SYR	Syrian Arab Republic	148,483	80.2	23.8	5.6	6.4	3,860	2,320	102.7	116.9	112.3	112.3	112.3	112.3	112.3	112.3	112.3	112.3	112.3	112.3	112.3	112.3
LBN	Lebanon	6,793	66.4	13.6	13.7	121.2	380	440	110.7	96.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
JOR	Jordan	9,225	10.4	2.3	0.9	98.2	670	540	134.2	98.6	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9
ISR	Israel	6,866	29.5	17.2	4.7	265.4	730	790	115.5	95.0	107.2	107.2	107.2	107.2	107.2	107.2	107.2	107.2	107.2	107.2	107.2	107.2
PSE	West Bank and Gaza	3,912	64.9	7.0	11.8	372.0	..	..	102.7	130.8	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0	119.0
EGY	Egypt, Arab Rep.	40,380	4.1	3.1	1.0	538.0	12,060	12,460	116.7	112.6	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7
LYB	Libya	153,900	8.7	1.0	16.3	106.0	1,860	1,170	118.5	99.8	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0
TUN	Tunisia	97,005	62.4	18.2	13.6	52.1	2,290	2,240	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
DZA	Algeria	413,010	17.3	3.2	0.4	20.7	8,010	5,020	104.6	123.3	116.6	116.6	116.6	116.6	116.6	116.6	116.6	116.6	116.6	116.6	116.6	116.6
MAR	Morocco	302,910	67.9	16.8	4.0	53.5	8,350	6,490	102.1	94.1	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6

(..) Data not available.

(a) 2021 for Israel and West Bank and Gaza.

Source: Food and Agriculture Organization (FAO), World Resources Institute (WRI), World Bank Development indicators.

Some highlighted topics

Healthy, sustainable and inclusive food systems are key to agricultural progress in Mediterranean countries. European and international strategies — such as the New Agenda for the Mediterranean and the 2030 Agenda for Sustainable Development — are increasingly focusing on climate change mitigation, emissions reduction and more responsible management of natural resources. The Mediterranean region is characterized by highly diverse agricultural systems. In North African countries, irrigated crops prevail, often necessary to cope with arid climatic conditions; in contrast, European Union Member States have adopted more sustainability-oriented policies, with an increase in environmentally friendly agricultural practices. This diversity requires differentiated approaches that can respond to specific local needs and promote a shared transition towards more sustainable agricultural models.

Agricultural areas. Compared to the total agricultural land in the Mediterranean area — approximately 2.45 million km² — North Africa has the largest share, with over 40% (more than 1 million km²). This is followed by the countries of the European Union with approximately 32%, the Middle East with 23% and, finally, the Western Balkans, which represent a very small share of around 3%.

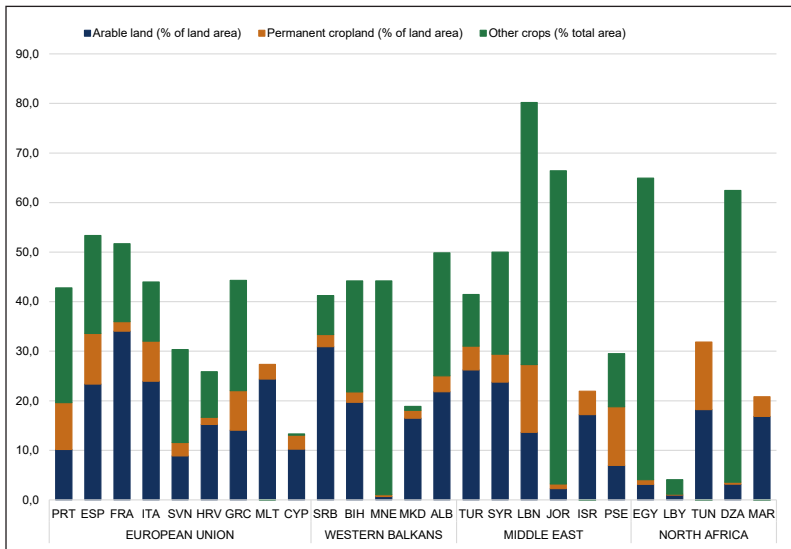
Looking at the proportion of agricultural land within individual countries, significant differences emerge. In the European Union, Spain and France

have the highest proportions, both over 50%, while Italy stands at around 44%. In the Western Balkans, Serbia and Bosnia stand out, with significant absolute values and proportions exceeding 40%. In the Middle East, Syria has an extremely high share of around 80%, followed by Turkey with 50%. In North Africa, Algeria, despite having the largest agricultural area in absolute terms in the entire region, has a relatively low incidence on its total area (17.3%), while Morocco — the third largest country in terms of agricultural area in the area — has a very high share even in relative terms (67.9%). In summary, the Middle East is the macro-area with the highest incidence of agricultural land in relation to total territory (over 50%), followed by the European Union (around 48%). The Western Balkans show a slightly lower percentage, while North Africa stands out with a significantly lower percentage of around 18%.

Over the last twenty years, the proportion of agricultural land in relation to total land area has remained stable overall in most of the main countries in the Mediterranean region. The most significant decreases have been recorded in Italy, Spain, Greece, Serbia and Palestine, while significant increases have been seen in Slovenia, Croatia, Syria and Lebanon.

Arable crops are the main component of Mediterranean agricultural land: in the European Union, the Western Balkans and the Middle East, they account for around a quarter of the total area, while in North Africa their share is very low, at around 4%.

Fig. 1. Agricultural area by type of cultivation. Year 2022 (% of total area).



Source: Food and Agriculture Organization (FAO) and World Bank Development Indicators based on FAO data.

Within the EU, Spain and Italy have the highest proportions of both arable land and woody crops in relation to their total land area: the former exceeds 20%, while woody crops range between 8% and 10%. France, on the other hand, stands out for its particularly high proportion of arable crops, which exceed 30%, the highest in the entire Mediterranean region.

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In the Western Balkans, Serbia, Bosnia and Herzegovina and Albania have significant shares of arable land, ranging from 20% to 30%. In the Middle East, similar values are recorded for Turkey and Syria, where arable land covers about a quarter of the territory. On the North African side, Tunisia and Morocco show significant incidences, albeit slightly below 20%.

As regards woody crops, Lebanon, Tunisia and Palestine are the countries with the highest proportions in the Mediterranean area, all above 10%. Among the EU countries, Spain remains in a prominent position with a share of 10%.

Sustainability in agriculture. To promote a genuine ecological transition, sustainable agriculture must reduce

the use of pesticides and fertilizers and limit greenhouse gas emissions. In the Mediterranean region, fertilizer consumption per hectare of arable land has been on a downward trend since 2007–2008, albeit with varying intensity between countries and macro-areas. Within the European Union, Portugal is the only exception, recording an increase in fertilizer use over the twenty-year period. Spain shows substantial stability, while France and Italy show a more virtuous path, with a steady reduction in consumption. France has gone from 227.7 kg per hectare in 2001 to 119.0 kg in 2022; Italy from 168.6 to 113.9 kg.

In the Western Balkans, Montenegro stands out for a sharp increase in fertilizer use since 2013, followed, however, by a reduction in 2022. In the Middle East, Palestine has high and growing consumption levels, while Lebanon

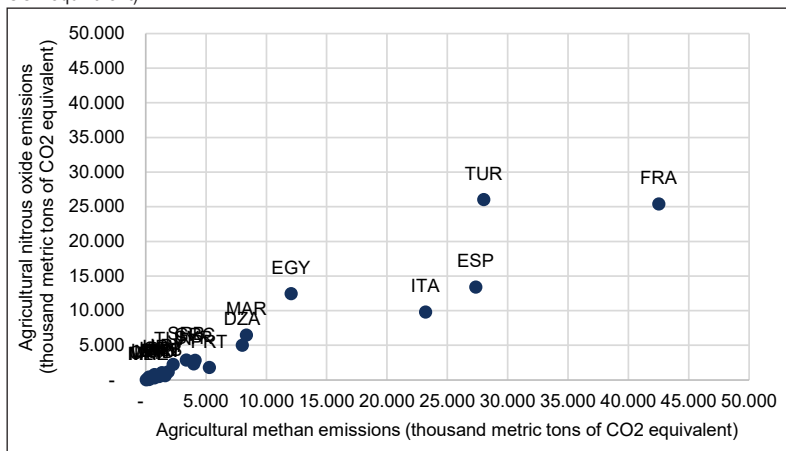
shows a more sustainable trend, with a significant decrease over the period considered.

Finally, in North Africa, Egypt represents the most critical case: over the twenty-year period, it has maintained average annual values above 500 kg per hectare of arable land, placing it at the highest levels in the Mediterranean area.

Similar to what has been observed for fertilizer consumption, agricultural emissions — consisting mainly of methane and nitrous oxide — are also a significant source of greenhouse gases (Figure 2). In absolute terms, the countries with the highest emissions generally coincide with the largest countries in the Mediterranean area, although they show different trends over time.

Within the European Union, France has particularly high levels in 2022:

Fig. 2. Methane and nitrous oxide emissions in agriculture. Year 2022 (thousands of metric tons CO₂ equivalent).



Source: World Resources Institute (WRI).

methane emissions are close to 45,000 thousand tonnes of CO₂ equivalent, while nitrous oxide emissions are around 25,000. However, both indicators are down compared to the beginning of the period observed. Italy and Spain record lower values and show a more stable trend: methane emissions remain virtually constant between 2001 and 2022, while nitrous oxide emissions show a slight decline. In the Middle East, Turkey stands out, with high emissions of both methane — close to 28,000 thousand tonnes — and nitrous oxide, reaching 26,000 in 2022. Both figures have increased by about 50% compared to 2001.

Among North African countries, Egypt continues to have the most critical levels: in 2022, methane emissions will exceed 12,000 thousand tonnes (down from around 16,000 in 2001), while nitrous oxide emissions will remain stable at around 12,000 thousand tonnes throughout the twenty-year period.

Food production, plant and animal. The food production index developed by the World Bank measures changes in food production volumes — including food crops considered edible and containing nutrients, calculated as price-weighted quantities — relative to a base period (2014–2016 = 100). Its dynamics reflect political and economic choices, as well as technological progress in the agricultural sector.

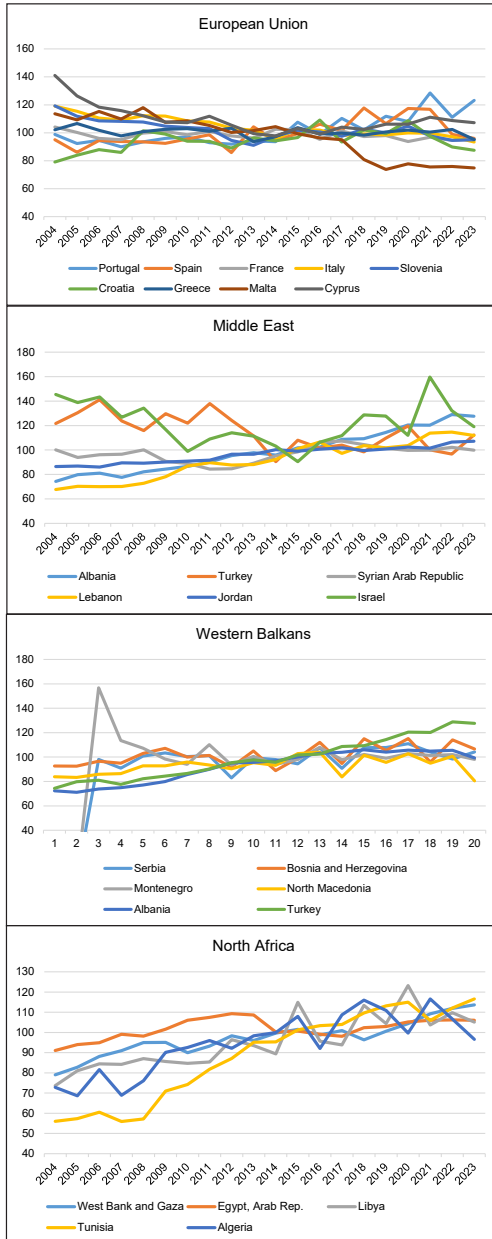
In European Union countries, there is a downward trend in food production between 2001 and 2023. The exceptions are Portugal, Spain and Croatia, which show an increase in the index:

Portugal from 93.2 to 123.2, Spain from 92.3 to 96.0 and Croatia from 76.3 to 87.5 (Figure 3). In contrast, the North Africa macro-region shows a general increase in the index, reflecting the growing importance of food production. In the Middle East, two distinct patterns emerge: Palestine remains fairly stable at around 120, while the other countries show a marked upward trend.

As regards the crop production index (which includes all crops except fodder crops), within the EU there has been a particularly significant increase in Portugal, rising from 87.7 to 137.0 between 2001 and 2023. In contrast, Malta, Cyprus and Italy have experienced the most pronounced declines. In the Western Balkans, Albania recorded strong growth, rising from 53.2 to 115.7, while in North Africa all countries showed positive changes, especially Tunisia, Algeria and Morocco.

The livestock production index (including meat, milk and dairy products) shows more irregular fluctuations in EU countries, with generally moderate variations, except for Spain and Croatia, where there has been a significant increase over the twenty-year period. In contrast, the trend is markedly expansive in all macro-regions of the Western Balkans, the Middle East (with the sole exception of Palestine) and North Africa.

Fig. 3. Food production index by macro-region
Period 2004/2023 (2014-2016 =100).



Source: Food and Agriculture Organization (FAO), World Bank (WB) (WB).