



Food and Agriculture Organization
of the United Nations

Aquaculture growth potential in Morocco

WAPI factsheet to facilitate evidence-based
policy-making and sector management in
aquaculture

November 2024
Rome, Italy

World Aquaculture Performance Indicators (WAPI)

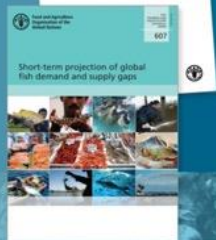
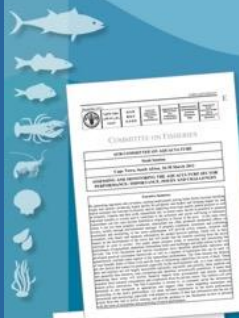
WAPI is an FAO initiative to develop user-friendly tools for compiling, generating and providing easy access to quantitative information on aquaculture sector performance at the national, regional and global levels. WAPI information and knowledge products include data analysis tools, technical papers and policy briefs.

Data analysis tools

– **WAPI Aquaculture Production Module (WAPI-AQPRN)** analyses the status and trends of aquaculture production (quantity and value) of over 650 species items in nearly 250 countries and areas under different farming environments (inland waters, marine areas and all areas) for seven decades, from the 1950s to the 2010s.

– **WAPI Fish Consumption Module (WAPIFISHCSP)** includes 10 indicators – three nutrition indicators and seven food indicators – to examine food supply and utilization patterns (with a focus on the contribution of fish to food and nutrition) in 270 countries and areas for six decades, from the 1960s to the 2010s. The module focuses on 14 fish/seafood items, but also includes 26 nonfish/seafood items.

Download WAPI tools and other products at:
www.fao.org/fishery/statistics/software/wapi/en
Contact us: WAPI@fao.org



Preparation of this factsheet

- This factsheet provides data and information to facilitate the assessment of aquaculture growth potential in Morocco. It relies on official data and statistics readily available to the public. Some important dimensions such as aquaculture's contribution to GDP and employment are not evaluated due to the lack of data.
- Analyses in the factsheet are based on official data and statistics published by FAO and other international or national organizations. The data and statistics may differ from data and statistics used in other WAPI factsheets because of different data sources or different versions of the same datasets. They may not be consistent with data and statistics from other sources (e.g. national statistics).
- The term "country" used in this factsheet includes non-sovereign territory. The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.
- Unless noted otherwise, country grouping in this factsheet follows the United Nations [M49 standard](#); under which Morocco is listed in [Developing Regions](#) (as opposed to [Developed Regions](#)), [Africa](#) and the sub-region of Northern Africa.
- The preparation of the factsheet has benefited from tables and charts generated by various World Aquaculture Performance Indicator (WAPI) modules. Most of these data analysis tools are for FAO internal use, yet some of them are available for test use. See [Slide 77](#) or visit the [WAPI webpage](#) for more information about WAPI information and knowledge products.
- The factsheet was prepared by Junning Cai, Xiaoying Li, and Xiaowei Zhou. Technical and other assistance provided by Alessandro Lovatelli, Graham Mair, Ana Menezes, and Derun Yuan is acknowledged.
- The validity and relevance of the results depends on the quality (in terms of timeliness and accuracy) of the underlying data and statistics used in the analyses – see some remarks on data and statistics in [Slide 3](#). Errors could also occur in the analyses despite our efforts to minimize them. Please let us know if you have any concern.
- Contact: Junning Cai (FAO Aquaculture Officer; wapi@fao.org).

Remarks on FAO aquaculture statistical data – Morocco

- FAO aquaculture statistics are based on data submitted by member countries. When there is a lack of data formally reported by a country, FAO usually estimates the country's aquaculture production based on data and information from alternative sources or relies on relatively conservative estimation methods when alternative data sources are not readily available.
- While many countries lack a national statistics system for collection of aquaculture production data on a regular basis for dissemination and for reporting to FAO, Morocco is among the 24 countries or territories in [Africa](#) that reported aquaculture production data to FAO in all the five years during 2013–2017.
- A robust national system of aquaculture data collection is first and foremost for the countries' own benefit. Generally speaking from a global perspective, there is an urgent need for national capacity development in aquaculture statistics system at several levels, including (i) the legal status, institutionalization and resource allocation; (ii) development of national statistical standards in line with international standards; (iii) adequate and stable staffing plus an effective mechanism for data collection, compilation, storage, dissemination and reporting.
- For further information about FAO statistics on aquaculture production, contact: Xiaowei Zhou (FAO Aquaculture Officer (Statistics); Fish-Statistics-Inquiries@fao.org).

Species grouping

In this factsheet, “fish” or “seafood” may be used interchangeably as a general term for narrative convenience. When it is necessary to define the scope of a species group for a specific quantitative measure, the following definitions are used.

- Aquatic organisms; aquatic species; aquatic foods; aquatic products; or aquatic commodities = fish and seafood + miscellaneous aquatic animal products + aquatic plants (or algae)*
- fish and seafood = finfish + shellfish + miscellaneous aquatic animals
- Finfish = marine fishes + diadromous fishes + freshwater fishes
- Shellfish = crustaceans + molluscs
- Molluscs = shell molluscs (i.e. molluscs excluding cephalopods) + cephalopods

*Aquatic plants is one of the ISSCAAP Divisions; [ISSCAAP](#) = International Standard Statistical Classification of Aquatic Animals and Plants. In FAO global fisheries and aquaculture production statistics, aquatic plants are virtually equal to algae, with only a few sporadic historical data (before the early 2010s) on the harvest of wild seagrass.

Contents

Aquaculture growth potential in Morocco	Slide number
Introduction	
Preparation of this factsheet	2
Remarks on aquaculture statistics	3
Species grouping	4
Contents	5
Highlights	6-7
Resources	8
Status of aquaculture production, population and GDP	9
Land and water resources	10
Population prospects in Morocco	11, 72
Demographic features in Morocco	12
Food security, nutrition and health	13
Food security and nutrition status in Morocco	14
Per capita protein intake in Morocco	15-16
Life expectancy in Morocco	17
Contribution to food and nutrition	18
Animal protein intake in Morocco	19-20
Contribution of fish and seafood to animal protein	21
Status and trend of fish and seafood supply and utilization in Morocco	22
Morocco's food balance sheet for fish and seafood	23
Domestic market (consumption)	24
Status and trend of fish and seafood consumption in Morocco	25
Status and trend of per capita fish and seafood consumption	26
Per capita fish and seafood consumption in Morocco	27-28
Morocco's preferences for aquatic foods	29
International trade	30
Status and trend of the international trade of aquatic products in Morocco	31-33

Aquaculture growth potential in Morocco	Slide number
Export	34
Status and trend of aquatic products exports	35
Morocco's export of aquatic products	36-37
Morocco's aquatic products export	38
Product composition in Morocco's export of aquatic products	39-40
Import	41
Status and trend of aquatic products imports	42
Morocco's import of aquatic products	43-44
Morocco's aquatic products import	45
Composition of Morocco's import of aquatic products	46-47
Total fisheries production	48
Status and trend of aquaculture and fisheries production in Morocco	49
Total fisheries production in Morocco	50-51
Capture fisheries production	52
Status and trend of capture fisheries production	53
Capture fisheries in Morocco	54-55
Taxonomic composition of capture fisheries production in Morocco	56-57
Top 10 ISSCAAP groups in Morocco's capture production quantity	58
Top 10 ASFIS species in Morocco's capture production quantity	59
Aquaculture production	60
Status and trends of aquaculture production	61
Aquaculture's share in total fisheries production in Morocco	62
Aquaculture production in Morocco by farming area	63-64
Taxonomic composition in Morocco's aquaculture production	65-66
Aquaculture species groups by production in Morocco	67-68
Species composition in Morocco's aquaculture production	69-70
Outlook	71
Morocco's GDP prospects	73
Morocco's aquaculture growth potential from a demand-side perspective	74
Morocco's aquaculture growth potential from a supply-side perspective	75
Further reading	76

Highlights (I)

Status and trends

- Aquaculture production in Morocco grew from 1 889 tonnes in 2000 to 2 310 tonnes in 2022. This represents an annual growth rate of 0.92 percent, which is lower than the subregional, regional, and global averages. In 2022, Morocco's aquaculture output was also lower than that of most neighboring countries, ranking 24th in Africa ([slide 61](#)).
- In 2022, inland fisheries contributed 1 percent to Morocco's total capture fisheries production ([slide 55](#)), whereas inland aquaculture accounted for 34.6 percent of its total aquaculture production ([slide 64](#)). Molluscs comprised nearly half of Morocco's aquaculture output, followed by diadromous fishes (19.5 percent), freshwater fishes (15.2 percent), marine fishes (8.2 percent), and aquatic plants (7.5 percent). The taxonomic composition was more diverse compared to the overall pattern in Northern Africa ([slide 66](#)). Morocco's aquaculture production of 2 310 tonnes in 2022 included eight ASFIS species, with an effective number of species (ENS) of 6.1, indicating high species diversity—no single species exceeded one-third of the total production. Notably, these eight species represented eight different taxonomic groups ([slide 67](#)).

Supply-side perspective

- Morocco's 0.0018 percent share of global aquaculture production by tonnage was lower than its 0.47 percent share of the world's population and its 0.33 percent share of the world's land area. Similarly, the country's 0.0014 percent share in global inland aquaculture production was below its 0.024 percent share of the world's inland water surface area and its 0.053 percent share of global renewable water resources. Likewise, Morocco's 0.0021 percent share of global marine/coastal aquaculture production was less than its 0.23 percent share of the world's coastline length ([slides 9-10](#); [slide 75](#)).
- Morocco's total fisheries production grew over tenfold, from less than 150 000 tonnes in 1950 to more than 1.5 million tonnes in 2022. This growth reflects the trend in capture fisheries production, while aquaculture accounted for less than 0.3 percent of the total fisheries production ([slides 49 and 62](#)). Morocco's geographic position along the nutrient-rich Atlantic coast has made it one of the largest fish producers in Africa. Key species targeted by Morocco's capture fisheries include sardines, mackerel, and cephalopods ([slides 53-59](#)). However, the country's limited freshwater resources—hosting only 0.05 percent of the world's renewable water despite having 0.5 percent of the global population ([slides 9-10](#))—pose significant challenges to the development of its aquaculture sector.
- In 2019, Morocco's food fish supply was primarily sourced from domestic production, with imports contributing only 8 percent ([slide 23](#)). The country's imports of aquatic products surged from USD 10 million in 2000 to USD 284 million in 2021, achieving an annual growth rate of 17.3 percent—higher than the sub-regional, regional, and global averages. By 2022, Morocco ranked as the 5th largest importer of aquatic products in Africa ([slide 42](#)).

Highlights (II)

Demand-side perspective

- Morocco is classified as a lower-middle-income country with a rapidly urbanizing economy and a growing population ([slides 9-12](#); [slides 72-73](#)). The life expectancy at birth in Morocco exceeds sub-regional, regional, and global averages ([slide 17](#)). The prevalence of undernourishment and child stunting in Morocco is lower than the sub-regional, regional, and global averages, while the prevalence of obesity among adults is higher ([slide 14](#)).
- In 2020, Morocco's per capita total protein intake exceeded both sub-regional and global averages ([slide 16](#)). However, its animal protein intake was below the world average ([slide 20](#)). Notably, the share of fish and seafood in Morocco's animal protein intake, at 19.9 percent, was higher than both sub-regional and global averages ([slide 20](#)).
- Between 1999 and 2019, per capita fish and seafood consumption in Morocco rose from 7.9 kg to 18.7 kg, marking a 4.4 percent annual growth rate that exceeded sub-regional, regional, and global averages. In 2019, Morocco's per capita consumption of 18.7 kg was the second highest in Northern Africa (after Egypt) and the 14th highest in Africa ([slide 26](#)). Morocco's Seafood Liking Index (SLI) of 109.1 in the 2010s indicates a preference for fish and seafood above the world average (set at 100). This primarily reflects its high preference for marine fishes (more than 250 percent of the world average), while its preferences for other aquatic food groups were below world averages ([slide 29](#)).
- In 2019, 48.2 percent of Morocco's food fish and seafood supply from domestic sources went to the net export ([slide 22](#)). As the largest exporter of aquatic products in Africa, Morocco saw its exports rise from USD 976 million in 2000 to USD 2.84 billion in 2021, reflecting an average annual growth rate of 5.1 percent. However, this growth rate was lower than the sub-regional, regional, and global averages ([slides 34-40](#)).
- Morocco's population is projected to grow from 37 million in 2020 to 40 million by 2030. To maintain the per capita fish and seafood consumption at the baseline level of 18.72 kg, an additional 66 221 tonnes of fish and seafood will be required ([slide 74](#)).
- Morocco's aquaculture production grew from 1 267 tonnes in 2018 to 2 310 tonnes in 2022. If this growth trend continues linearly, production is projected to reach 4 254 tonnes by 2030. However, even with this increase, the additional 2 636 tonnes of aquaculture supply would fall short of meeting the 66 221 tonnes of extra fish and seafood demand resulting from population growth alone ([slide 74](#)).
- As noted in [slide 23](#), Morocco exported over 700 000 tonnes of fish and seafood—more than 10 times the 66 221 tonnes of additional fish and seafood needed to meet demand driven by population growth. This suggests that Morocco's capture fisheries have sufficient capacity to support the increase in domestic demand at the national level. However, aquaculture could provide a diversified livelihood at the sub-national level, helping to alleviate poverty and enhance food security in rural communities, particularly in inland areas.

Resources

Morocco (2022): 0.0018 percent of world aquaculture production; 0.47 percent of world population; a lower-middle income country (28 percent of world average GDP per capita).

Status of aquaculture production, population and GDP

Country/area	Aquaculture production (2022) ¹		Population (2022) ²		GDP per capita (2022) ³	
	Tonnes	Share of world total (%)	Million	Share of world total (%)	Current USD	Ratio to world average (%)
World	130 920 761	100.00	7 975	100.00	12 737	100
Africa	2 505 220	1.91	1 427	17.89	2 103	17
Sub-Saharan Africa	924 336	0.71	1 214	15.22	1 710	13
Northern Africa	1 589 884	1.21	260	3.26	3 682	29
Morocco and selected neighbouring countries, ranked by aquaculture production in 2022						
1. Egypt	1 552 430	1.1858	111	1.39	4 587	36
2. Spain	276 071	0.2109	48	0.60	29 800	234
3. France	200 490	0.1531	65	0.81	42 306	332
4. Greece	142 008	0.1085	10	0.13	20 818	163
5. Italy	132 661	0.1013	59	0.74	35 043	275
6. Croatia	27 156	0.0207	4.0	0.05	18 583	146
7. Portugal	20 968	0.0160	10	0.13	24 799	195
8. Tunisia	20 926	0.0160	12	0.15	3 814	30
9. Malta	18 051	0.0138	0.5	0.01	35 264	277
10. Sudan	9 000	0.0069	46.9	0.59	723	6
11. Albania	8 812	0.0067	2.8	0.04	6 658	52
12. Algeria	5 208	0.0040	44.9	0.56	4 982	39
13. Morocco	2 310	0.0018	37.5	0.47	3 570	28
14. Libya	10	0.0000	6.8	0.09	6 388	50

Data sources: 1. FAO Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStat). www.fao.org/fishery/en/statistics/software/fishstatj 2. UN World Population Prospects (2022 Revision). <https://esa.un.org/unpd/wpp/Download/wpp/Download/Standard/Population> 3. Total GDP from IMF World Economic Outlook Database (April 2024; <https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/download.aspx>) divided by population from UN World Population Prospects (2022 Revision).

Notes: Country grouping based on UN-OHRLS and UN M49 standard. Sub-Saharan Africa includes Sudan.

Natural resources of Morocco: 0.33 percent of world land area (including inland water surface area); 0.024 percent of world inland water surface area; 0.23 percent of world coastline length; 0.053 percent of world total renewable water resources.

Land and water resources

Country/area	Total country area (excluding coastal waters; 2020) ¹		Surface area of inland waterbodies (2020) ²		Coastline length (2019) ³		Total renewable water resources (2020) ¹	
	km ²	Share of world total (%)	km ²	Share of world total (%)	km	Share of world total (%)	Billion m ³ /year	Share of world total (%)
World	133 780 390	100.00	3 494 969	100.00	805 942	100.00	54 737	100.00
Africa	30 091 420	22.49	312 064	8.93	40 828	5.07	5 630	10.29
Sub-Saharan Africa	24 338 529	18.19	298 859	8.55	31 517	3.91	5 526	10.10
Northern Africa	7 630 891	5.70	18 095	0.52	10 164	1.26	141	0.26
Morocco and selected neighbouring countries, ranked by aquaculture production in 2022								
1. Egypt	1 001 450	0.75	8 816	0.252	2 450	0.30	57.5	0.105
2. Spain	505 970	0.38	4 409	0.126	4 964	0.62	111.5	0.204
3. France	549 087	0.41	4 357	0.125	4 853	0.60	211.0	0.385
4. Greece	131 960	0.10	3 652	0.105	13 676	1.70	68.4	0.125
5. Italy	302 067	0.23	4 149	0.119	7 600	0.94	191.3	0.349
6. Croatia	56 590	0.04	899	0.026	5 835	0.72	105.5	0.193
7. Portugal	92 226	0.07	985	0.028	1 793	0.22	77.4	0.141
8. Tunisia	163 610	0.1220	1 393	0.040	1 148	0.14	4.6	0.008
9. Malta	320	-	16	-	197	0.02	0.1	-
10. Sudan	1 878 000	1.40	4 889	0.140	853	0.11	37.8	0.069
11. Albania	27 730	0.02	575	0.016	362	0.05	30.2	0.055
12. Algeria	2 381 741	1.78	1 542	0.044	998	0.12	11.7	0.021
13. Morocco	446 550	0.33	854	0.024	1 835	0.23	29.0	0.053
14. Libya	1 759 540	1.32	523	0.015	1 770	0.22	0.7	0.001

Data sources: 1. FAO AQUASTAT main country database (November 2020; downloaded on 29 April, 2023). <http://fao.org/aquastat/statistics/query/index.html?lang=en2>.

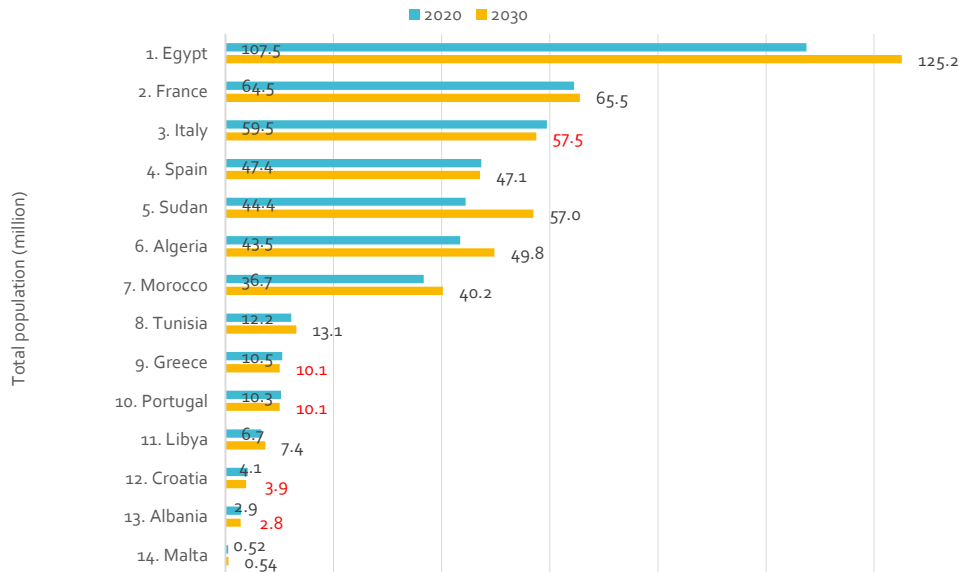
FAOSTAT Land Cover database (CCI_LC; updated on 13 July, 2023), excluding Antarctica and several uninhabited or isolated islands/atolls.

<http://fao.org/aquastat/statistics/query/index.html?lang=en> 3. The World Factbook, Central Intelligence Agency (CIA), United States of America. Web accessed on 20 May 2019.

<http://www.cia.gov/the-world-factbook/field/coastline/> Coastline length of world equal to the sum of coastline length of 265 countries and territories listed in the data source.

Notes: Country grouping based on UN-OHRLS and UN M49 standard. Sub-Saharan Africa includes Sudan.

Population prospects in Morocco and neighbouring countries, 2030 versus 2020



Population prospects in Morocco (2030 versus 2020):

Morocco had a medium-size population compared to neighbouring countries.

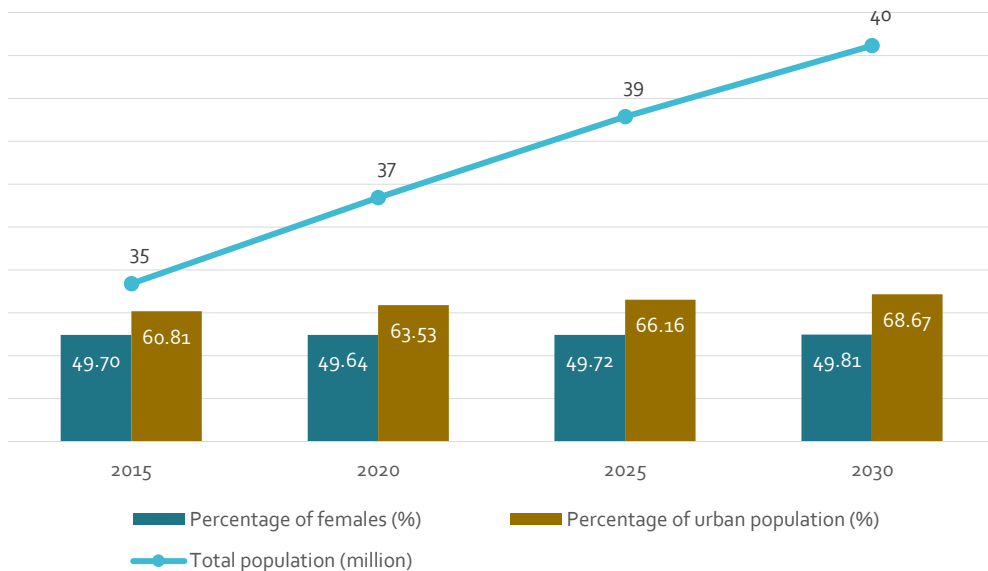
Its population is expected to increase from 36.7 million in 2020 to 40.2 million in 2030.

In contrast, Morocco's five Mediterranean neighbors in Europe (**highlighted in red**) are expected to experience a population decline during this period.

Data source: United Nations World Population Prospects (2022 revision)

<https://esa.un.org/unpd/wpp/Download/Standard/Population>

Population prospects in Morocco, 2015–2030



Demographic features in Morocco (2015–2030):

Population is expected to increase from 35 million in 2015 to 40 million in 2030.

Urban ratio of total population is expected to increase from 60.81 percent to 68.67 percent.

Female ratio in total population is expected to increase yet remain below 50 percent.

Data source: United Nations World Population Prospects (2022 revision)

<https://esa.un.org/unpd/wpp/Download/Standard/Population>; United Nations World Urbanization Prospects (2018 revision)

<https://population.un.org/wup>.

Food security, nutrition and health

Food security and nutrition status in Morocco

Prevalence of undernourishment (2020–2022)

6.3 percent of population undernourished, which was lower than subregional, regional, and world averages.

Stunted children (2022)

12.8 percent of children under 5 years of age were stunted, which was lower than subregional, regional, and world averages.

Overweight children (2022)

4.9 percent of children under 5 years of age were overweight, which was similar to the Africa average yet lower than Northern Africa and world averages.

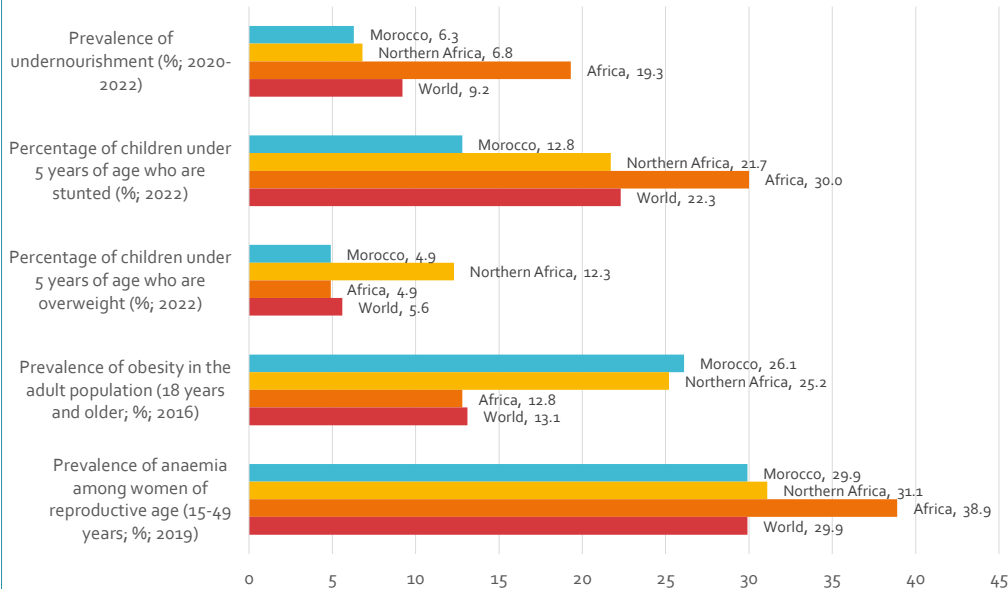
Adult obesity (2016)

26.1 percent of adult population were obese, which was higher than subregional, regional, and world averages.

Women anaemia (2019)

29.9 percent of reproductive-age women were anaemic, which was similar to the world average yet lower than Northern Africa and Africa averages.

Food security and nutrition status in Morocco



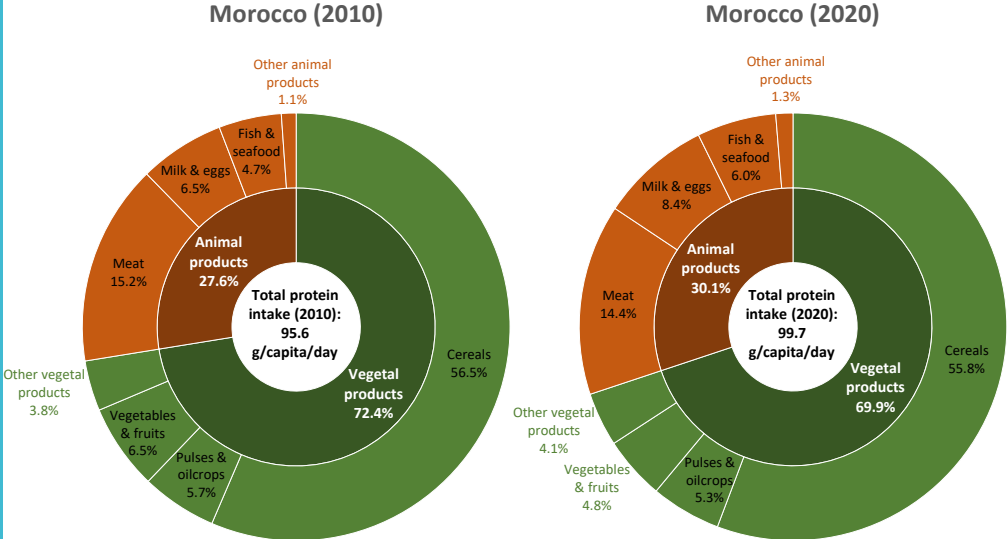
Data source: The chart uses the latest available data in the FAOSTAT – Suite of Food Security Indicators (updated on 23 August, 2023).
www.fao.org/faostat/en/#data/FS

Per capita protein intake in Morocco (2020 versus 2010):

Per capita total protein intake increased from 95.6 g/day to 99.7 g/day between 2010 and 2020.

The share of animal protein in total protein intake increased from 27.6 percent to 30.1 percent.

The share of fish and seafood increased from 4.7 percent to 6 percent.

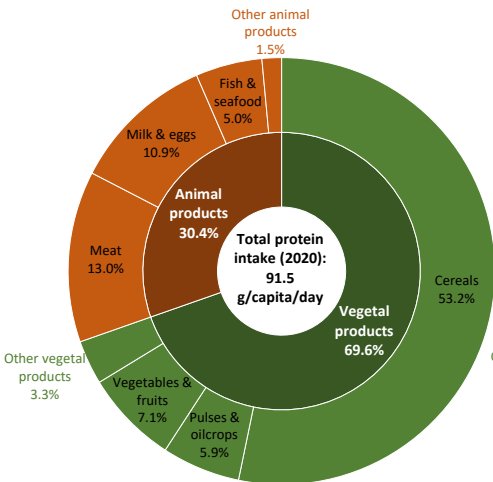


Data source: FAOSTAT New Food Balances (updated on 27 October, 2023; <http://www.fao.org/faostat/en/#data/FBS>).

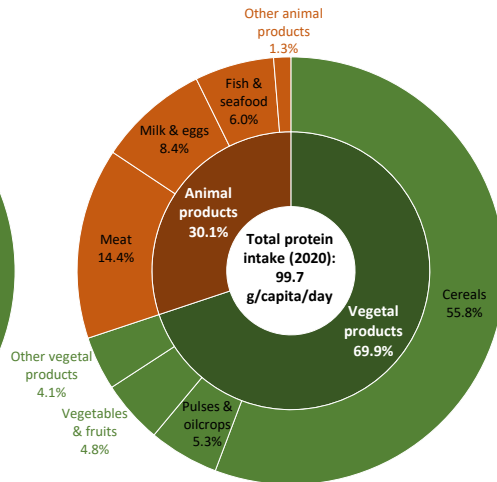
Notes: See [slide #4](#) for the scope of fish and seafood. Food items with a small contribution to total protein intake may not be labelled.

Per capita protein intake in Morocco (2020): The 99.7 g/day of per capita protein intake was higher than sub-regional average (91.5 g/day) and world average (90.4 g/day). The share of animal proteins in the country's total protein intake (30.1 percent) was lower than sub-regional and world averages. The share of fish and seafood in its total protein intake (6 percent) was higher than the subregional average yet lower than the world average.

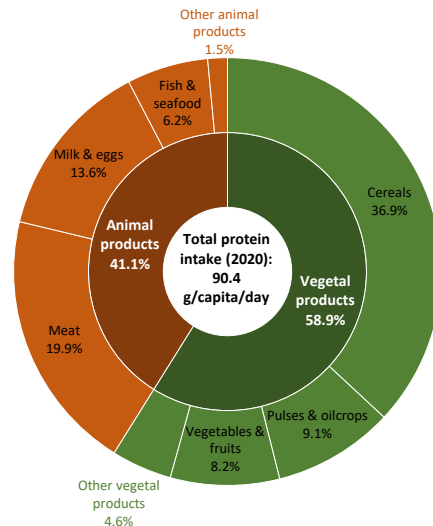
Northern Africa (2020)



Morocco (2020)



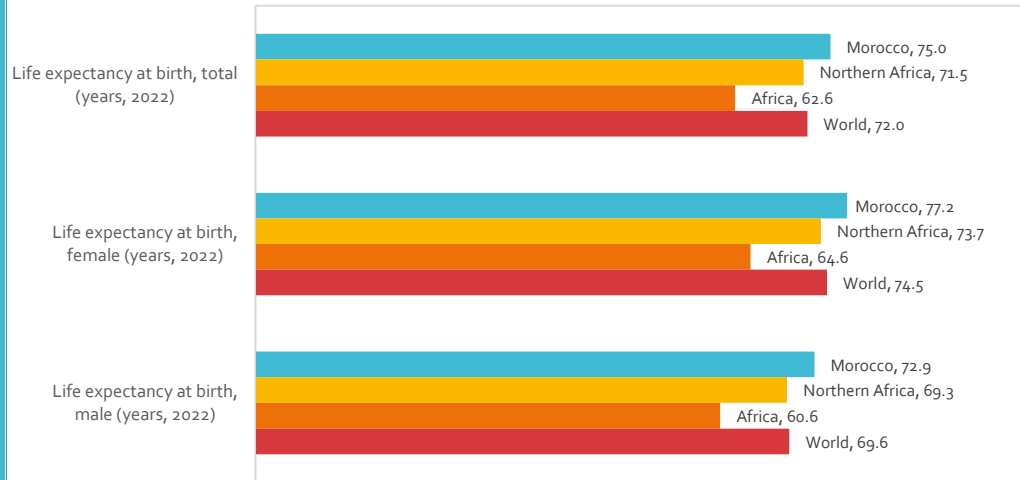
World (2020)



Data source: FAOSTAT New Food Balances (updated on 27 October, 2023; <http://www.fao.org/faostat/en/#data/FBS>).

Notes: See [slide #4](#) for the scope of fish and seafood. Food items with a small contribution to total protein intake may not be labelled.

Life expectancy in Morocco



Life expectancy in Morocco (2022):

Life expectancy at birth for the total population was 75 years, which was higher than subregional, regional, and world averages.

Life expectancy for female population (77.2 years) was higher than male population (72.9 years) – a general pattern applying to most countries and areas.

Data source: World Bank World Development Indicators (WDI), downloaded on 25 January, 2023 (<http://datatopics.worldbank.org/world-development-indicators/#archives>); United Nations World Population Prospects (2022 revision; <https://esa.un.org/unpd/wpp/Download/Standard/Population>) used to calculate life expectancy at the regional level.

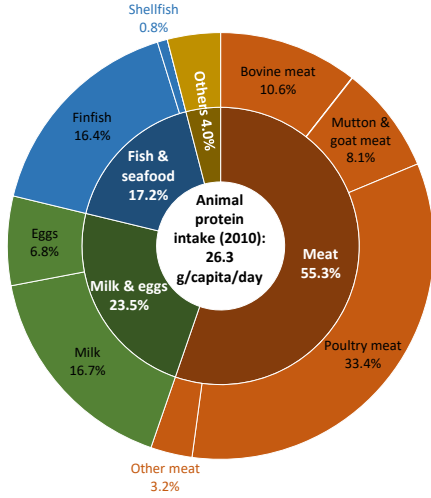
Contribution to food and nutrition

Animal protein intake in Morocco (2020 versus 2010):

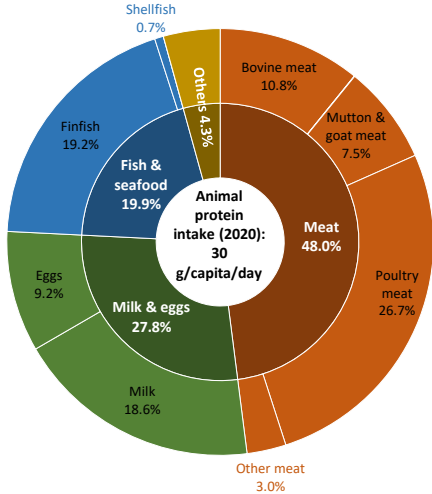
Per capita animal protein intake increased from 26.3 g/day in 2010 to 30 g/day in 2020.

The share of fish and seafood in animal protein intake increased from 17.2 percent to 19.9 percent.

Morocco (2010)



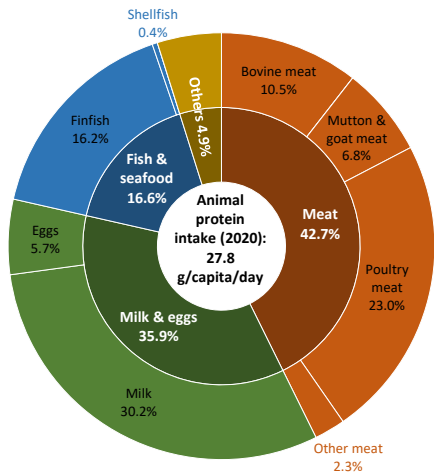
Morocco (2020)



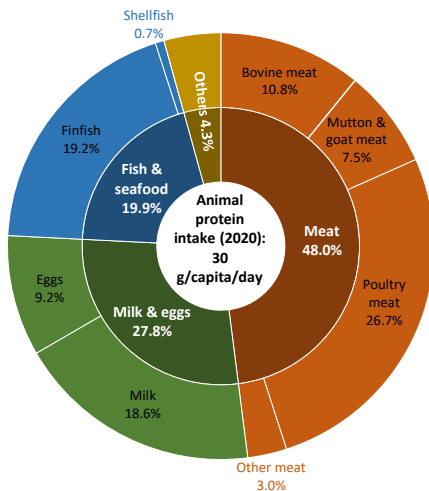
Data source: FAOSTAT New Food Balances (updated on 27 October, 2023; <http://www.fao.org/faostat/en/#data/FBS>).
 Note: See slide #4 for the scope of fish and seafood. Food items with a small contribution to animal protein may not be labelled.

Animal protein intake in Morocco (2020): The 30 g/day of per capita animal protein intake was higher than the subregional average yet lower than the world average. The 19.9 percent fish and seafood share in the country's animal protein intake was higher than both world and sub-regional averages.

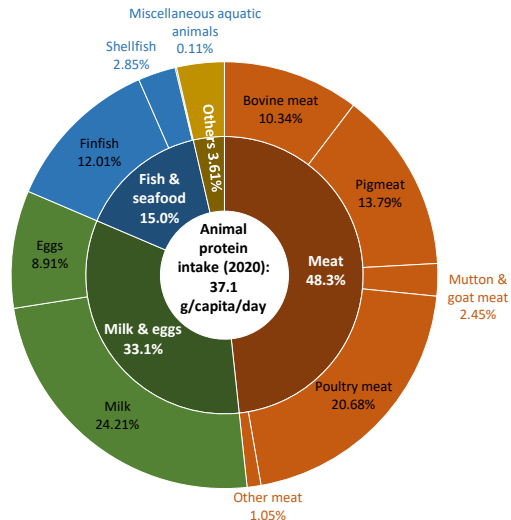
Northern Africa (2020)



Morocco (2020)



World (2020)



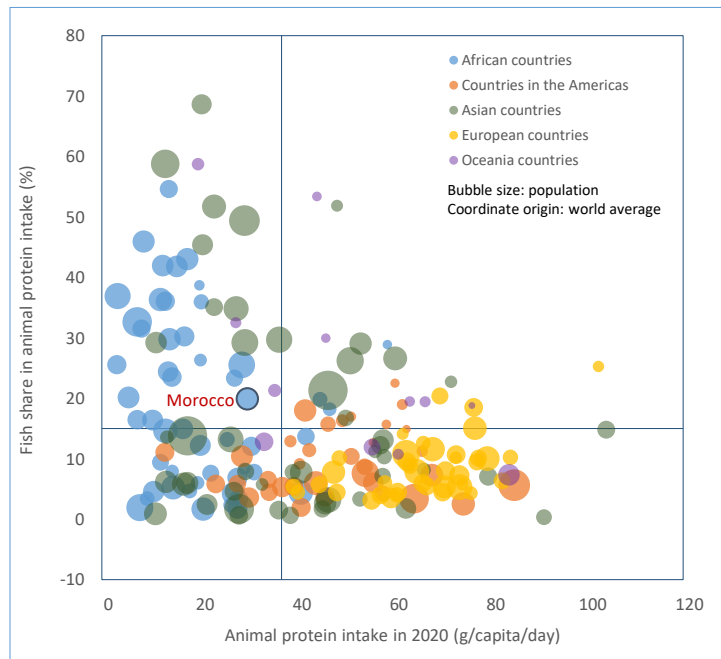
Data source: FAOSTAT New Food Balances (updated on 27 October, 2023; <http://www.fao.org/faostat/en/#data/FBS>).

Note: See slide #4 for the scope of fish and seafood.

Morocco (2020): Locating in the second quadrant in the bubble chart, indicating that animal protein intake was lower than the world average, yet the share of fish and seafood was higher. The country's 19.9 percent of fish and seafood share in animal protein was higher than most of neighbouring countries except for Egypt.

Contribution of fish and seafood to animal protein, 2020

Country/area	Per capita protein intake in 2020 (g/capita/day)		fish and seafood share (%)
	fish and seafood	Animal products	
World	5.6	37.1	15.0
Africa	2.8	15.8	17.9
Sub-Saharan Africa	2.3	13.3	17.6
Northern Africa	4.6	27.8	16.6
Morocco and selected neighbouring countries, ranked by animal protein			
1. France	8.0	79.6	10.0
2. Spain	11.6	77.0	15.1
3. Portugal	14.2	76.8	18.5
4. Italy	7.9	68.3	11.6
5. Croatia	5.6	63.6	8.8
6. Greece	6.0	63.0	9.5
7. Malta	8.8	62.1	14.1
8. Albania	2.5	60.9	4.0
9. Libya	5.8	42.1	13.7
10. Tunisia	3.7	30.9	12.1
11. Morocco	6.0	30.0	19.9
12. Egypt	7.4	28.9	25.5
13. Algeria	1.2	27.2	4.2
14. Sudan	0.4	20.9	1.7



Data source: FAOSTAT New Food Balances (updated on 27 October, 2023; <http://www.fao.org/faostat/en/#data/FBS>).

Notes: Country grouping based on UN-OHRLS and UN M49 standard.

Status and trend of fish and seafood supply and utilization in Morocco (1999–2019):

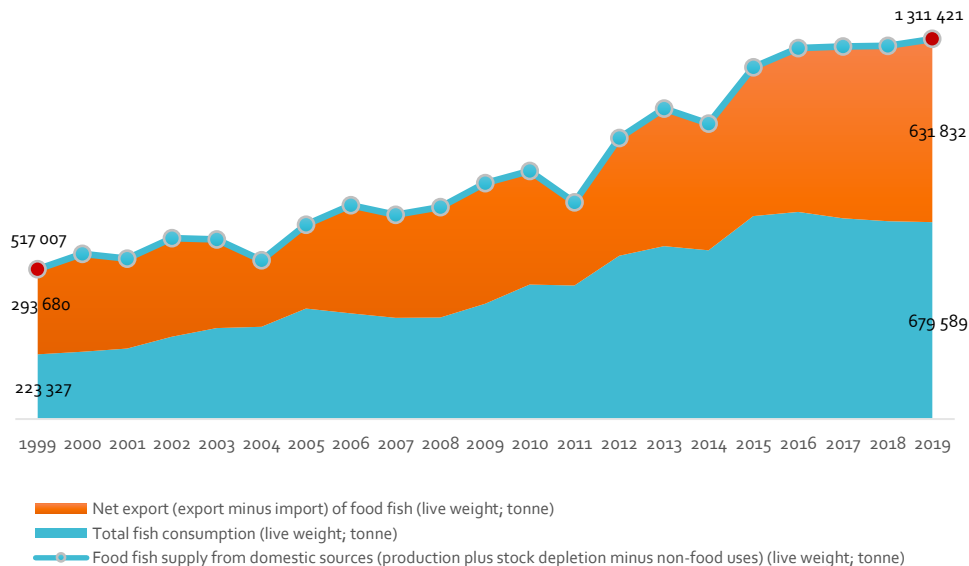
Food fish and seafood supply from domestic sources increased from 517 007 tonnes in 1999 to 1 311 421 tonnes in 2019.

Total fish and seafood consumption increased from 223 327 tonnes to 679 589 tonnes.

Net export increased from 293 680 tonnes to 631 832 tonnes.

In 2019, 1 311 421 tonnes of food fish and seafood supply from domestic sources = 679 589 tonnes of total fish and seafood consumption (51.8 percent) + 631 832 tonnes net export of food fish and seafood (48.2 percent).

Fish & seafood supply and utilization in Morocco (1999–2019)



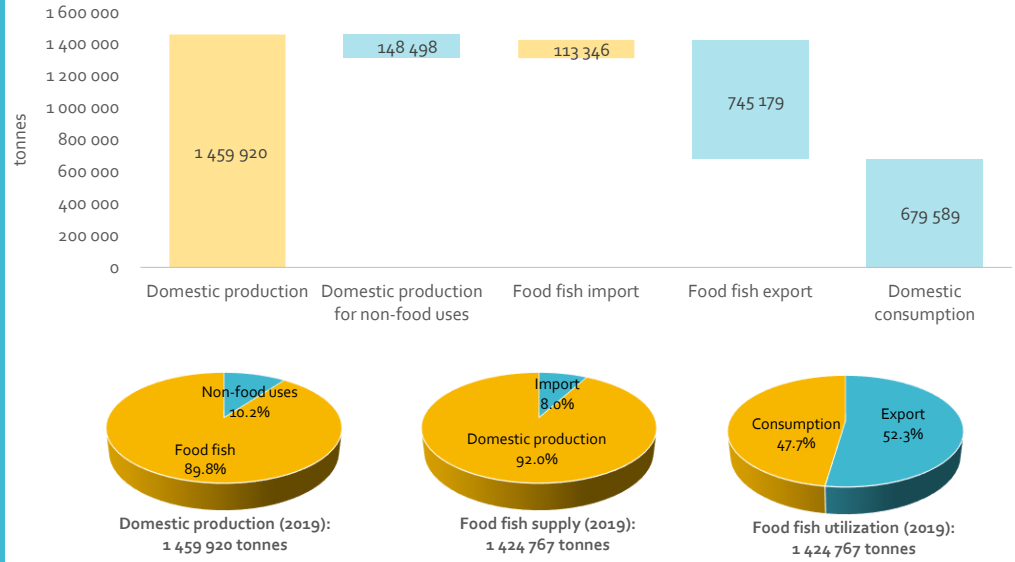
Morocco's food balance sheet for fish and seafood, 2019

1 459 920 tonnes domestic fish and seafood production – 148 498 tonnes for non-food use (10.2 percent) = 1 311 421 tonnes domestic food fish and seafood production (89.8 percent).

1 311 421 tonnes domestic food fish and seafood production (92 percent of food fish supply) + 113 346 tonnes of import of food fish and seafood (8 percent) = 1 424 767 tonnes food fish and seafood supply available for utilization.

1 424 767 tonnes utilization of food fish and seafood = 745 179 tonnes export (52.3 percent of food fish and seafood utilization) + 679 589 tonnes domestic (food) fish and seafood consumption (47.7 percent).

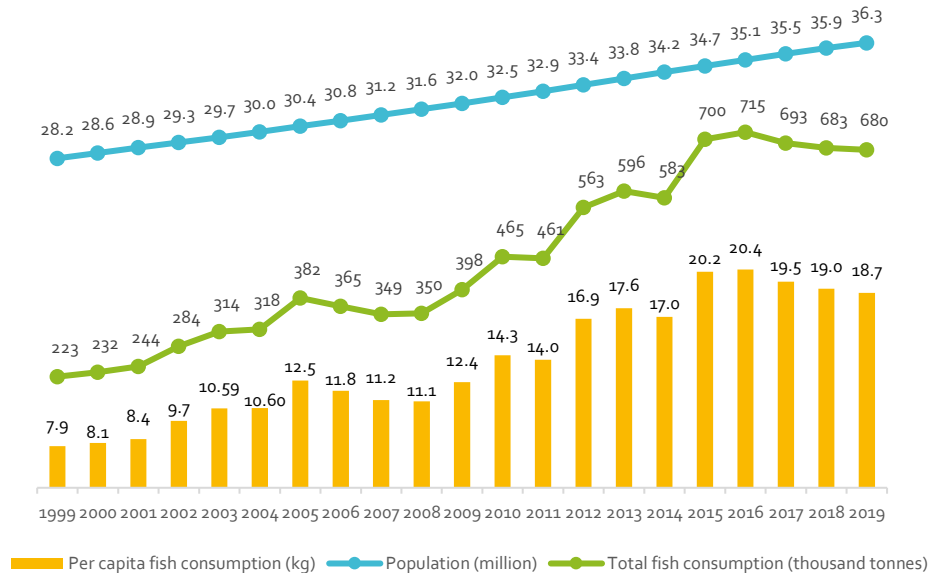
Fish & seafood supply and utilization in Morocco (2019)



Data source: FAO. 2023. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2019 (FishStat); www.fao.org/fishery/en/statistics/software/fishstati. Note: See slide #4 for the scope of fish and seafood. Numbers may not add up exactly due to rounding.

Domestic market (consumption)

Fish and seafood consumption in Morocco, 1999–2019



Status and trend of fish and seafood consumption in Morocco (1999–2019):

Between 1999 and 2019, the country's population increased 29 percent from 28.2 million to 36.3 million.

Its total fish and seafood consumption increased 204 percent from 223 thousand tonnes to 680 thousand tonnes.

Accordingly, its per capita fish and seafood consumption increased from 7.9 kg to 18.7 kg.

Data source: Data on total consumption from FAO. 2023. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2019 (FishStatJ). www.fao.org/fishery/en/statistics/software/fishstatj
 Data on population from the United Nations World Population Prospects (2022 revision) <https://esa.un.org/unpd/wpp/Download/Standard/Population>. Per capita consumption = Total consumption ÷ population.

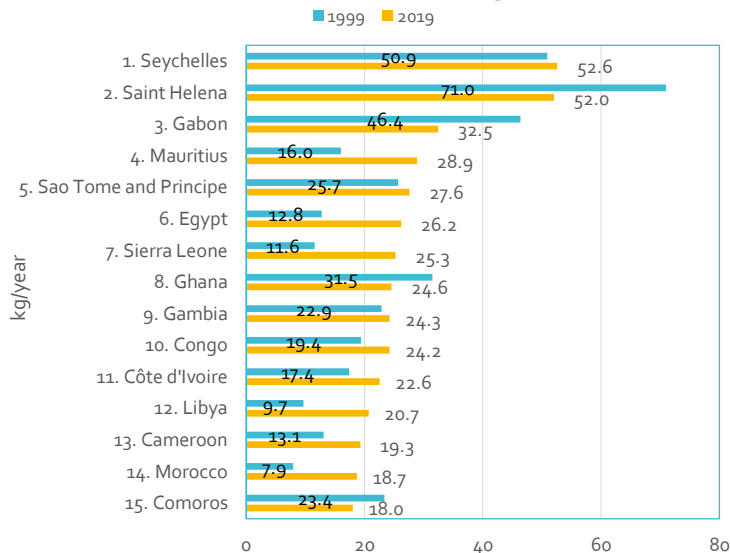
Note: See [slide #4](#) for the scope of fish and seafood.

Between 1999 and 2019, per capita fish and seafood consumption in Morocco increased from 7.9 kg to 18.7 kg. The 4.4 percent annual growth was higher than subregional, regional and world averages. Morocco's 18.7 kg per capita fish and seafood consumption in 2019 was the second highest in Northern Africa (lower only than Egypt) and the 14 highest in Africa.

Status and trend of per capita fish and seafood consumption

Country/area	Per capita fish and seafood consumption (kg/year)		Annual growth (%)
	1999	2019	
World	15.7	20.5	1.3
Africa	7.8	10.0	1.2
Sub-Saharan Africa	7.4	8.3	0.6
Northern Africa	8.4	16.0	3.3
Morocco and selected neighbouring countries, ranked by consumption in 2019			
1. Portugal	60.4	59.4	-0.1
2. Spain	43.8	40.4	-0.4
3. France	32.2	33.7	0.2
4. Malta	31.4	32.2	0.1
5. Italy	22.5	29.3	1.3
6. Egypt	12.8	26.2	3.7
7. Greece	22.8	21.4	-0.3
8. Libya	9.7	20.7	3.9
9. Croatia	4.1	19.8	8.2
10. Morocco	7.9	18.7	4.4
11. Tunisia	9.6	13.4	1.7
12. Albania	2.7	8.4	5.8
13. Algeria	3.7	3.9	0.3
14. Sudan		1.2	n.a.

Top 15 countries in Africa with the highest per capita fish and seafood consumption in 2019 (kg/year)



Data source: Data on total consumption from FAO. 2023. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2019 (FishStatJ).

www.fao.org/fishery/en/statistics/software/fishstati Data on population from the United Nations World Population Prospects (2022 revision) <https://esa.un.org/unpd/wpp/Download/Standard/Population>.

Per capita consumption = Total consumption ÷ population.

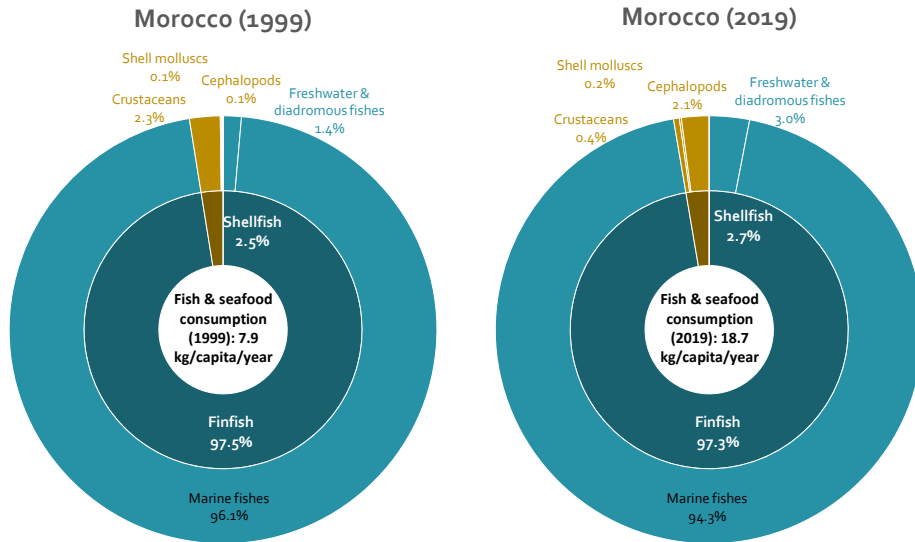
Notes: See [slide #4](#) for the scope of fish and seafood.

Per capita fish and seafood consumption in Morocco (2019 versus 1999):

Per capita fish and seafood consumption increased from 7.9 kg in 1999 to 18.7 kg in 2019.

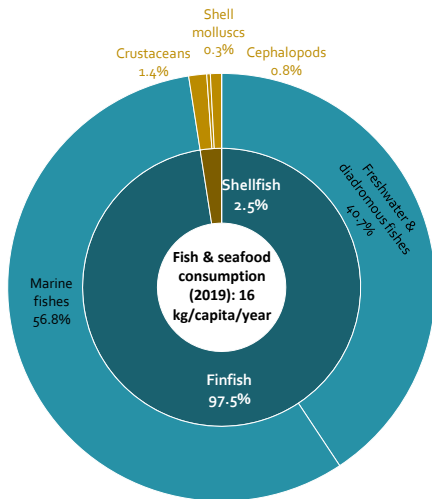
The share of marine fishes declined from 96.1 percent to 94.3 percent, while that of freshwater & diadromous fishes increased from 1.4 percent to 3 percent.

The share of shellfish increased from 2.5 percent to 2.7 percent, with a decline in the share of crustaceans and increases in the shares of shell molluscs and cephalopods.

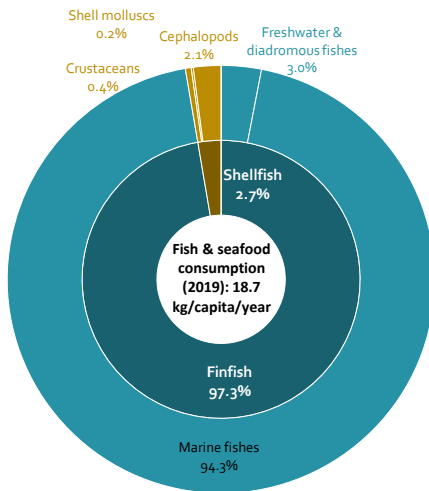


Morocco (2019): The 18.7 kg per capita fish and seafood consumption was higher than the subregional average yet lower than the world average. The taxonomic composition was less diverse than subregional and world patterns.

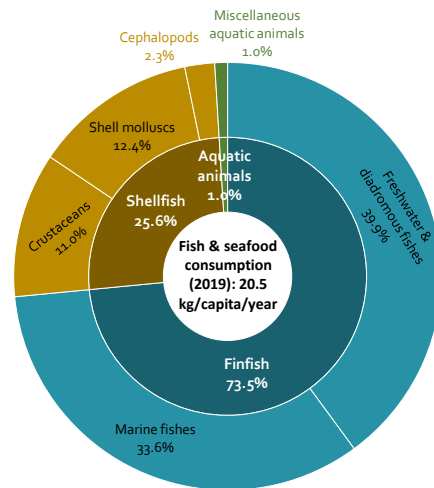
Northern Africa (2019)



Morocco (2019)



World (2019)



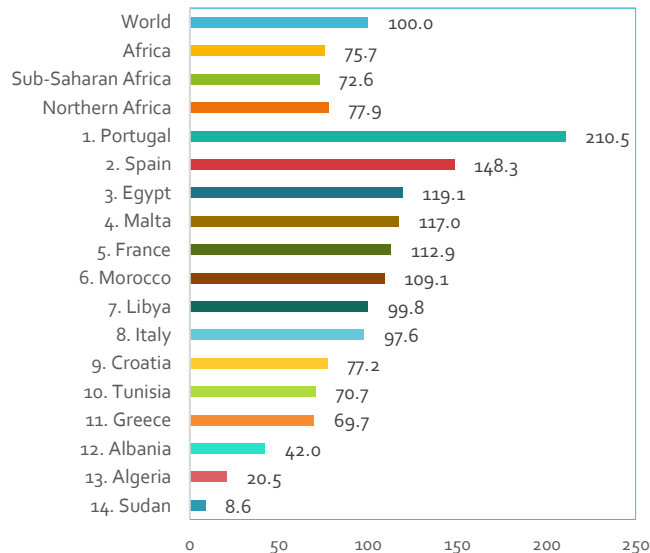
Data source: Data on total consumption from FAO. 2023. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2019 (FishStatJ). www.fao.org/fishery/en/statistics/software/fishstatj
 Data on population from the United Nations World Population Prospects (2022 revision) <https://esa.un.org/unpd/wpp/Download/Standard/Population>. Per capita consumption = Total consumption ÷ population.
 Note: Shellfish = crustaceans + molluscs. Molluscs = cephalopods + shell molluscs (i.e. molluscs excluding cephalopods). For more details on taxonomic groupings, refer to [slide #4](#).

Morocco's 109.1 seafood liking index (SLI) in the 2010s indicates that its preference for fish and seafood was above the world average (set at 100). This primarily reflects its high preference for marine fishes (more than 250 percent of the world average), while its preferences for other aquatic food subgroups were below world averages.

Morocco's preferences for aquatic foods, 2010–2017

Morocco	Seafood liking index (SLI, 2010-17 average)	Per capita consumption, 2010-17 average	
		kg/year	Ratio to world average (%)
fish and seafood	109.1	17.58	97.1
Finfish & shellfish	110.2	17.58	98.0
Finfish	136.3	16.96	126.0
Freshwater & diadromous fishes	7.2	0.42	6.6
Marine fishes	303.2	16.54	257.9
Shellfish	23.2	0.62	14.3
Crustaceans	44.5	0.49	30.6
Molluscs	9.8	0.13	4.9
Shell molluscs	2.3	0.02	1.1
Cephalopods	53.9	0.10	26.5
Miscellaneous aquatic animals	2.0	0.00	0.3

Seafood liking index (SLI): Morocco versus neighbouring countries

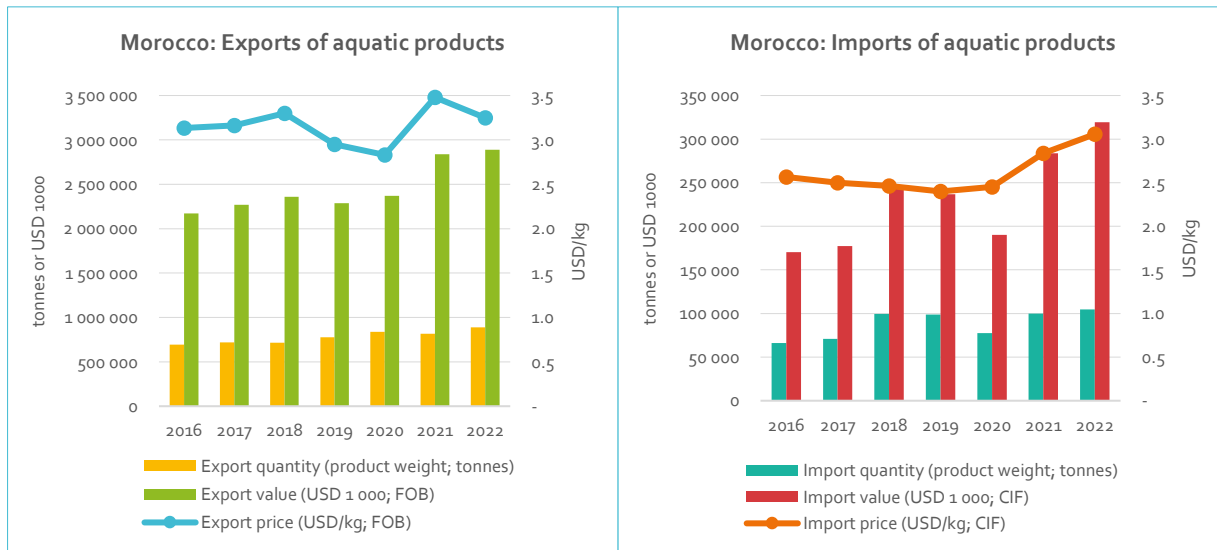


Data source: Cai, J. & Leung, P.S. 2022. Unlocking the potential of aquatic foods in global food security and nutrition: A missing piece under the lens of seafood liking index. *Global food security*, 33, 100641. doi.org/10.1016/j.gfs.2022.100641

Notes: The Seafood Liking Index (SLI) measures a country's preference for fish and seafood in general or for a specific sub-group, with an SLI of 100 representing the global average. A country with an SLI of 200, for example, indicates a preference that is twice as high as the world average.

International trade

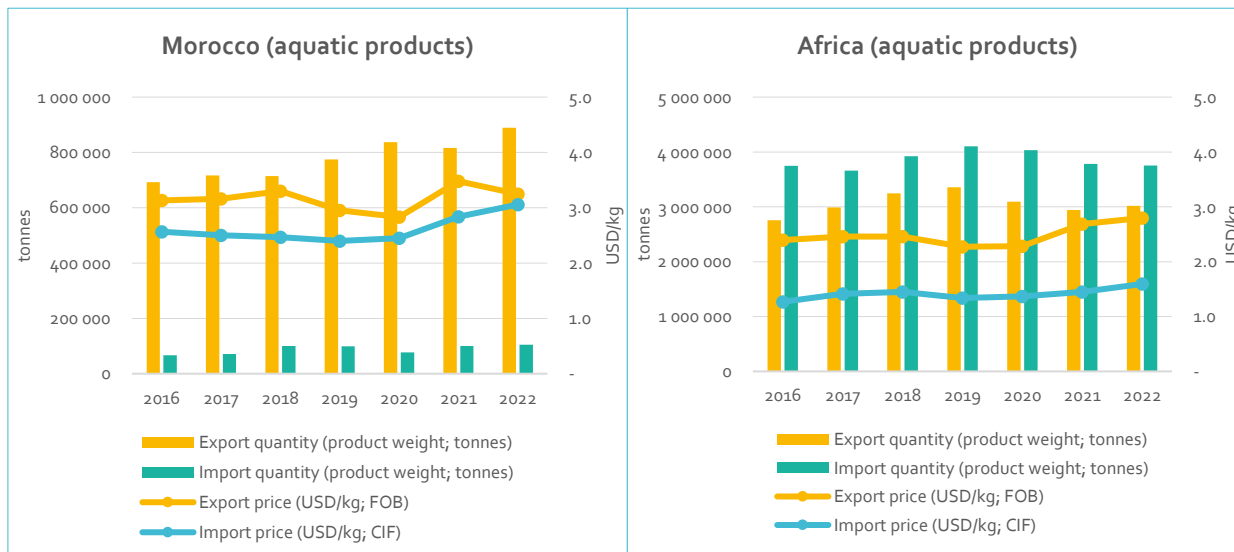
Status and trend of the international trade of aquatic products in Morocco, 2016–2022



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ); www.fao.org/fishery/en/statistics/software/fishstatj).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. CIF = Cost, insurance and freight; FOB = Free on board.

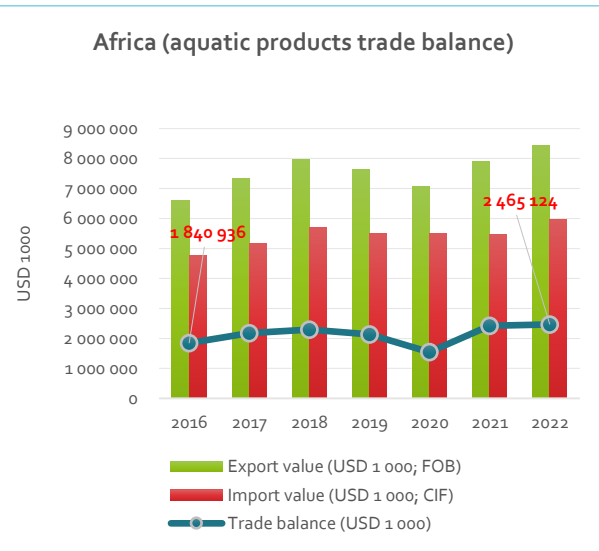
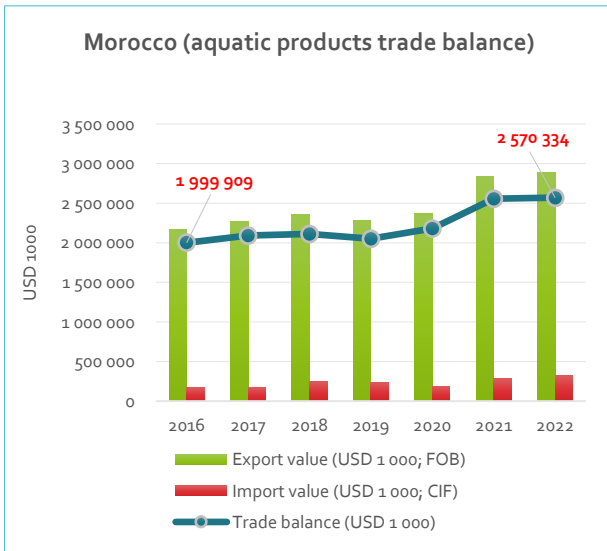
Morocco (2016–2022): Export quantity was much greater than import quantity, opposite to the pattern in Africa. Export price was higher than import price, similar to the pattern in Arica.



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstatj).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. CIF = Cost, insurance and freight; FOB = Free on board.

Morocco's aquatic trade surplus increased from USD 2 billion in 2016 to USD 2.57 billion in 2022, while Africa's aquatic trade surplus also increased during the period.



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstatj).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. CIF = Cost, insurance and freight; FOB = Free on board.

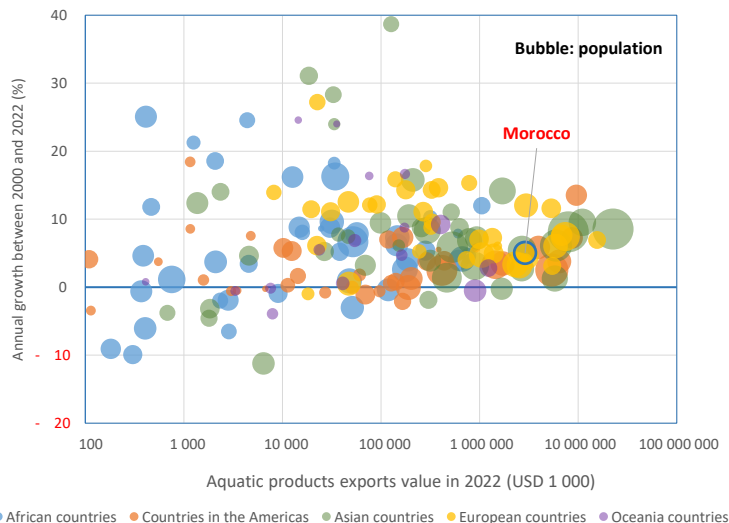
Export

Morocco's export of aquatic products increased from USD 976 million in 2000 to USD 2.89 billion in 2022. The 5.06 percent annual growth was lower than sub-regional, regional, and world averages. In 2022, the country was the largest exporter of aquatic products in Africa.

Status and trend of aquatic products exports (2000–2022)

Country/area	Aquatic products export value (USD 1 000)		Annual growth (%)
	2000	2022	
World	55 833 945	192 684 782	5.79
Africa	2 739 300	8 446 735	5.25
Sub-Saharan Africa	1 656 102	5 171 654	5.31
Northern Africa	1 083 792	3 277 004	5.16
Top 10 aquatic exporter in Africa, 2022			
1. Morocco	976 427	2 889 797	5.06
2. Mauritania	87 190	1 052 737	11.99
3. Namibia	283 931	766 711	4.62
4. South Africa	272 550	666 977	4.15
5. Senegal	260 373	611 241	3.96
6. Seychelles	113 465	603 055	7.89
7. Mauritius	36 659	316 045	10.29
8. Tunisia	88 862	281 192	5.38
9. Ghana	78 472	186 639	4.02
10. United Republic of Tanzania	99 012	174 666	2.61

Status and trends of global Aquatic products exports: 2022 vs. 2000



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstatj).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products.

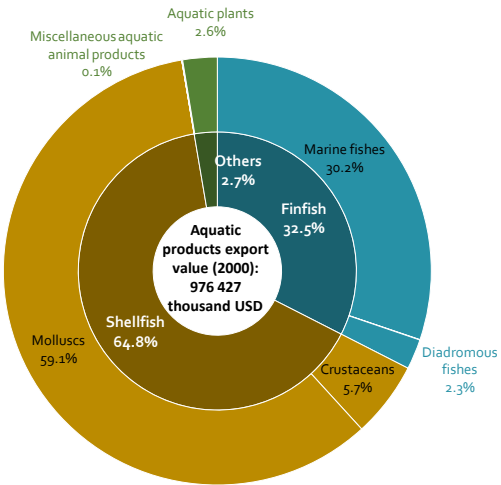
Morocco's export of aquatic products (2022 versus 2000):

Aquatic commodities export increased from USD 976.427 million in 2000 to USD 2.89 billion in 2022.

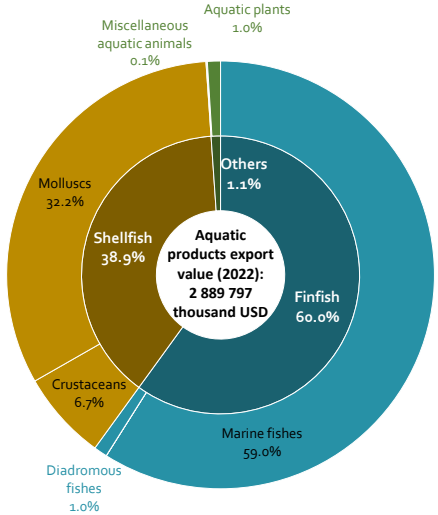
The share of finfish increased from 32.5 percent to 60 percent, thanks primarily to the increase of the share of marine fishes from 30.2 percent to 59 percent.

The share of molluscs declined from 59.1 percent to 32.2 percent, while the crustaceans share increased from 5.7 percent to 6.7 percent.

Morocco (2000)

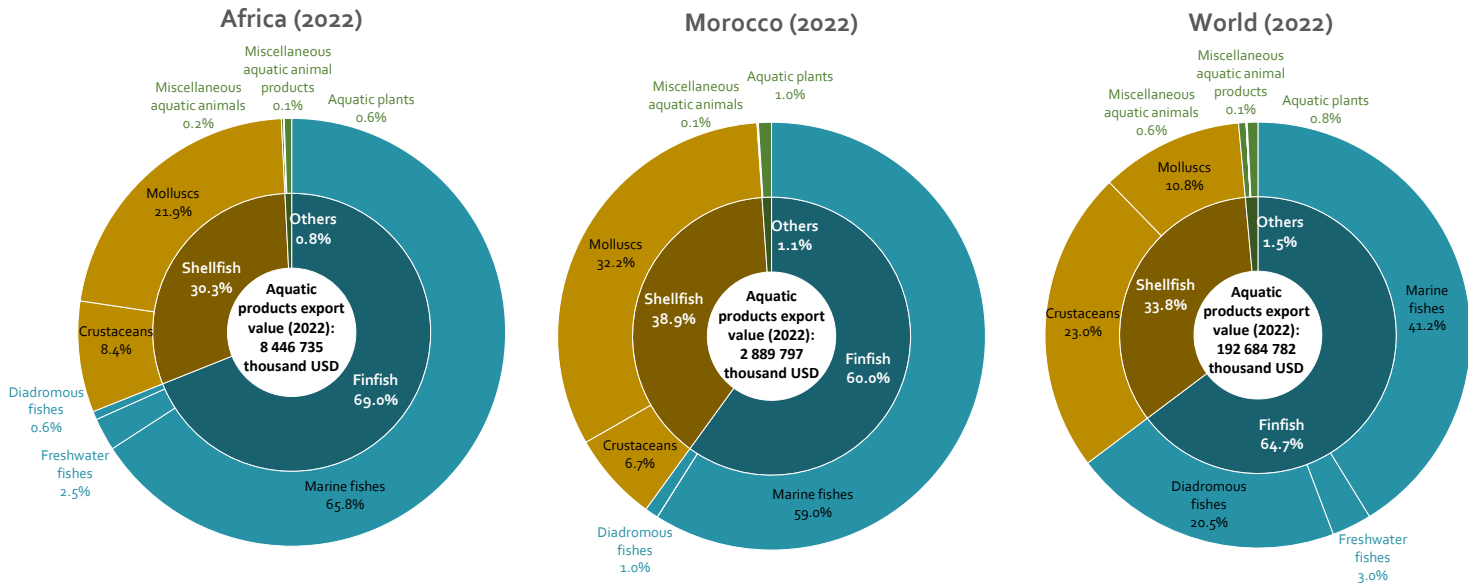


Morocco (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstatj).
 Notes: Includes all aquatic commodities recorded in the data source; see slide #4 for the scope of aquatic products. Species groups less than 0.1 percent of the total value not labelled in the charts.

Morocco's export of aquatic products in 2022 comprised mostly marine fishes (59 percent), molluscs (32.2 percent), and crustaceans (6.7 percent). The share of marine fishes was higher than the world average yet lower than the Africa average. The share of molluscs was higher than both Africa and world averages, while that of crustaceans was lower.



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ); www.fao.org/fishery/en/statistics/software/fishstaj).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. Species groups less than 0.1 percent of the total value not labelled in the charts.

Morocco's export of aquatic products in 2022 comprised primarily herrings/sardines/anchovies, squids/cuttlefishes/octopus, marine fishes not identified, and shrimps/prawns. The country accounted for 18.95 percent of the global export value of herrings/sardines/anchovies and 6.41 percent of the global export value of squids/cuttlefishes/octopuses.

Morocco's aquatic products export, 2022

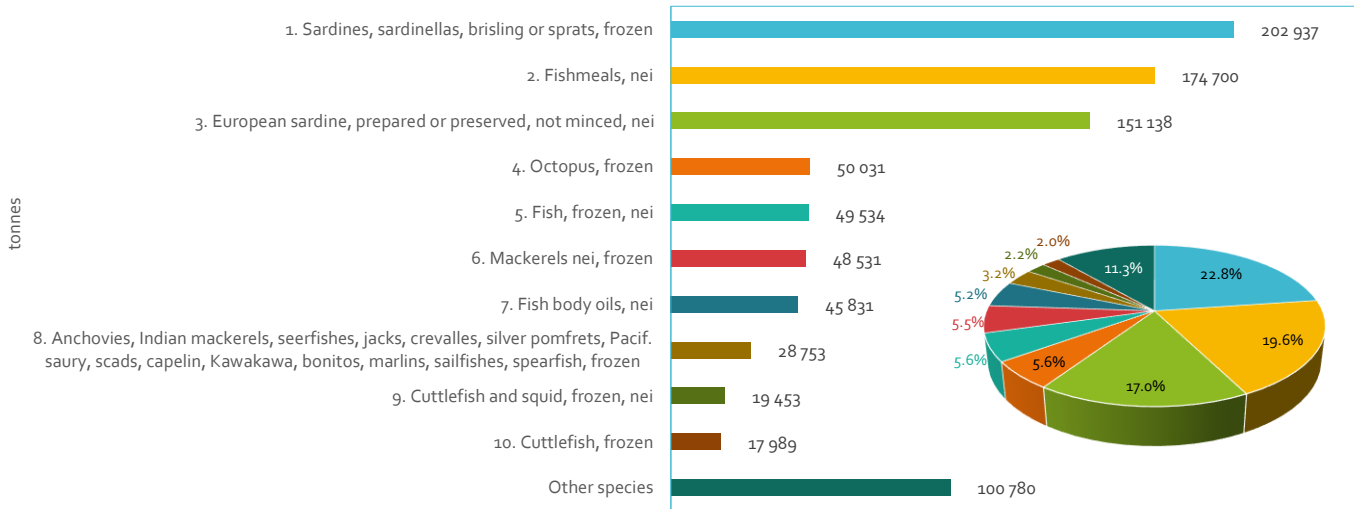
Top 10 export species groups in terms of quantity				Top 10 export species groups in terms of value			
ISSCAAP groups in Morocco's exports quantity	Product weight (tonnes)	Share of the country's total exports of all aquatic commodities (%)	Share of world exports of the same species group (%)	ISSCAAP groups in Morocco's exports value	FOB value (USD 1000)	Share of the country's total exports of all aquatic commodities (%)	Share of world exports of the same species group (%)
1. Herrings, sardines, anchovies	374 177	42.06	11.97	1. Herrings, sardines, anchovies	936 973	32.42	18.95
2. Marine fishes not identified	278 705	31.33	2.99	2. Squids, cuttlefishes, octopuses	917 533	31.75	6.41
3. Miscellaneous pelagic fishes	106 961	12.02	2.70	3. Marine fishes not identified	527 281	18.25	2.10
4. Squids, cuttlefishes, octopuses	91 163	10.25	3.64	4. Shrimps, prawns	170 010	5.88	0.54
5. Shrimps, prawns	20 643	2.32	0.51	5. Miscellaneous pelagic fishes	149 709	5.18	2.17
6. Tunas, bonitos, billfishes	5 285	0.59	0.13	6. Tunas, bonitos, billfishes	46 357	1.60	0.28
7. Flounders, halibuts, soles	3 763	0.42	0.64	7. Flounders, halibuts, soles	40 635	1.41	1.38
8. Miscellaneous aquatic plants	2 851	0.32	0.53	8. Miscellaneous aquatic plants	28 454	0.98	2.30
9. Salmons, trouts, smelts	2 595	0.29	0.06	9. Salmons, trouts, smelts	24 293	0.84	0.06
10. Lobsters, spiny-rock lobsters	654	0.07	0.29	10. Lobsters, spiny-rock lobsters	16 078	0.56	0.32
<i>Others</i>	2 879	0.32	-	<i>Others</i>	32 475	1.12	-
Aquatic products	889 676	100.00	2.09	Aquatic products	2 889 797	100.00	1.50

Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstaj).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. FOB = Free on board; ISSCAAP = International Standard Statistical Classification of Aquatic Animals and Plants.

Product composition in Morocco's export of aquatic products (quantity; 2022)

Morocco's top 10 exports of aquatic products (quantity; 2022)

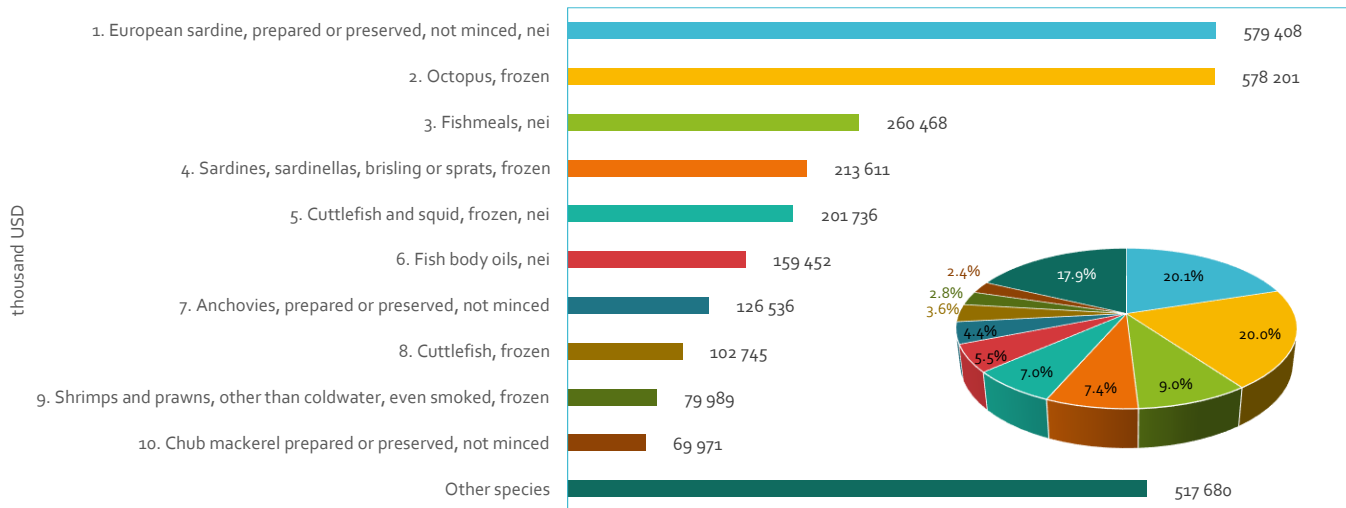


Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstat/).

Notes: Includes all aquatic commodities recorded in the data source. Nei = not elsewhere included.

Product composition in Morocco's export of aquatic products (value; 2022)

Morocco's top 10 exports of aquatic products (value; 2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstat).

Notes: Includes all aquatic commodities recorded in the data source. Nei = not elsewhere included.

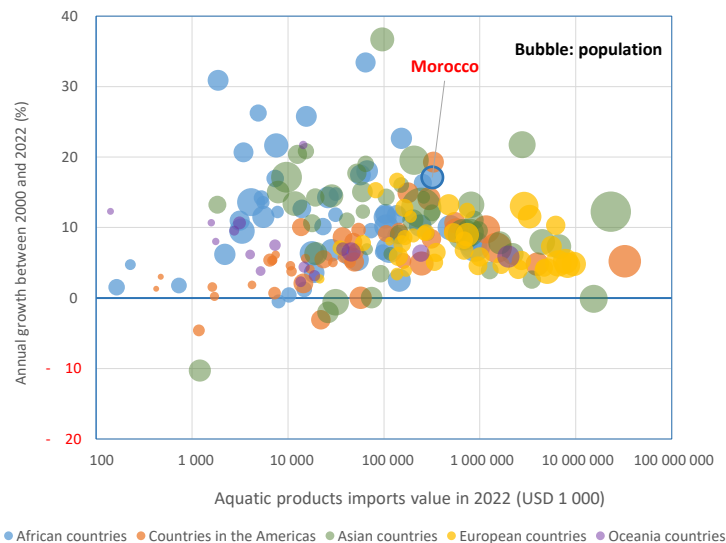
Import

Morocco's import of aquatic products increased from USD 9.871 million in 2000 to USD 319.464 million in 2022; the 17.12 percent annual growth was higher than sub-regional, regional, and world averages. In 2022, the country was 5th largest importer of aquatic products in Africa.

Status and trend of aquatic products imports (2000–2022)

Country/area	Aquatic products import value (USD 1 000)		Annual growth (%)
	2000	2022	
World	61 033 551	194 987 638	5.42
Africa	958 036	5 981 610	8.68
Sub-Saharan Africa	743 753	4 310 615	8.31
Northern Africa	215 138	1 675 708	9.78
Top 10 aquatic importers in Africa, 2022			
1. Nigeria	188 485	889 351	7.31
2. Egypt	171 061	855 245	7.59
3. Côte d'Ivoire	132 147	746 822	8.19
4. South Africa	60 296	490 112	9.99
5. Morocco	9 871	319 464	17.12
6. Mauritius	41 885	285 603	9.12
7. Libya	9 100	254 468	16.35
8. Cameroon	27 740	238 744	10.28
9. Zambia	1 700	152 107	22.66
10. Seychelles	11 517	146 564	12.26

Status and trends of global Aquatic products imports: 2022 vs. 2000



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstat/.

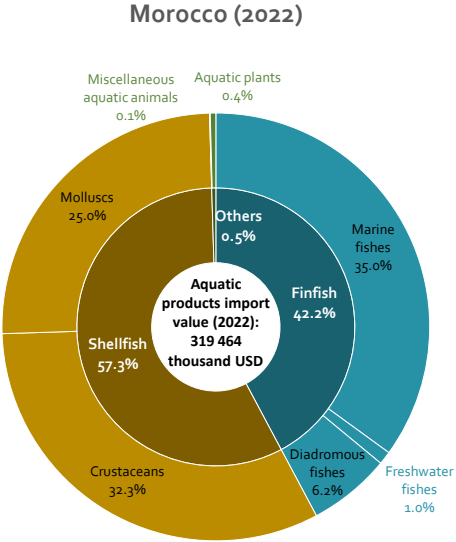
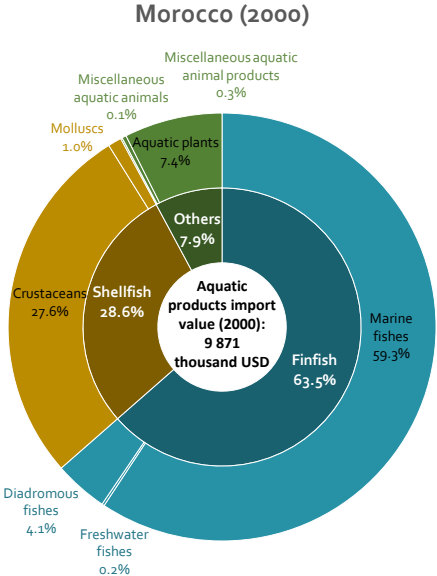
Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products.

Morocco's import of aquatic products (2022 versus 2000):

Aquatic commodities import increased from USD 9.871 million in 2000 to USD 319.464 million in 2022.

The share of finfish declined from 63.5 percent to 42.2 percent, reflecting a decrease in the share of marine fishes, while the diadromous fish share increased.

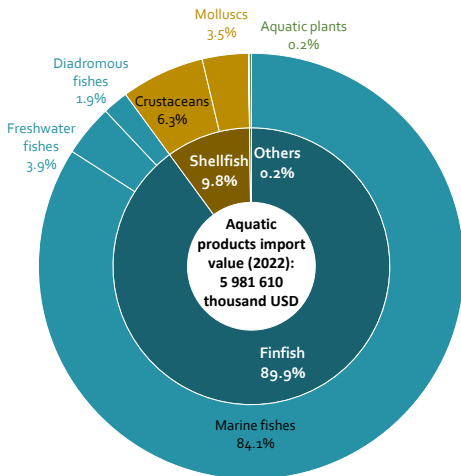
The share of shellfish increased from 28.6 percent to 57.3 percent, reflecting increases in both crustaceans and molluscs shares.



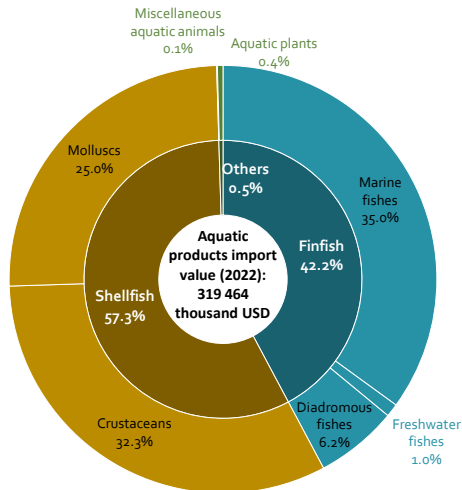
Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstatj).
 Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. Species groups less than 0.1 percent of the total value not labelled in the charts.

Morocco's import of aquatic products in 2022 comprised mostly marine fishes (35.0 percent), crustaceans (32.3 percent), and molluscs (25.0 percent). The share of marine fishes was lower than both Africa and world averages, while that of crustaceans was higher; so was the molluscs share.

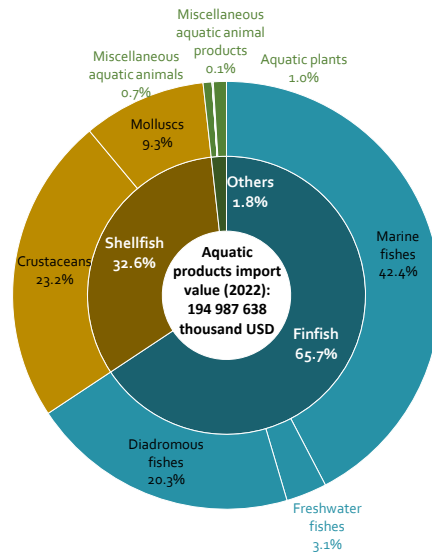
Africa (2022)



Morocco (2022)



World (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstatj).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. Species groups less than 0.1 percent of the total value not labelled in the charts.

Morocco's import of aquatic commodities in 2022 primarily comprised shrimps/prawns, tunas/bonitos/billfishes, and squids/cuttlefishes/octopuses.

Morocco's aquatic products import in 2022

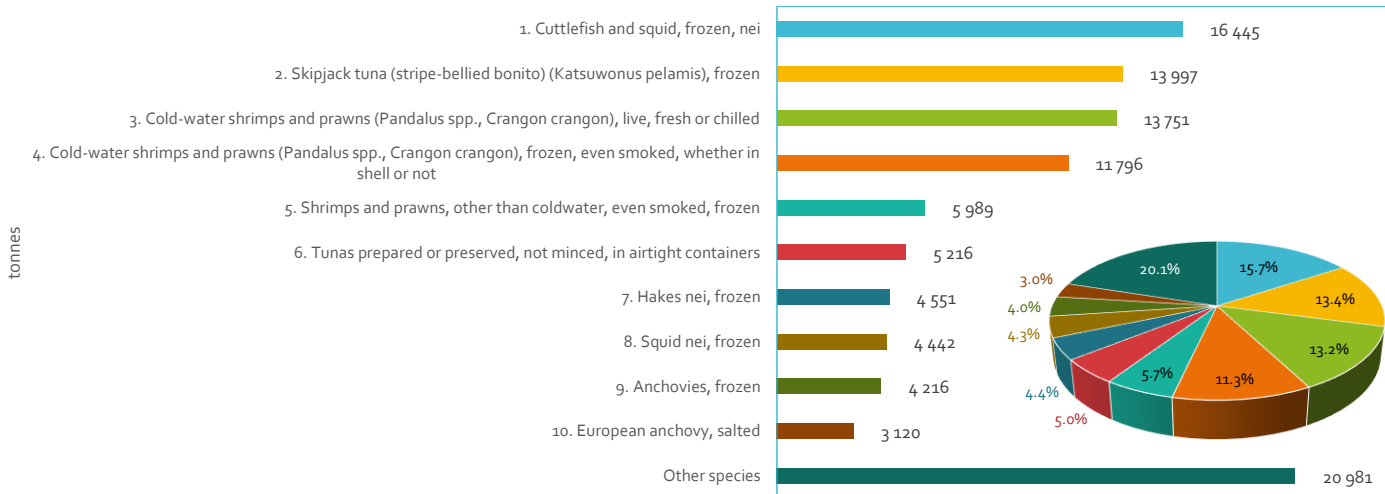
Top 10 import species groups in terms of quantity				Top 10 import species groups in terms of value			
ISSCAAP groups in Morocco's imports quantity	Product weight (tonnes)	Share of the country's total imports of all aquatic commodities (%)	Share of world imports of the same species group (%)	ISSCAAP groups in Morocco's imports value	CIF value (USD 1000)	Share of the country's total imports of all aquatic commodities (%)	Share of world imports of the same species group (%)
1. Shrimps, prawns	31 614	30.25	0.81	1. Shrimps, prawns	101 896	31.90	0.32
2. Tunas, bonitos, billfishes	22 750	21.77	0.55	2. Squids, cuttlefishes, octopuses	76 744	24.02	0.64
3. Squids, cuttlefishes, octopuses	21 769	20.83	0.91	3. Tunas, bonitos, billfishes	58 720	18.38	0.33
4. Herrings, sardines, anchovies	9 976	9.55	0.33	4. Salmons, trouts, smelts	19 669	6.16	0.05
5. Cods, hakes, haddocks	5 489	5.25	0.12	5. Herrings, sardines, anchovies	18 197	5.70	0.37
6. Marine fishes not identified	3 657	3.50	0.04	6. Marine fishes not identified	13 695	4.29	0.05
7. Sharks, rays, chimaeras	2 138	2.05	2.30	7. Cods, hakes, haddocks	8 620	2.70	0.05
8. Salmons, trouts, smelts	2 131	2.04	0.05	8. Sharks, rays, chimaeras	4 569	1.43	0.95
9. Flounders, halibuts, soles	1 266	1.21	0.22	9. Miscellaneous coastal fishes	3 869	1.21	0.15
10. Miscellaneous freshwater fishes	1 139	1.09	0.11	10. Miscellaneous freshwater fishes	3 180	1.00	0.08
<i>Others</i>	2 573	2.46	-	<i>Others</i>	10 304	3.23	-
Aquatic products	104 503	100.00	0.25	Aquatic products	319 464	100.00	0.16

Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstati).

Notes: Includes all aquatic commodities recorded in the data source; see [slide #4](#) for the scope of aquatic products. CIF = Cost, insurance and freight; ISSCAAP = International Standard Statistical Classification of Aquatic Animals and Plants.

Composition of Morocco's import of aquatic products (2022; in terms of quantity)

Morocco's top 10 imports of aquatic products (quantity; 2022)

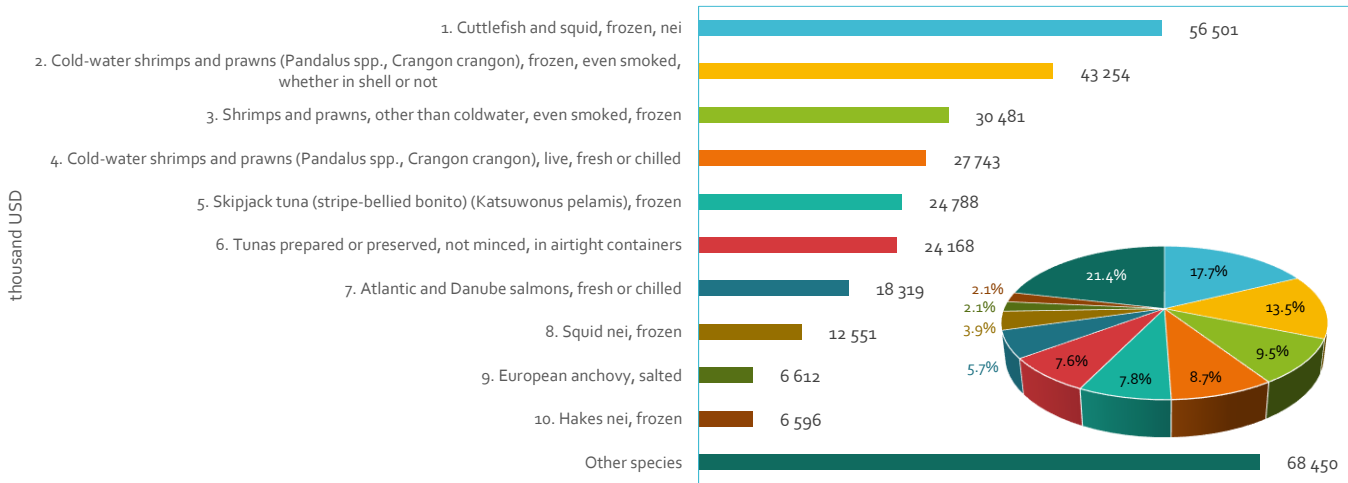


Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ); www.fao.org/fishery/en/statistics/software/fishstatj).

Notes: Includes all aquatic commodities recorded in the data source. Nei = not elsewhere included.

Composition of Morocco's import of aquatic products (2022; in terms of value)

Morocco's top 10 imports of aquatic products (value; 2022)

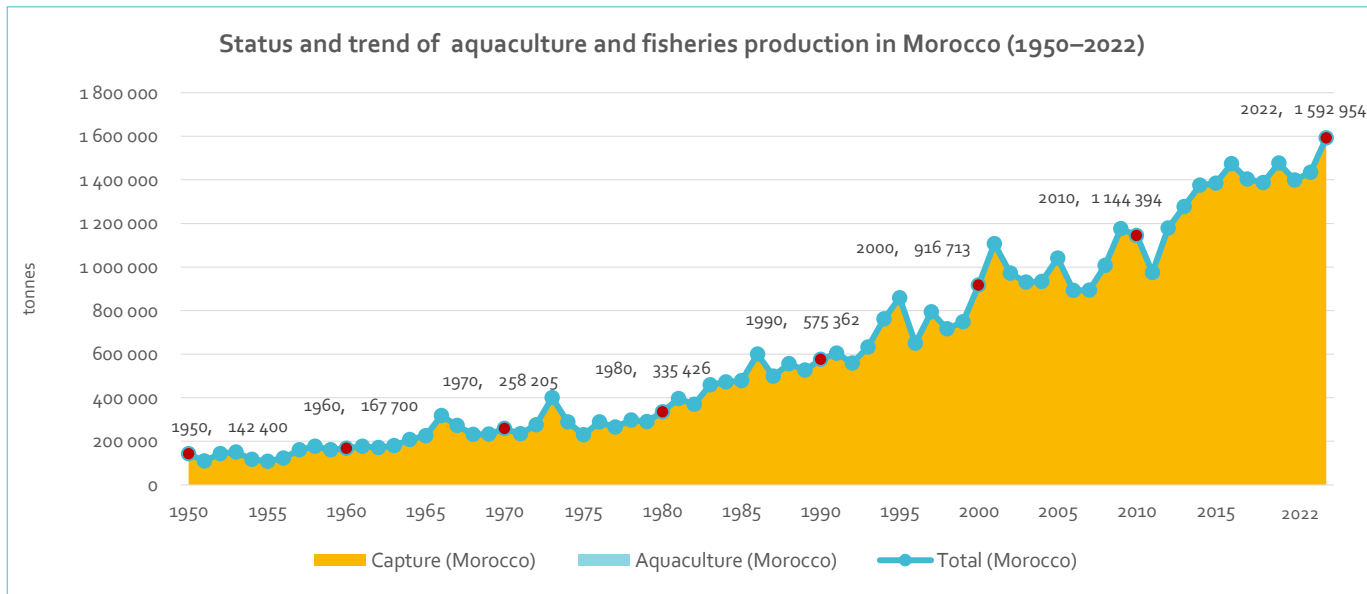


Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2022 (FishStatJ); www.fao.org/fishery/en/statistics/software/fishstaj).

Notes: Includes all aquatic commodities recorded in the data source. Nei = not elsewhere included.

Total fisheries production

Morocco (1950–2022): Total fisheries production increased more than 10 times from less than 150 000 tonnes in 1950 to more than 1.5 million tonnes in 2022. This reflects the trend of capture fisheries production, while aquaculture production was too small to be visible in the chart.



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global production by production source 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstatj).

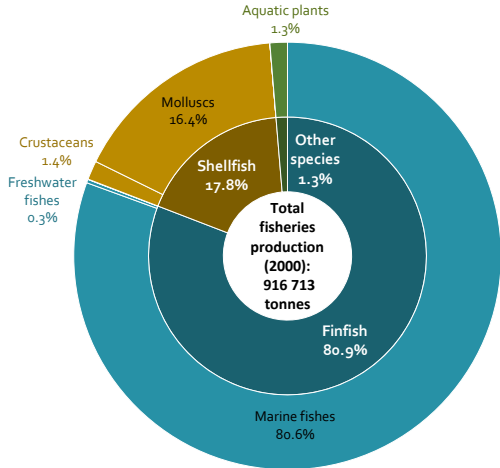
Notes: Production covers all aquatic species measured in tonnage; see [slide #4](#) for the scope of aquatic species.

Total fisheries production in Morocco (2022 versus 2000):

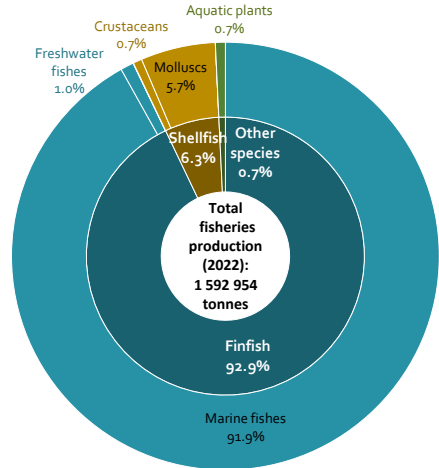
Total fisheries production increased from 916 713 tonnes in 2000 to 1 592 954 tonnes in 2022, with small changes in the taxonomic composition.

The share of marine fishes increased from 80.6 percent to 91.9 percent, while that of molluscs declined from 16.4 percent to 5.7 percent.

Morocco (2000)



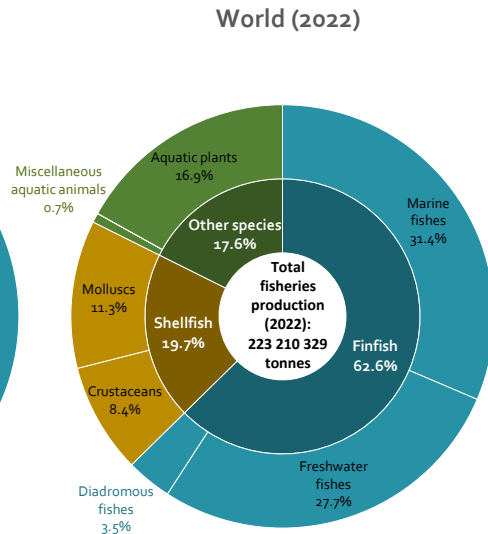
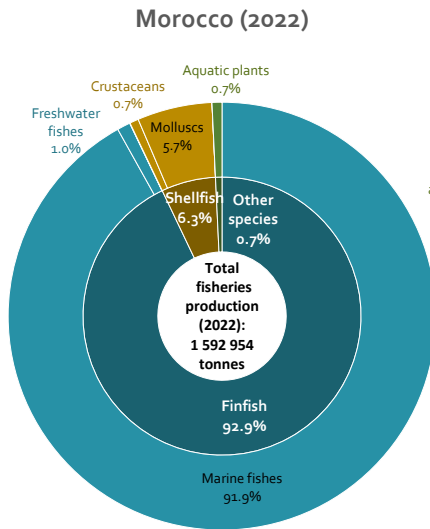
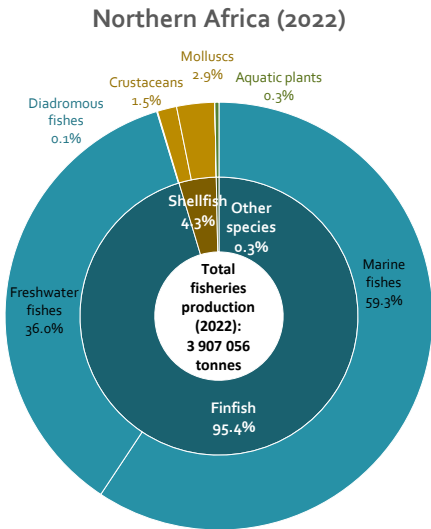
Morocco (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global production by production source 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstaj).

Notes: Production covers all aquatic species measured in tonnage; see slide #4 for the scope of aquatic species. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Morocco's total fisheries production in 2022 comprised primarily marine fishes (91.9 percent) and molluscs (5.7 percent). The taxonomic composition appeared less diverse than Northern Africa and world patterns.



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global production by production source 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstatj).
Notes: Production covers all aquatic species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Species accounting for less than 0.1 percent of total production not labelled in the charts.

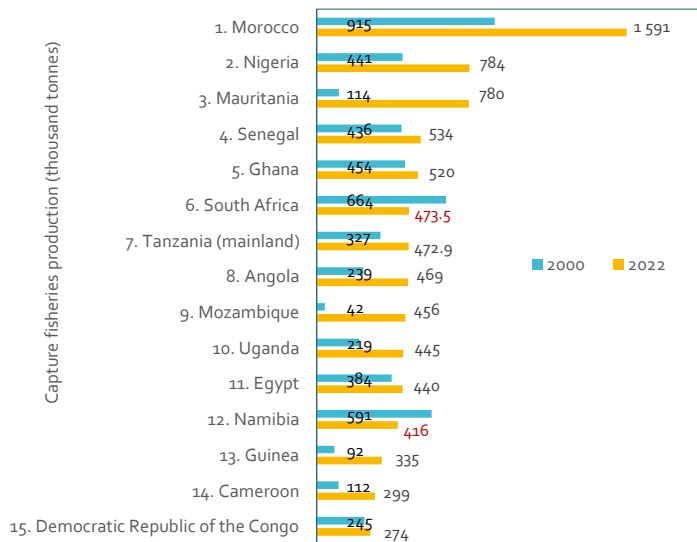
Capture fisheries production

Morocco's capture fisheries production increased from less than 1 million tonnes in 2000 to more than 1.5 million tonnes in 2022. The 2.55 percent annual growth was higher than subregional, regional, and world averages. The country's 1.59 million tonnes of capture fisheries production in 2022 was the highest in Africa and also much higher than neighbouring countries.

Status and trend of capture fisheries production, 2022 versus 2000

Country/area	Capture fisheries production (tonnes)		Annual growth (%)
	2000	2022	
World	94 777 549	92 289 568	-0.12
Africa	6 812 485	10 639 992	2.05
Sub-Saharan Africa	5 255 546	8 367 070	2.14
Northern Africa	1 609 949	2 317 172	1.67
Morocco and neighbouring countries, ranked by production in 2022			
1. Morocco	914 824	1 590 644	2.55
2. Spain	1 062 915	809 094	-1.23
3. France	694 453	534 876	-1.18
4. Egypt	384 315	440 197	0.62
5. Portugal	192 120	159 891	-0.83
6. Italy	304 157	143 646	-3.35
7. Tunisia	94 671	128 705	1.41
8. Algeria	113 160	80 790	-1.52
9. Greece	99 344	65 495	-1.88
10. Croatia	21 068	63 683	5.16
11. Sudan		44 250	n.a.
12. Libya	49 969	32 585	-1.92
13. Albania	3 328	8 740	4.49
14. Malta	1 074	2 809	4.47

Top 15 capture fisheries countries in Africa



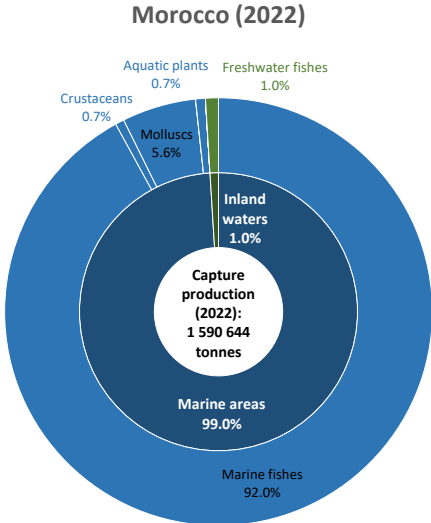
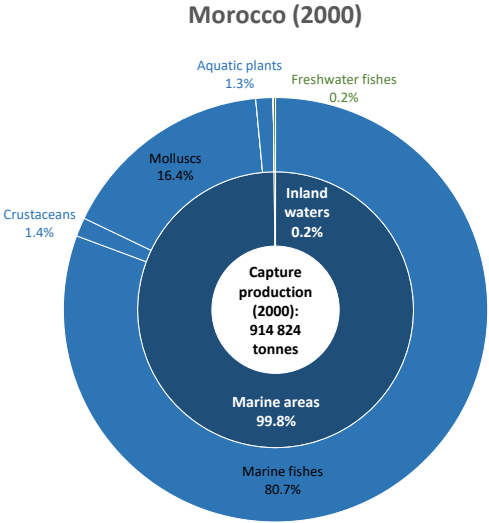
Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global capture production 1950-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstati).

Notes: N.a. = not available. Country grouping based on UN-OHRLS and UN M49 standard. Sub-Saharan Africa includes Sudan. Production covers all aquatic species measured in tonnage; see [slide #4](#) for the scope of aquatic species.

Capture fisheries in Morocco (2022 versus 2000):

Capture fisheries production increased from 914 824 tonnes in 2000 to 1 590 644 tonnes in 2022.

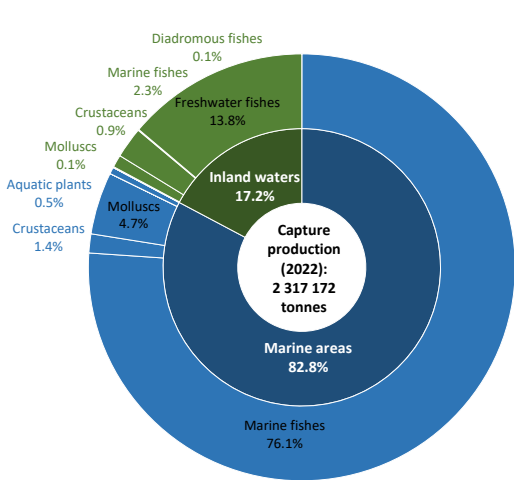
The share of inland fisheries increased from 0.2 percent to 1 percent.



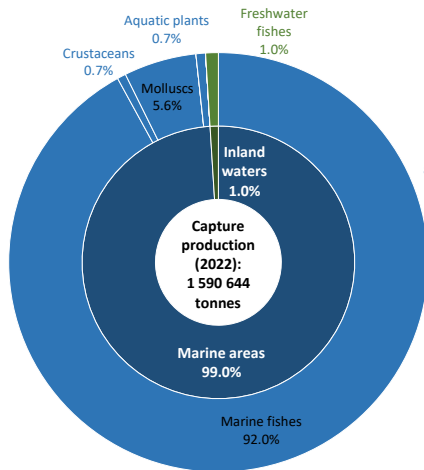
Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global capture production 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstati).
 Notes: Production covers all species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Marine areas including coastal areas. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Inland fisheries contributed 1 percent of Morocco's capture fisheries production in 2022, as opposed to 17.2 percent in Northern Africa and 12.3 percent in the world.

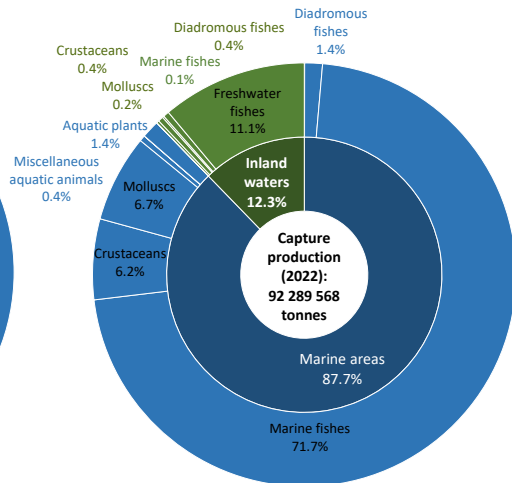
Northern Africa (2022)



Morocco (2022)



World (2022)



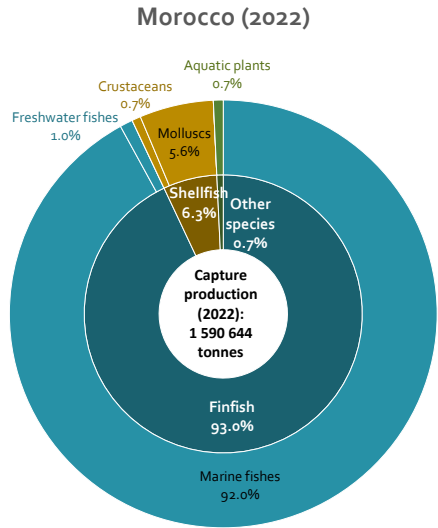
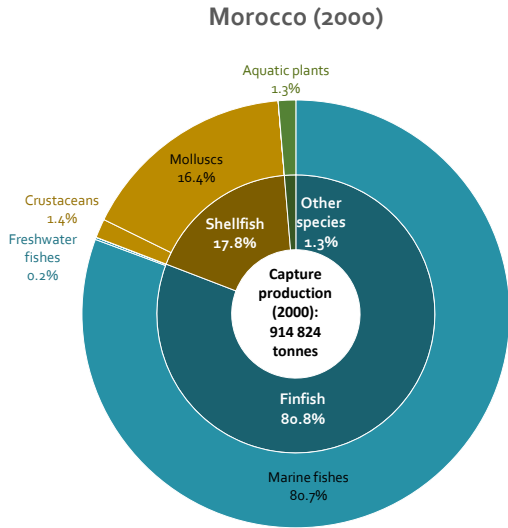
Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global capture production 1950-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstati).

Notes: Production covers all species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Marine areas including coastal areas. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Taxonomic composition of capture fisheries production in Morocco (2022 versus 2000):

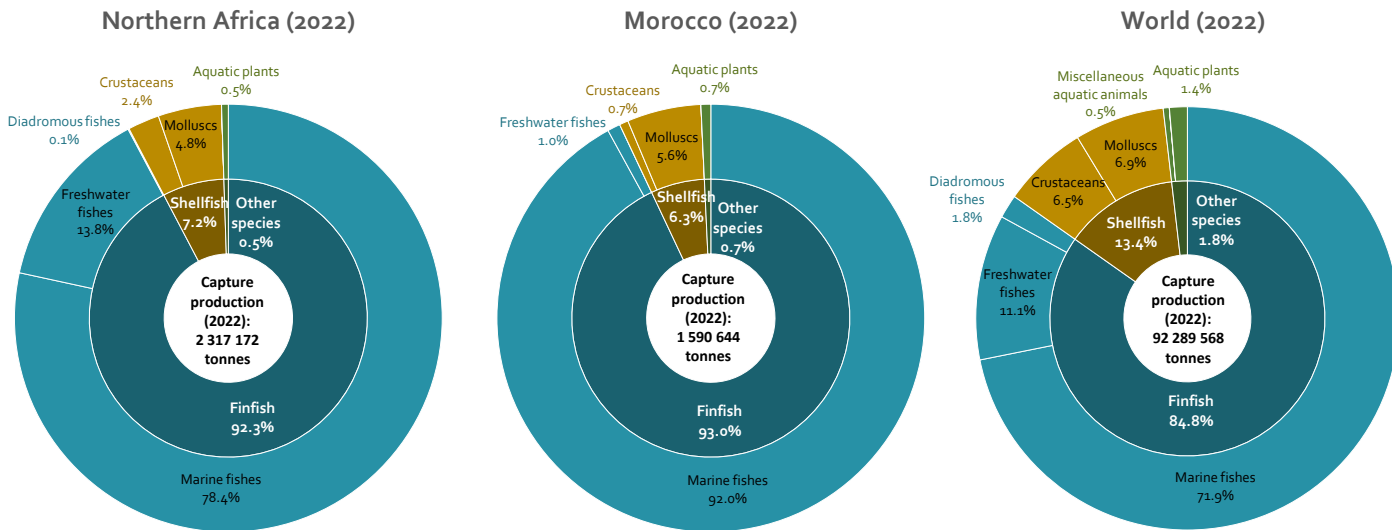
Capture fisheries production increased from 914 824 tonnes in 2000 to 1 590 644 tonnes in 2022.

The share of marine fishes increased from 80.7 percent to 92 percent, while the share of molluscs declined from 16.4 percent to 5.6 percent.



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global capture production 1950-2022 (FishStatJ); www.fao.org/fishery/en/statistics/software/fishstatj.
 Notes: Production covers all species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Morocco's capture fisheries production in 2022 primarily comprised marine fishes (92 percent) and molluscs (5.6 percent). The taxonomic composition was less diverse than Northern Africa and the world.

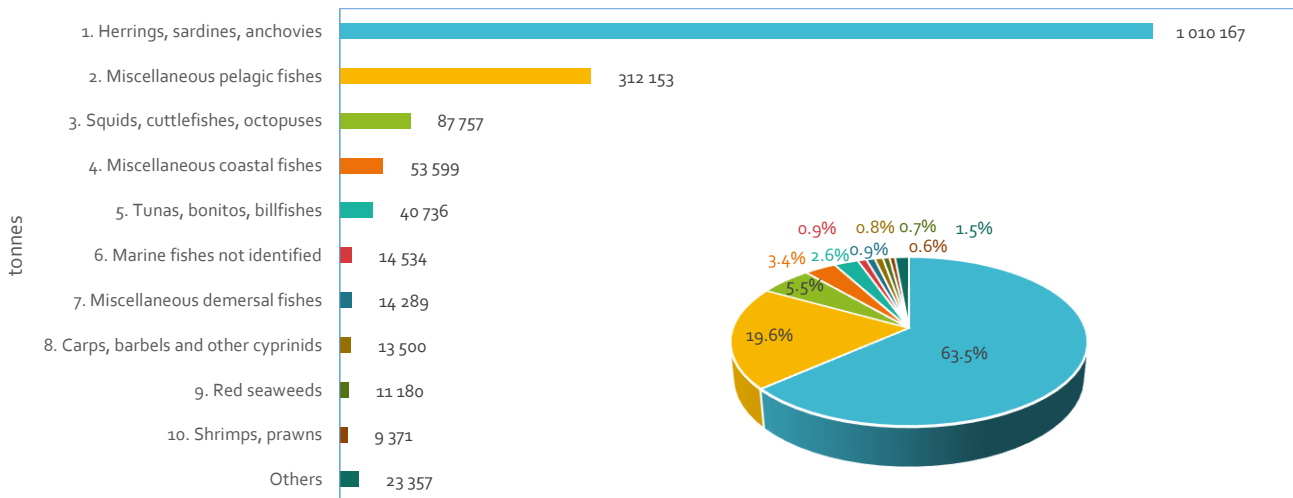


Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global production by production source 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstaj).

Notes: Production covers all species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Taxonomic composition in Morocco's capture fisheries production in 2022

Top 10 ISSCAAP groups in Morocco's capture production quantity (2022)

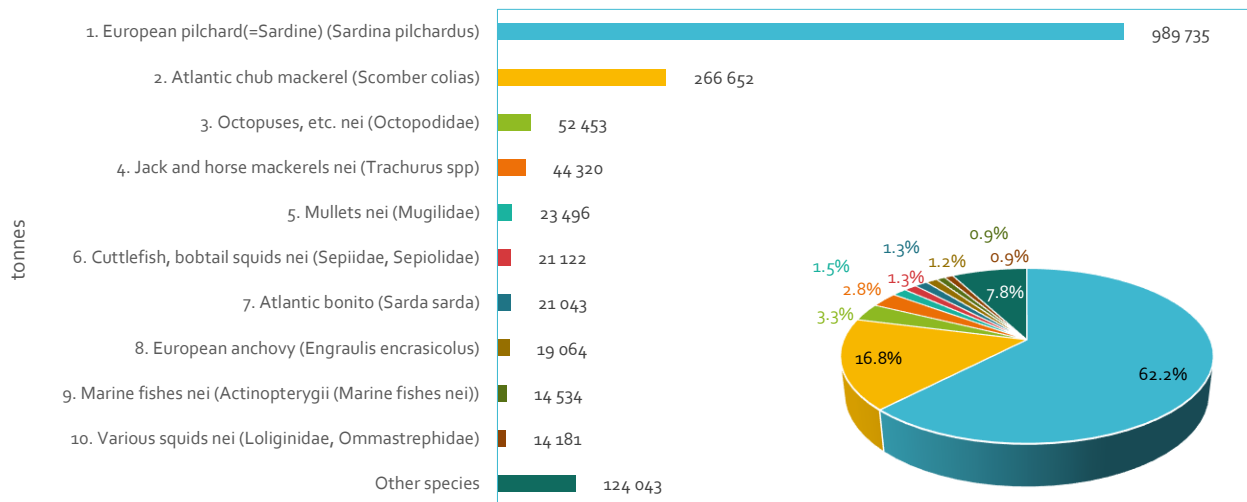


Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global capture production 1950-2022 (FishStat). www.fao.org/fishery/en/statistics/software/fishstati

Note: **ISSCAAP** = International Standard Statistical Classification of Aquatic Animals and Plants.

Species composition in Morocco's capture fisheries production in 2022

Top 10 ASFIS species in Morocco's capture production quantity (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global capture production 1950-2022 (FishStatJ). www.fao.org/fishery/en/statistics/software/fishstatj

Notes: The common and scientific names of a species follow the names adopted in the database. Nei = not elsewhere included. ASFIS = Aquatic Sciences and Fisheries Information System. www.fao.org/fishery/collection/asfis/en

Aquaculture production

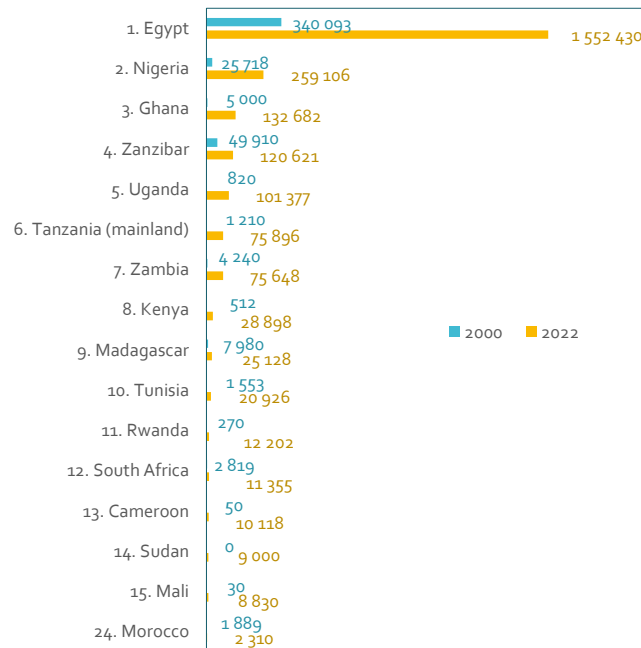
Aquaculture production in Morocco increased from 1 889 tonnes in 2000 to 2 310 tonnes in 2022. The 0.92 percent annual growth was lower than subregional, regional, and world averages. The country's aquaculture production in 2022 was lower than most neighbouring countries, and it ranked the 24th in Africa.

Morocco versus top 15 aquaculture countries in Africa

Status and trends of aquaculture production, 2022 versus 2000

Country/area	Aquaculture production of all species (tonnes)		Annual growth (%)
	2000	2022	
World	43 016 624	130 920 761	5.19
Africa	451 264	2 505 220	8.10
Sub-Saharan Africa	107 338	924 336	10.28
Northern Africa	344 926	1 589 884	7.19
Morocco and neighbouring countries, ranked by production in 2022			
1. Egypt	340 093	1 552 430	7.15
2. Spain	311 429	276 071	-0.55
3. France	266 802	200 490	-1.29
4. Greece	95 418	142 008	1.82
5. Italy	216 525	132 661	-2.20
6. Croatia	6 876	27 156	6.44
7. Portugal	7 537	20 968	4.76
8. Tunisia	1 553	20 926	12.55
9. Malta	1 746	18 051	11.20
10. Sudan		9 000	n.a.
11. Albania	307	8 812	16.48
12. Algeria	351	5 208	13.04
13. Morocco	1 889	2 310	0.92
14. Libya	40	10	-6.11

Aquaculture production (tonnes)

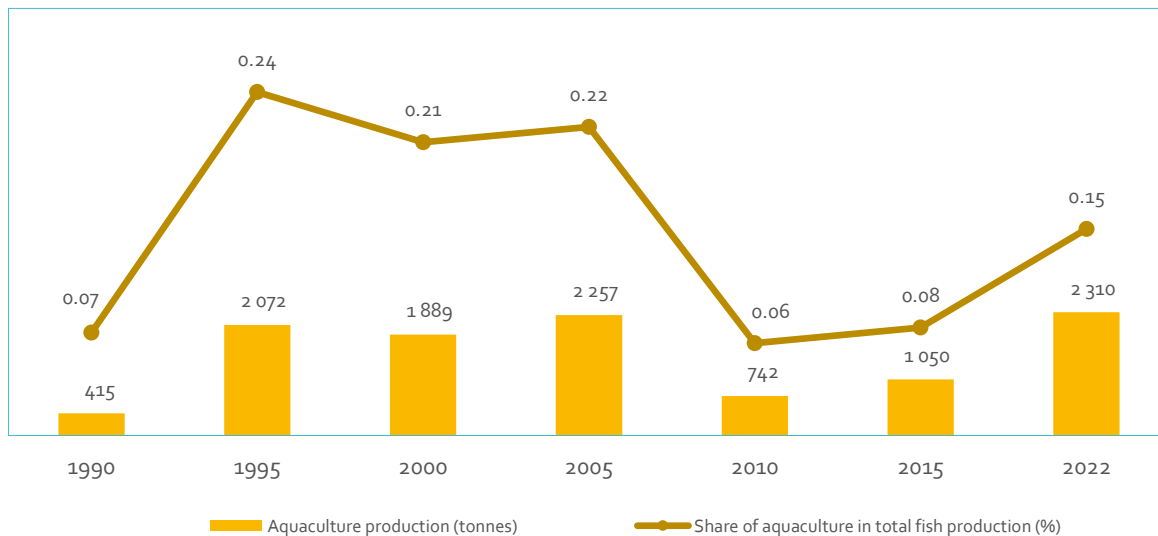


Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstati.

Notes: Production covers all aquatic species measured in tonnage; see [slide #4](#) for the scope of aquatic species.

Aquaculture production in Morocco increased from 415 tonnes in 1990 to 2 072 tonnes in 1995, with the share of aquaculture in total fisheries production increased from 0.07 percent to 0.24 percent. The production increased to 2 310 tonnes in 2022, while the aquaculture share declined to 0.15 percent.

Morocco: aquaculture's share in total fisheries production

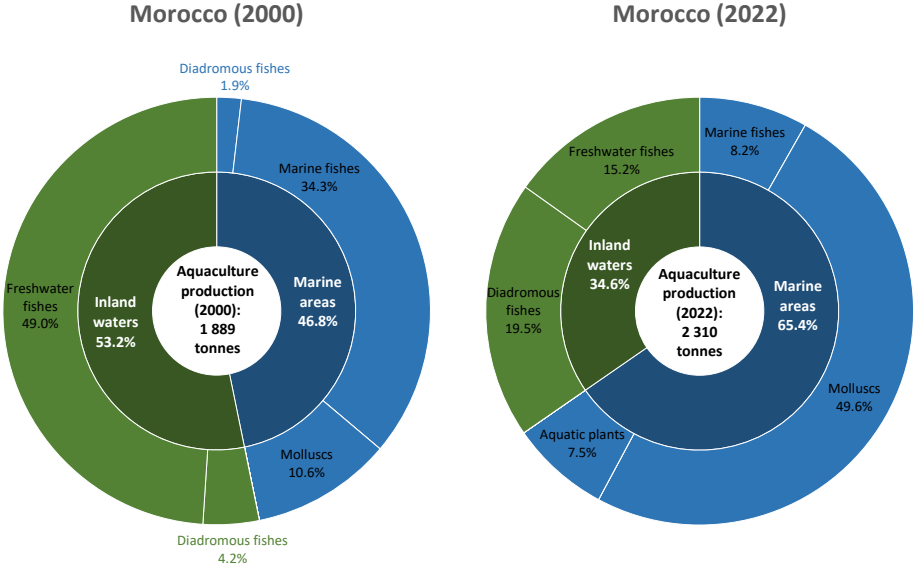


Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStat); www.fao.org/fishery/en/statistics/software/fishstatj.
Notes: Production covers all aquatic species measured in tonnage; see [slide #4](#) for the scope of aquatic species.

Aquaculture production in Morocco by farming area (2022 versus 2000):

Aquaculture production increased from 1 889 tonnes in 2000 to 2 310 tonnes in 2022.

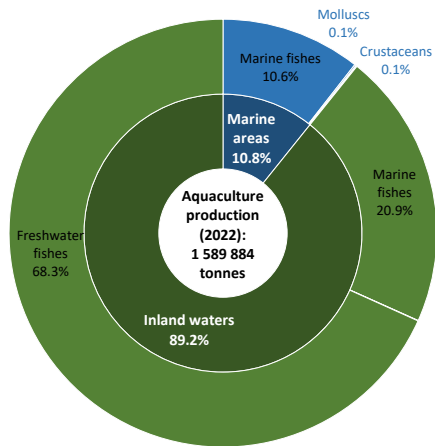
The share of inland aquaculture declined from 53.2 percent to 34.6 percent.



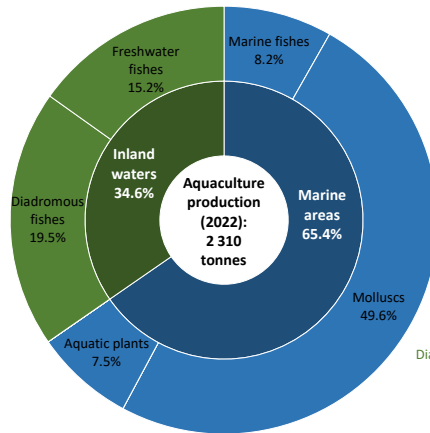
Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstatj).
 Notes: Production covers all species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Species group less than 0.1 percent of total production may not be labelled.

Inland aquaculture accounted for 34.6 percent of Morocco's aquaculture production in 2022. The share was lower than subregional and world averages.

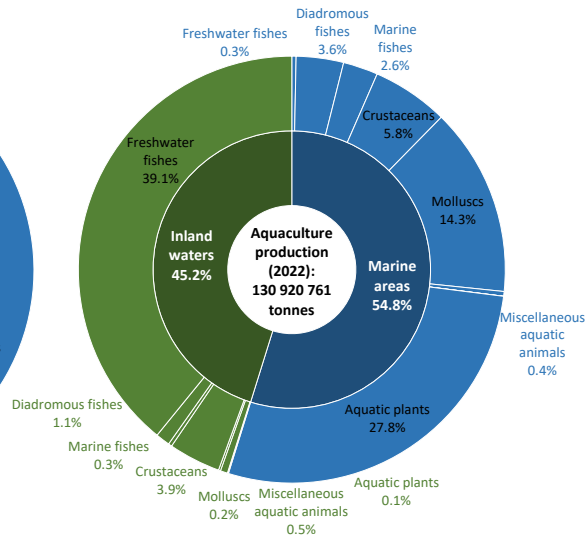
Northern Africa (2022)



Morocco (2022)



World (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstati).

Notes: Production covers all aquatic species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Species group less than 0.1 percent of total production may not be labelled.

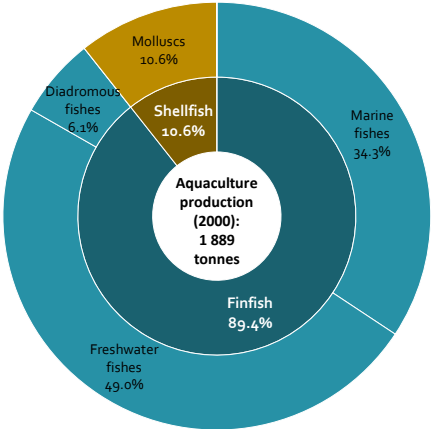
Taxonomic composition in Morocco's aquaculture production (2022 versus 2000):

Aquaculture production increased from 1 889 tonnes in 2000 to 2 310 tonnes in 2022, with a more diverse taxonomic composition.

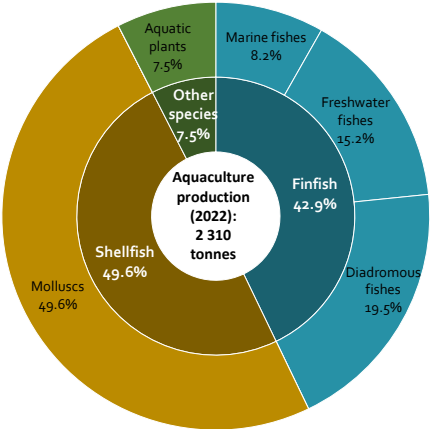
The shares of freshwater fishes and marine fishes declined, while that of diadromous fishes increased.

The share of molluscs increased from 10.6 percent to 49.6 percent, while the share of aquatic plants increased to 7.5 percent.

Morocco (2000)



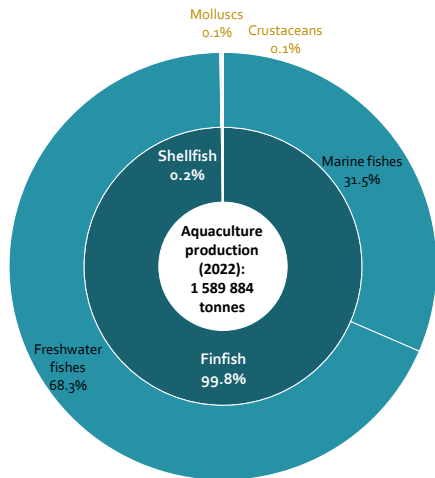
Morocco (2022)



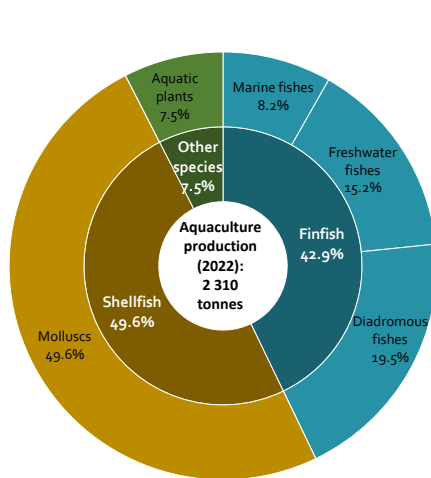
Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstatj).
 Notes: Production covers all species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Molluscs accounted for nearly half of Morocco's aquaculture production in 2022, followed by diadromous fishes (19.5 percent), freshwater fishes (15.2 percent), marine fishes (8.2 percent), and aquatic plants (7.5 percent). The taxonomic composition was more diverse than the Northern Africa pattern.

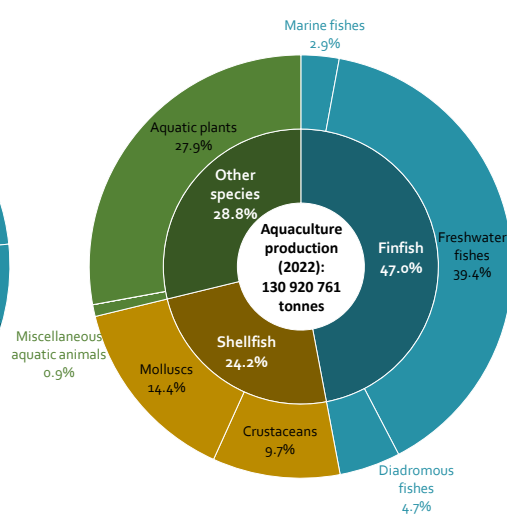
Northern Africa (2022)



Morocco (2022)



World (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStatJ; www.fao.org/fishery/en/statistics/software/fishstati).

Notes: Production covers all aquatic species measured in tonnage; see [slide #4](#) for the scope of aquatic species. Species group less than 0.1 percent of total production may not be labelled.

Morocco's 2 310 tonnes of aquaculture production in 2022 was contributed by eight ASFIS species items, and the effective number of species (ENS; a measure of species diversity) was 6.1, indicating a highly diverse species composition – the largest species accounted for only one third of the total production. Yet the eight species belong to eight different species groups.

Aquaculture species groups by production quantity		Morocco (all areas; quantity; 2022)				
WAPI species group	ISSCAAP division	Number of ASFIS species items in the group farmed by the country		The country's aquaculture production quantity of each species group (live weight; tonnes)	Share of the country's aquaculture production quantity of all species (%)	Share of world aquaculture production quantity of the same species group (%)
		Total	Effective			
1. Oysters (ISSCAAP group)	Molluscs	1	1.0	793	34.3	0.0112
2. River eels (ISSCAAP group)	Diadromous fishes	1	1.0	350	15.2	0.1068
3. Tilapias and other cichlids (ISSCAAP group)	Freshwater fishes	1	1.0	350	15.2	0.0053
4. Clams, cockles, arks shells (ISSCAAP group)	Molluscs	1	1.0	318	13.8	0.0054
5. Marine perch-like fishes (Percoidea, marine)	Marine fishes	1	1.0	190	8.2	0.0110
6. Red seaweeds (ISSCAAP group)	Aquatic plants	1	1.0	174	7.5	0.0009
7. Salmon, trouts, smelts (ISSCAAP group)	Diadromous fishes	1	1.0	100	4.3	0.0023
8. Mussels (ISSCAAP group)	Molluscs	1	1.0	35	1.5	0.0018
Aquatic products		8	6.1	2 310	100.0	0.0018

Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (Fishstat); www.fao.org/fishery/en/statistics/software/fishstatj

Notes: ASFIS = Aquatic Sciences and Fisheries Information System. www.fao.org/fishery/collection/asfis/en. ISSCAAP (International Standard Statistical Classification of Aquatic Animals and Plants) grouping can be found at www.fao.org/tempref/FI/DOCUMENT/cwp/handbook/annex/AnnexS2listISSCAAP2000.pdf. The taxonomic scope of WAPI species groups indicated in bracket. More information about the WAPI species grouping can be found at www.fao.org/3/cb5012en/cb5012en.pdf. "Effective Number of Species" as a diversity measure is discussed in FAO Fisheries and Technical Paper 605 - Benchmarking Species Diversification in Global Aquaculture. www.fao.org/3/cb8335en/cb8335en.pdf.

The species composition of Morocco's aquaculture production in terms of value is similar to the pattern in terms of quantity, which is described in the preceding page.

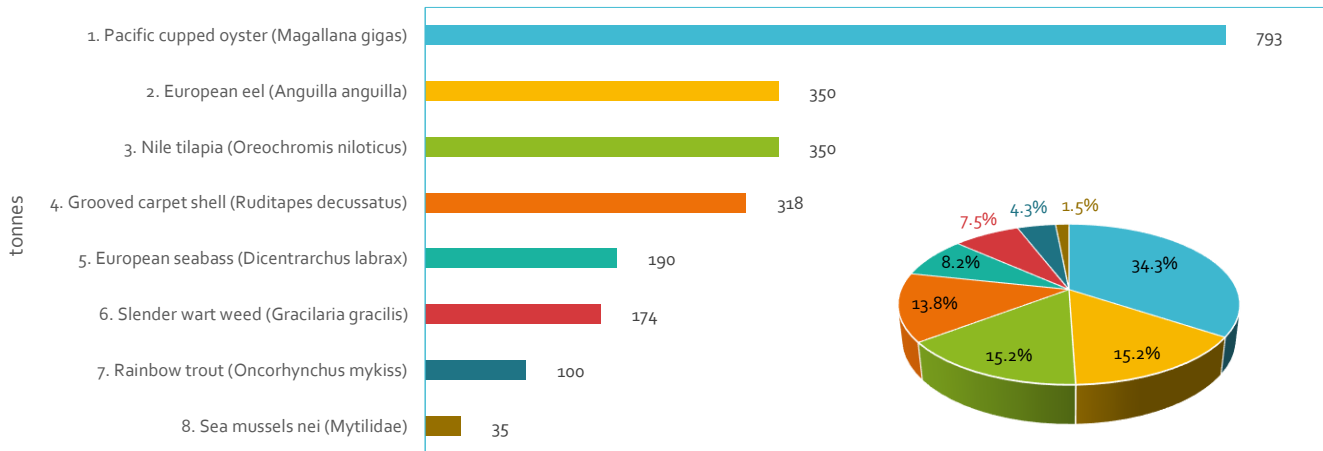
Aquaculture species groups by production value		Morocco (all areas; value; 2022)				
WAPI species group	ISSCAAP division	Number of ASFIS species items in the group farmed by the country		The country's aquaculture production value of each species group (farmgate value; USD 000)	Share of the country's aquaculture production value of all species (%)	Share of world aquaculture production value of the same species group (%)
		Total	Effective			
1. Clams, cockles, arkshells (ISSCAAP group)	Molluscs	1	1.0	5 586	36.2	0.0533
2. River eels (ISSCAAP group)	Diadromous fishes	1	1.0	4 134	26.8	0.1724
3. Oysters (ISSCAAP group)	Molluscs	1	1.0	2 805	18.2	0.0339
4. Marine perch-like fishes (Percoidea, marine)	Marine fishes	1	1.0	1 495	9.7	0.0209
5. Tilapias and other cichlids (ISSCAAP group)	Freshwater fishes	1	1.0	861	5.6	0.0062
6. Salmons, trouts, smelts (ISSCAAP group)	Diadromous fishes	1	1.0	492	3.2	0.0016
7. Mussels (ISSCAAP group)	Molluscs	1	1.0	51	0.3	0.0018
8. Red seaweeds (ISSCAAP group)	Aquatic plants	1	1.0	17	0.1	0.0002
Aquatic products		8	4.7	15 441	100.0	0.0049

Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishstatJ); www.fao.org/fishery/en/statistics/software/fishstatj

Notes: ASFIS = Aquatic Sciences and Fisheries Information System. www.fao.org/fishery/collection/asfis/en. ISSCAAP (International Standard Statistical Classification of Aquatic Animals and Plants) grouping can be found at www.fao.org/tempref/FI/DOCUMENT/cwp/handbook/annex/AnnexS2listISSCAAP2000.pdf. The taxonomic scope of WAPI species groups indicated in bracket. More information about the WAPI species grouping can be found at www.fao.org/3/cb5012en/cb5012en.pdf. "Effective Number of Species" as a diversity measure is discussed in FAO Fisheries and Technical Paper 605 - Benchmarking Species Diversification in Global Aquaculture. www.fao.org/3/cb8335en/cb8335en.pdf.

Species composition in Morocco's aquaculture production in 2022 (in terms of quantity)

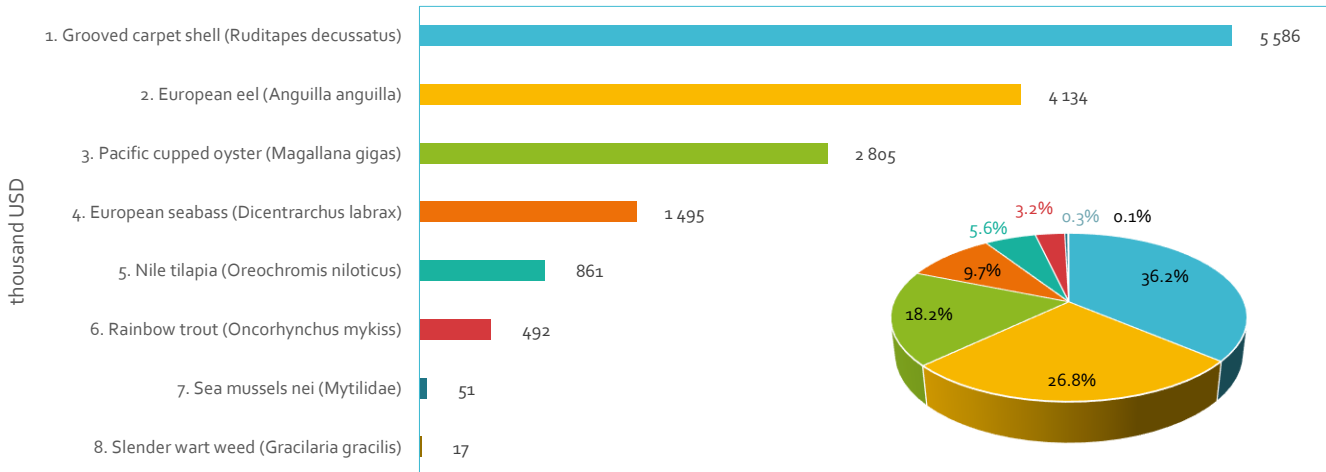
ASFIS species in Morocco's aquaculture production quantity (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStatJ). www.fao.org/fishery/en/statistics/software/fishstatj
Notes: The common and scientific names of a species follow the names adopted in the database. Nei = not elsewhere included. Species item less than 1 percent of total production may not be labelled in the pie chart. ASFIS = Aquatic Sciences and Fisheries Information System. www.fao.org/fishery/collection/asfis/en

Species composition in Morocco's aquaculture production in 2022 (in terms of value)

ASFIS species in Morocco's aquaculture production value (2022)



Data source: FAO. 2024. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStatJ). www.fao.org/fishery/en/statistics/software/fishstatj
Notes: The common and scientific names of a species follow the names adopted in the database. Nei = not elsewhere included. Species item less than 1 percent of total production may not be labelled in the pie chart. ASFIS = Aquatic Sciences and Fisheries Information System. www.fao.org/fishery/collection/asfis/en

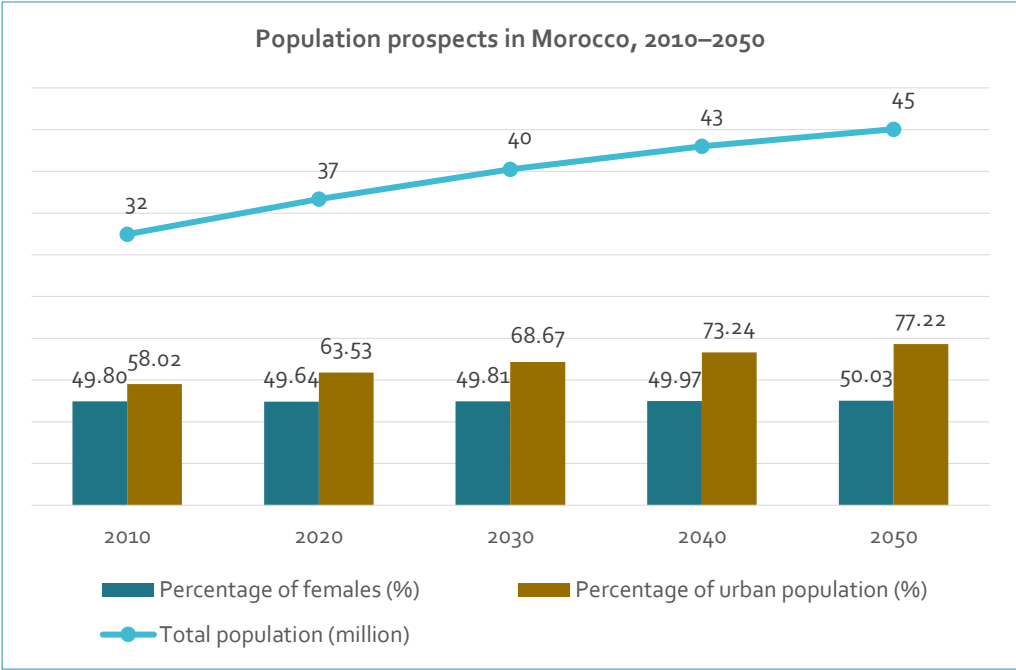
Outlook

Population prospects in Morocco (2010–2050):

Total population is expected to reach 45 million in 2050.

The ratio of urban population is expected to go beyond 75 percent in 2050.

The female ratio is expected to be above 50 percent in 2050.



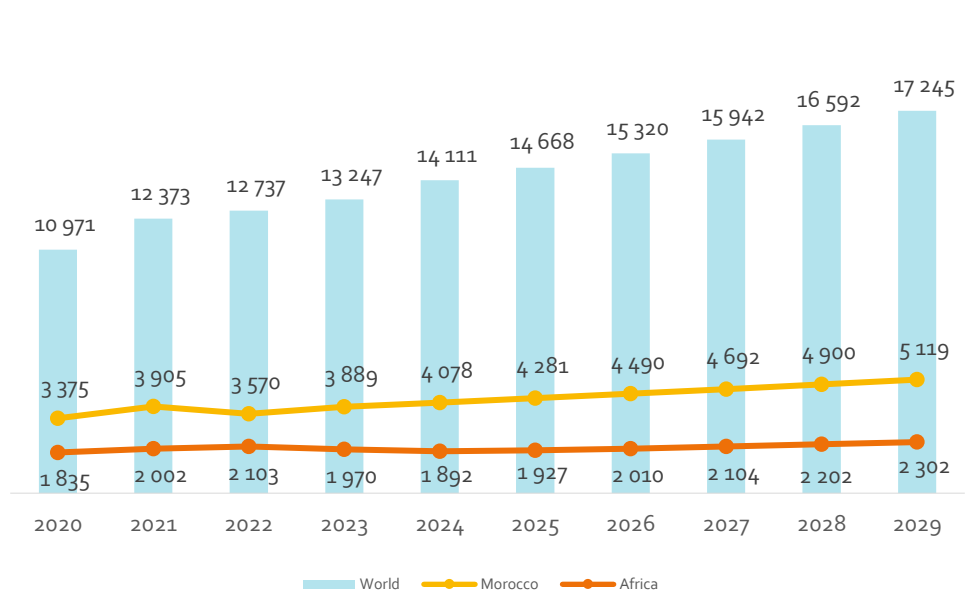
Data sources: United Nations World Population Prospects (2022 revision; <https://esa.un.org/unpd/wpp/Download/Standard/Population>). United Nations World Urbanization Prospects (2018 revision; <https://population.un.org/wup>).

Morocco's GDP prospects (2020-2029):

According to IMF's projection, Morocco's GDP per capita is expected to increase from USD 3 375 to USD 5 119 between 2020 and 2029.

The 52 percent growth will be lower than the world average (57 percent) yet higher than the Africa average (25 percent).

GDP per capita (current USD)



Data sources: Per capita GDP equal to total GDP from IMF World Economic Outlook Database (April 2024; <https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/download.aspx>) divided by population from UN World Population Prospects (2022 Revision; <https://esa.un.org/unpd/wpp/Download/Standard/Population/>).

Morocco (2020–2030): Aquaculture growth potential from a demand-side perspective

Morocco	Baseline (2020)	Projection to 2030	
		Year 2030	2030 compared to baseline
1. Per capita fish demand (kg/capita/year)	18.72	18.72	-
2. Population (thousand)	36 689	40 226	3 538
3. Total fish demand (tonnes)	686 784	753 005	66 221
4. Fish supply from aquaculture (tonnes)	1 618	4 254	2 636
5. Supply-demand gap (tonnes)			-63 585

Notes: Fish and seafood includes finfish, crustaceans, molluscs and miscellaneous aquatic animals. 1. Morocco's per capita fish and seafood consumption in 2019 (18.72 kg) is treated as the baseline. 2. Population data from UN World Population Prospects (2022 revision). 3. Equal to (1) x (2). 4. According to FAO Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishstatJ), Morocco's aquaculture production increased from 1 267 tonnes in 2018 to 2 310 tonnes in 2022. Following the linear trend during 2018–2022, the country's aquaculture production could reach 4 254 tonnes in 2030, 2 636 tonnes higher than the 1 618 tonnes in 2020. 5. Equal to (4)–(3).

- Given the 18.72 kg baseline per capita fish and seafood consumption, 753 005 tonnes of fish and seafood will be needed to satisfy the demand of Morocco's projected 40 226 thousand total population in 2030, which is 66 221 tonnes higher than its 686 784 tonnes of baseline fish and seafood demand in 2020 when the population was 36 689 thousand.
- Morocco's aquaculture production increased from 1 267 tonnes in 2018 to 2 310 tonnes in 2022. Following this trend linearly, the country's aquaculture production would reach 4 254 tonnes in 2030. The 2 636 tonnes of extra supply compared to the baseline would nevertheless be insufficient to cover the 66 221 tonnes of extra fish and seafood demand driven by population growth only (with a deficit of 63 585 tonnes).
- As indicated in [slide 23](#), Morocco's annual export of fish and seafood exceeded 700 000 tonnes (live weight equivalent), which is more than 10 times of the 66 221 tonnes of extra fish and seafood demand driven by population growth. While the country appears to have ample production capacity in capture fisheries to satisfy the population-driven demand growth, there is still potential for aquaculture development to satisfy the growth of niche markets.

Morocco: Aquaculture growth potential from a supply-side perspective

- Morocco's share in world aquaculture production tonnage (0.0018 percent):
 - **lower than** its share in world land area (0.33 percent).
 - **lower than** its share in world population (0.47 percent).
- Morocco's share in world inland aquaculture production (0.0014 percent):
 - **lower than** its share in world surface area of inland waterbodies (0.024 percent).
 - **lower than** its share in world renewable water resources (0.053 percent).
- Morocco's share in world marine aquaculture production (0.0021 percent):
 - **lower than** its share in world coastline length (0.23 percent).
- While the comparisons provide some general idea of the aquaculture growth potential based on the country's natural resource endowments, they only offer a rough indication. More comprehensive assessments are necessary to determine the suitability and availability of these resources for aquaculture development.

Morocco	Share of world total (%)
Total country area (excluding coastal waters, 2020) ¹	0.33
Surface area of inland waterbodies (2020) ²	0.024
Coastline length (2019) ³	0.23
Total renewable water resources (2020) ¹	0.053
Population (2021) ⁴	0.47
Aquaculture production (all areas, 2022)⁵	0.0018
Aquaculture production (inland waters, 2022)⁵	0.0014
Aquaculture production (marine areas, 2022)⁵	0.0021

Data sources: 1. FAO AQUASTAT main country database (November 2020; downloaded on 29 April, 2023). 2. FAOSTAT Land Cover database (CCI_LC; excluding Antarctica and several uninhabited islands; updated on 13 July, 2023). 3. The World Factbook, Central Intelligence Agency (CIA), United States of America. Website accessed on 20 May 2019; coastline length of world equal to the sum of coastline length of 265 countries and territories listed in the data source. 4. United Nations World Population Prospects (2022 revision). 5. FAO. 2024. FAO Fishery and Aquaculture Statistics. Global aquaculture production 1950-2022 (FishStatJ).

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Further reading

FAO FISHERIES DIVISION NASO/ NALO FACTSHEETS:

- The National Aquaculture Sector Overview (NASO) collection provides a general overview of the aquaculture sector at national level in a concise and comprehensive product. The NASOs contain detailed information on the history of aquaculture; its human resources and farming systems; and development trends and issues, among others. More than 100 NASO factsheets are available in five languages at: www.fao.org/fishery/en/countrysector/search
- The National Aquaculture Legislation Overview (NALO) consist of a series of comparative national overviews of aquaculture laws and regulations from the top 40 aquaculture producing countries. NALO factsheets have been prepared in collaboration with the FAO Development Law Service and are updated on a regular basis. The NALO collection is available in several languages at: www.fao.org/fishery/en/nalo/search

MORE INFORMATION ON WAPI:

- World Aquaculture Performance Indicators (WAPI) is a process to generate information and knowledge products for evidence-based policymaking and sector management. Key WAPI information/ knowledge products include data analysis tools, technical papers and policy briefs. For more details, visit our webpage at: www.fao.org/fishery/en/statistics/software/wapi
- World Aquaculture Performance Indicators (WAPI) banner: www.fao.org/3/CA0198EN/ca0198en.pdf
- *World Aquaculture Performance Indicators (WAPI) – Information, Knowledge and Capacity for Blue Growth* (brochure): www.fao.org/3/I9622EN/i9622en.pdf
- *The Potential of World Aquaculture Performance Indicators as a Research and Educational Tool* (FAN article, April 2017): www.fao.org/3/a-i7171e.pdf#page=44
- *Report of FAO Expert Workshop on Assessment and Monitoring of Aquaculture Sector Performance, Gaeta. Italy, 5–7 November 2012* (FAO Fisheries and Aquaculture Report 1063): www.fao.org/3/a-i3539e.pdf