Food and Agriculture Organization of the United Nations

Aquaculture growth potential in Costa Rica

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

March 2021

Preparation of this factsheet

- This factsheet provides data and information to facilitate the assessment of aquaculture growth potential in Costa Rica. 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 those 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 Costa Rica is listed in Developing Regions (as opposed to Developed Regions), the Americas, Latin America and the Caribbean (LAC) and the sub-region of Central America.
- 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 76 or visit the WAPI webpage for more information about WAPI information and knowledge products.
- The factsheet was prepared by Junning Cai, Giulia Galli and Xiaowei Zhou. Technical support/feedback from John Jorgensen, Helga Josupeit, Carlos Pulgarin and Marc Taconet are 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); junning.cai@fao.org; wapi@fao.org.

Remarks on FAO aquaculture statistical data – Costa Rica

- 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.
- Many countries lack a national statistics system for collection of aquaculture production data on a regular basis for dissemination and for reporting to FAO. Only 16 countries or territories in Latin America and the Caribbean (LAC) reported aquaculture production data to FAO in all the five years during 2013–2017, and Costa Rica was not one of them.
- 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); Xiaowei.Zhou@fao.org).

Species grouping

In this factsheet, "fish" is used as a general term for convenience. When it is necessary to define the scope of a species group for a specific quantitative measure, the following definitions are used:

- Aquatic products = Fish & seafood + Miscellaneous aquatic animal products + Aquatic plants
- Fish & 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

Contents

Highlights (I)

Status and trends

- Aquaculture production in Costa Rica increased from 9 708 tonnes in 2000 to 20 820 tonnes in 2018; the 4.33 percent annual growth rate was lower than the global, regional and sub-regional averages (slide 60). However, as its capture fisheries production declined from 35 163 tonnes to 13 673 tonnes (slide 52), the share of aquaculture in its total fishery production increased from 21.6 percent to 60.4 percent (slides 61).
- The 20 820 tonnes of aquaculture production in 2018 comprised seven species items, with tilapias and marine shrimps/prawns accounting for over 90 percent of the total production (slides 66-69).

Supply-side perspective

- Costa Rica's 0.02 percent share of world aquaculture production tonnage in 2018 was smaller than its 0.07 percent share in world population. The country's 0.01 percent share in world marine aquaculture production was smaller than its 0.16 percent share in world coastline length, and its 0.03 percent share in world inland aquaculture production was smaller than its 0.21 percent share in world renewable water resources, yet larger than its 0.01 percent share in world surface area of inland waterbodies (slides 9-10; slide 74).
- From 2000 to 2018, Costa Rica's capture fisheries production declined from 35 163 tonnes to 13 673 tonnes (composed of mostly marine fishes; slides 52-58); the 21 490 tonnes decline could not be covered by the 11 112 tonnes increase in its aquaculture production from 9 708 tonnes to 20 820 tonnes (slides 60-69), resulting in a decrease in its total fishery production by 10 378 tonnes from 44 871 tonnes to 34 493 tonnes (slide 48).
- Despite the slight decline in Costa Rica's food fish supply from domestic sources from 27 822 tonnes in 1997 to 27 142 tonnes in 2017, its total fish consumption increased from 18 370 tonnes to 91 417 tonnes thanks to fish import. Since 2008 the country has turned from a net food fish exporter to a net importer, and the 64 275 tonnes (live weight) of food fish import in 2017 accounted for 77.9 percent of its total fish food supply in 2017 (slides 22-23).
- Costa Rica's import of aquatic products increased from USD 20 million in 2000 to nearly USD 200 million in 2018. The 67 630 tonnes of import in 2018 (including both food and non-food aquatic products) comprised 29 812 tonnes of tunas/bonitos/billfishes products, 9 058 tonnes of fish waste, 8 888 tonnes of tilapia products, and 4 186 tonnes of catfish fillets, among others (slides 44-46).

Highlights (II)

Demand-side perspective

- Costa Rica is an upper-middle income, urbanized economy with a relatively small yet growing population (slides 9-12; slides 71-72). The levels of undernourishment, severe insecurity and anaemia among women of reproductive age in Costa Rica were lower than the world, regional and sub-regional averages, yet the country's adult obesity was higher than the world and regional averages (slide 14). Costa Rica's per capita protein intake in 2017 was lower than the world average (slide 16); yet its per capita animal protein intake and the life expectancy of its population were higher (slide 17; slide 20).
- Per capita fish consumption in Costa Rica increased from 4.9 kg in 1997 to 18.5 kg in 2017, which was the highest in Central America and the fourth highest in Latin America and the Caribbean. Fish consumption in Costa Rica was mainly contributed by finfish with the 12 percent shellfish share less than half of the world and Central America averages (slides 25-28).
- Costa Rica's export of aquatic products increased slightly from USD 118 million in 2000 to USD 135 million in 2018. The 24 976 tonnes of export in 2018 comprised 7 401 tonnes of tunas/bonitos/billfishes products, 5 404 tonnes of tilapia products and 1 202 tonnes of marine shrimps/prawns products, among others (slides 37-39).
- Given its 18.47 kg per capita fish and seafood consumption in 2018, Costa Rica's total fish demand would increase by 8 655 tonnes between 2018 and 2030 due to its population growth from 4.999 million to 5.468 million. Given its 20 820 tonnes of aquaculture production in 2018, aquaculture in Costa Rica would need to grow 3 percent a year between 2018 and 2030 in order to generate enough extra supply to cover the 8 655 tonnes of demand growth driven by its population growth (slide 73).

Geo-location, natural resources, population and income

Costa Rica (2018): 0.0182 percent of world aquaculture production; 0.07 percent of world population; an upper-middle income country (107.77 percent of world average GDP per capita).

Status of aquaculture production, population and GDP, 2018

Country/area	Aquaculture production (2018)[1]		Population (2018)[2]		GDP per capita (2018)[3]	
	Tonnes	Share of world total (%)	Million	Share of world total (%)	Current USD	Ratio to world average (%)
World	**114 508 042**	**100.00**	**7 631**	**100.00**	**11 222**	**100.00**
Developing Regions	109 509 509	95.63	6 364	83.39	5 372	47.87
Latin America and the Caribbean	3 161 618	2.76	642	8.42	8 503	75.77
Central America	410 436	0.36	175	2.30	8 497	75.72
Costa Rica + other countries in Central America						
Belize	563	0.0005	0.4	0.01	5 038	44.90
Costa Rica	***20 820***	***0.0182***	***5.0***	***0.07***	***12 093***	***107.77***
El Salvador	8 600	0.0075	6.4	0.08	4 059	36.17
Guatemala	28 317	0.0247	17.2	0.23	4 549	40.54
Honduras	65 000	0.0568	9.6	0.13	2 482	22.12
Mexico	247 222	0.2159	126.2	1.65	9 684	86.30
Nicaragua	29 468	0.0257	6.5	0.08	2 029	18.08
Panama	10 445	0.0091	4.2	0.05	15 576	138.80

Data sources: 1. FAO Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishstatJ). 2. UN World Population Prospects (2019 Revision). 3. Total GDP from IMF World Economic Outlook Database (October 2019) divided by population from UN World Population Prospects (2019 Revision).
Notes: Country grouping based on UN-OHRLLS and UN M49 standard.

Costa Rica (mid-2010s): 0.04 percent of world land area (including inland water surface area); 0.01 percent of world inland water surface area; 0.16 percent of world coastline length; 0.21 percent of world total renewable water resources.

Land and water resources

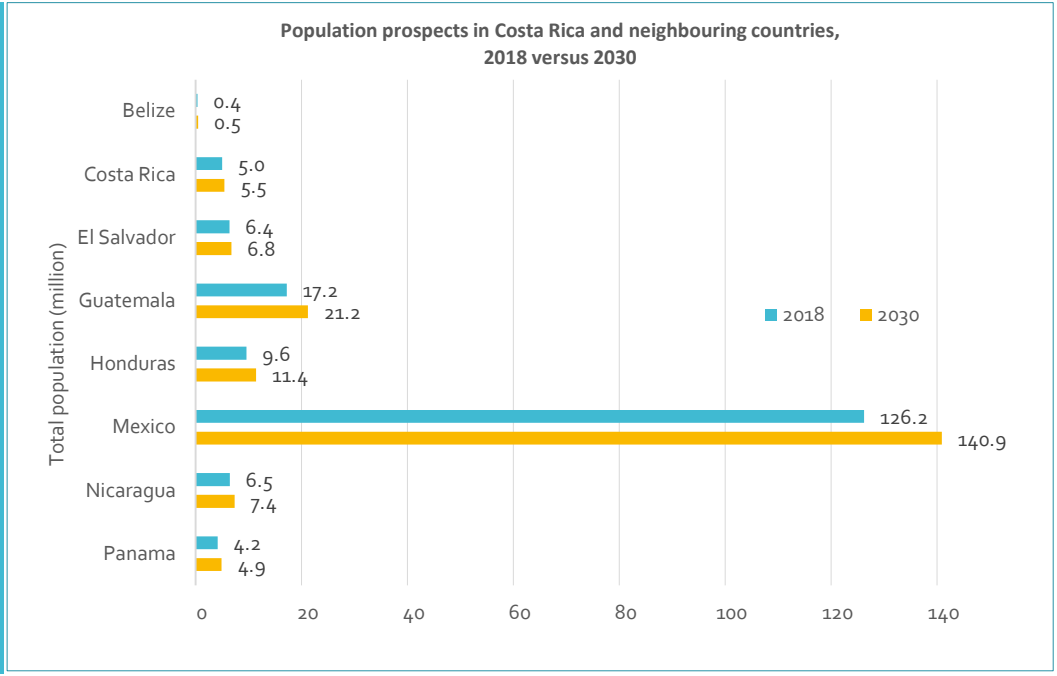
Country/area	Total country area (excluding coastal waters; 2013-17)[1]		Surface area of inland waterbodies (2015)[2]		Coastline length (2019)[3]		Total renewable water resources (2013-17)[1]	
	km^2	Share of world total (%)	km^2	Share of world total (%)	km	Share of world total (%)	Billion m^3/year	Share of world total (%)
World	**134 108 230**	**100.00**	**3 434 349**	**100.00**	**805 942**	**100.00**	**54 737**	**100.00**
Developing Regions	82 607 378	61.60	1 371 378	39.93	n.a.	n.a.	39 730	72.58
Latin America and the Caribbean	20 423 660	15.23	306 507	8.93	n.a.	n.a.	19 204	35.08
Central America	2 486 660	1.85	30 845	0.90	n.a.	n.a.	1 147	2.10
Costa Rica + other countries in Central America								
Belize	22 970	0.02	493	0.01	386	0.05	22	0.04
Costa Rica	***51 100***	***0.04***	***285***	***0.01***	***1 290***	***0.16***	***113***	***0.21***
El Salvador	21 040	0.02	458	0.01	307	0.04	26	0.05
Guatemala	108 890	0.08	1 317	0.04	400	0.05	128	0.23
Honduras	112 490	0.08	1 116	0.03	823	0.10	92	0.17
Mexico	1 964 380	1.46	15 848	0.46	9 330	1.16	462	0.84
Nicaragua	130 370	0.10	10 214	0.30	910	0.11	165	0.30
Panama	75 420	0.06	1 113	0.03	2 490	0.31	139	0.25

Data sources: 1. FAO. 2016. AQUASTAT Main Database – Food and Agriculture Organization of the United Nations (FAO). Website accessed on 16 May 2019. 2. FAOSTAT Land Cover database (updated June 2019; CCI_LC). 3. The World Factbook, Central Intelligence Agency (CIA), United States of America. Web 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.
Notes: N.a. = not available.

Population prospects in Costa Rica (2018 versus 2030):

Population smaller than most countries in Central America (e.g. El Salvador, Guatemala, Honduras, Mexico and Nicaragua).

Population expected to increase from 6.4 million in 2018 to 6.8 million in 2030.



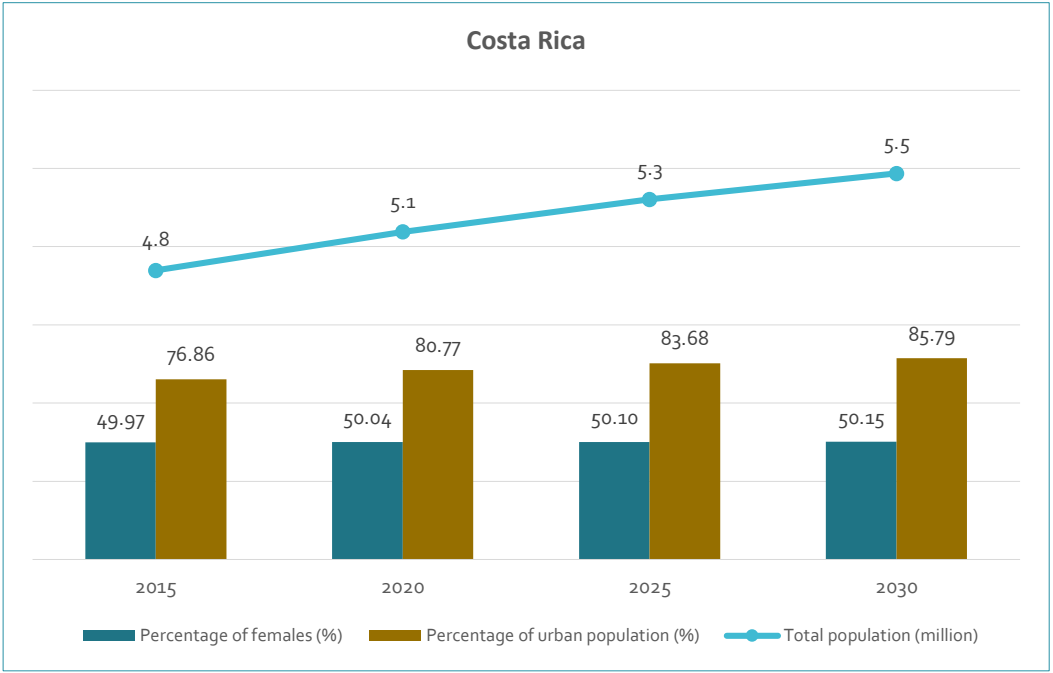
Data source: United Nations World Population Prospects (2019 revision).

Demographic features in Costa Rica (2015–2030):

Population expected to increase by 0.7 million between 2015 and 2030.

Urban ratio of total population expected to increase from 76.86 percent to 85.79 percent.

Female ratio in total population expected to increase slightly above 50 percent.



Data source: United Nations World Population Prospects (2019 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

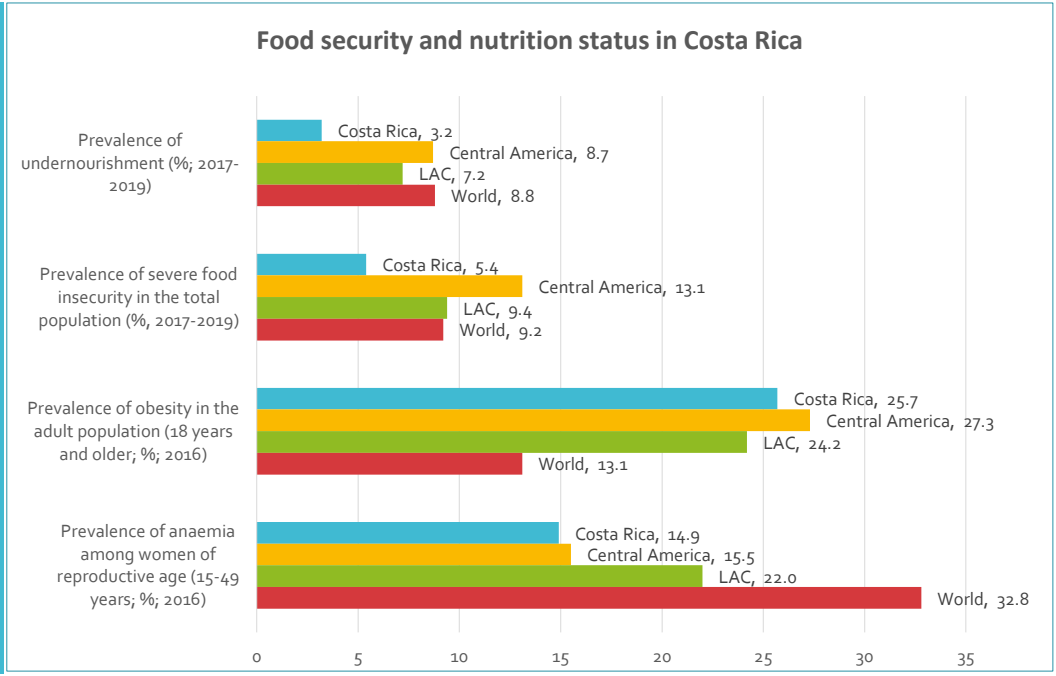
Food security and nutrition status in Costa Rica (mid-2010s):

Undernourishment:
3.2 percent of total population undernourished, lower than the world, regional and sub-regional averages.

Food insecurity:
5.4 percent of total population facing severe food insecurity, lower than the world, regional and sub-regional averages.

Obesity:
25.7 percent of adult population obese, lower than the sub-regional average, yet higher than the regional and world averages.

Anaemia:
14.9 percent of reproductive-age women anaemic, lower than the world, regional and sub-regional averages.



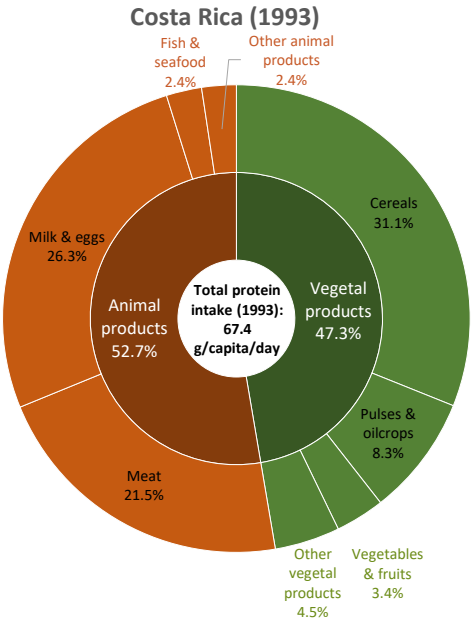
Data source: FAOSTAT – Suite of Food Security Indicators (updated on 6 August 2020; www.fao.org/faostat/en/#data/FS).
Note: LAC = Latin America and the Caribbean.

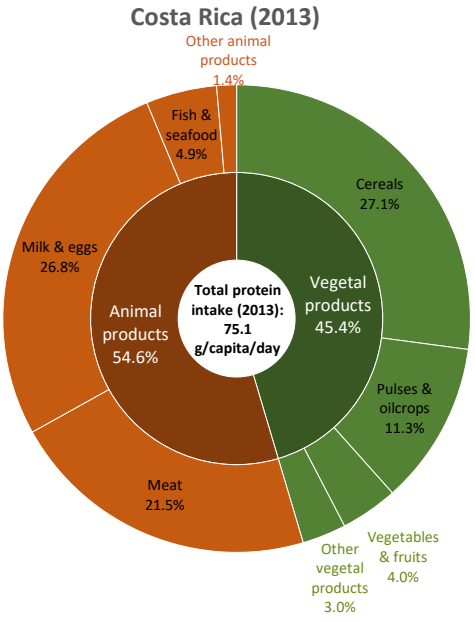
Per capita protein intake in Costa Rica (1993 versus 2013):

Per capita total protein intake increased from 67.4 g/day to 75.1 g/day between 1993 and 2013.

The share of animal protein in total protein intake slightly increased from 52.7 percent to 54.6 percent.

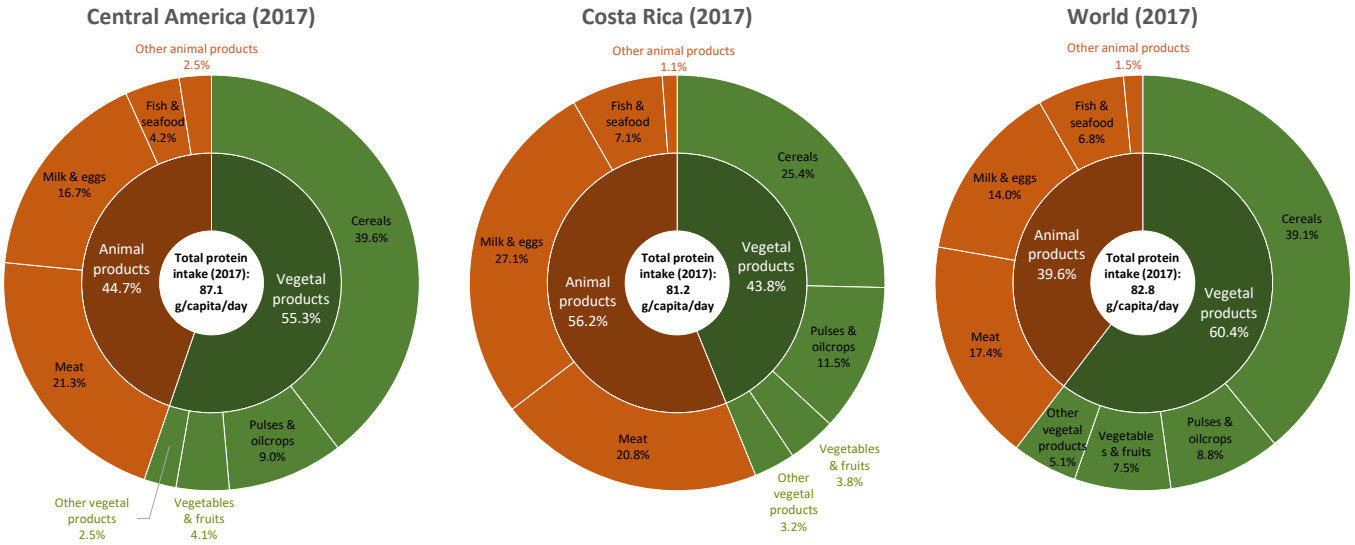
The share of fish and seafood more than doubled from 2.4 percent to 4.9 percent.





Data source: FAOSTAT Food Balances 1961-2013 (accessed in January 2018; www.fao.org/faostat/en/#data/FBSH). The recently published FAOSTAT New Food Balances data (2014–2017; http://www.fao.org/faostat/en/#data/FBS) are still preliminary data yet to be harmonized with the older data (1961–2013).

Per capita protein intake in Costa Rica (2017): The 81.2 g/day of per capita protein intake was lower than the world (82.8 g/day) and Central America (87.1 g/day) averages. The animal protein share (56.2 percent) and the fish share (7.1 percent) were higher than both the Central America and world averages.

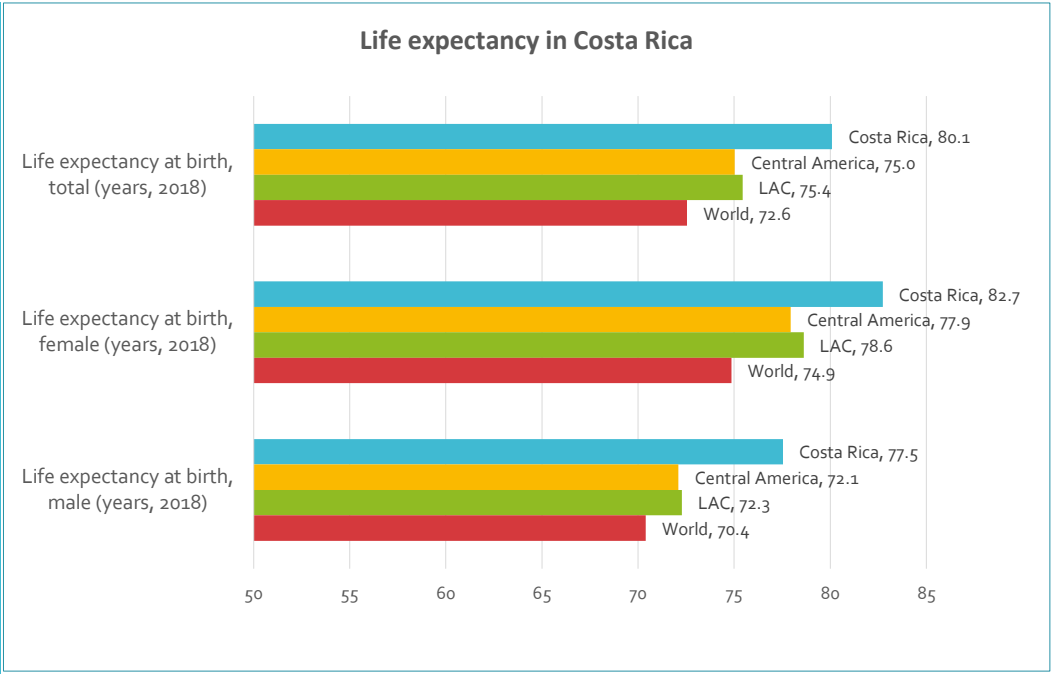


Data source: FAOSTAT New Food Balances (accessed in September 2020; http://www.fao.org/faostat/en/#data/FBS).

Life expectancy in Costa Rica (2018):

Life expectancy at birth for the total population was 80.1 years, higher than the world, regional and sub-regional averages.

Life expectancy for female population (82.7 years) higher than male population (77.5 years) – a general pattern applying to most countries and areas.



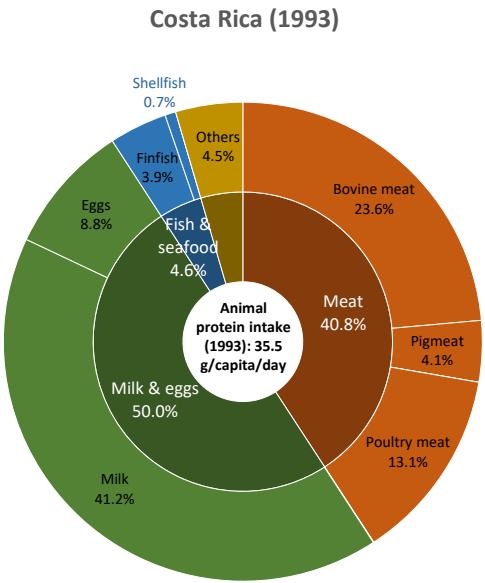
Data source: World Bank World Development Indicators (WDI), downloaded on 29 May, 2020 (http://datatopics.worldbank.org/world-development-indicators/#archives); United Nations World Population Prospects (2019 revision; https://esa.un.org/unpd/wpp/Download/Standard/Population) used to calculate life expectancy at the regional level.
Note: LAC = Latin America and the Caribbean.

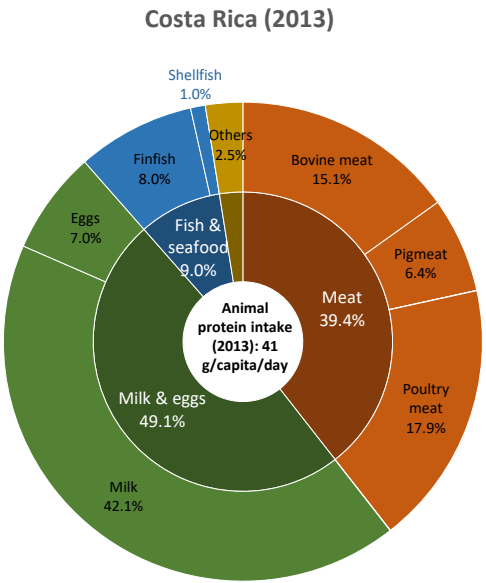
Contribution of fish to food and nutrition

Animal protein intake in Costa Rica (1993 versus 2013):

Per capita animal protein intake increased from 35.5 g/day in 1993 to 41 g/day in 2013.

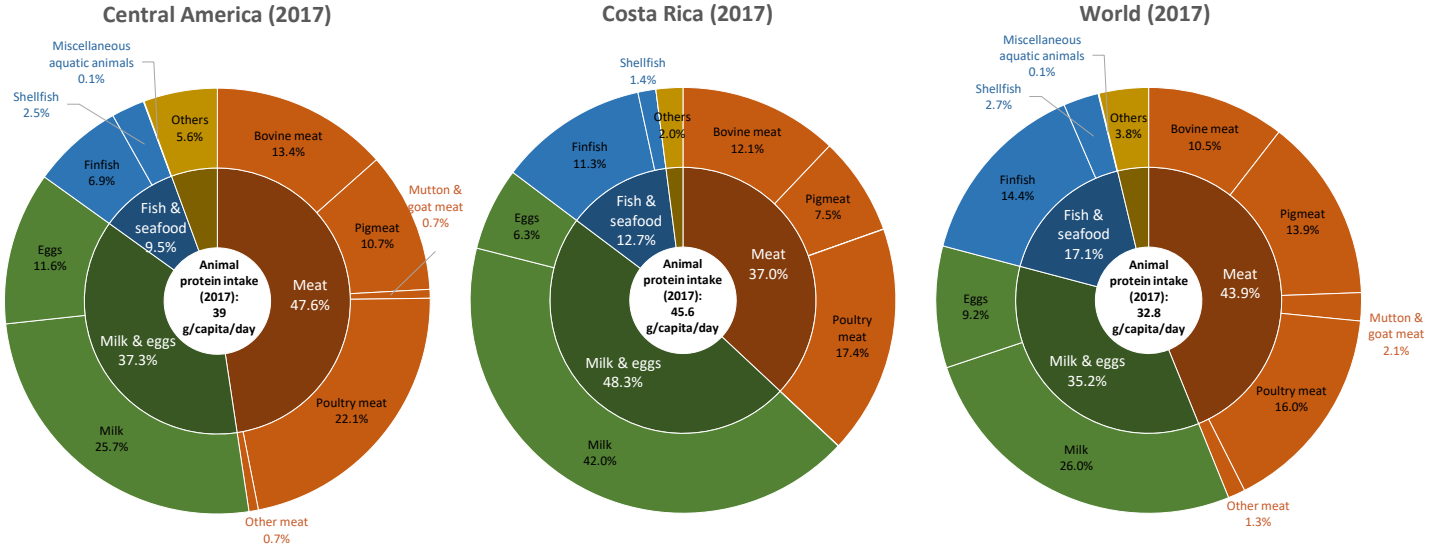
The share of fish in animal protein intake nearly doubled from 4.6 percent to 9 percent.





Data source: FAOSTAT Food Balances 1961-2013 (accessed in January 2018; www.fao.org/faostat/en/#data/FBSH). The recently published FAOSTAT New Food Balances data (2014–2017; http://www.fao.org/faostat/en/#data/FBS) not used in this factsheet because they are still preliminary data yet to be harmonized with the older data (1961–2013).
Note: See slide #4 for the scope of fish & seafood.

Animal protein intake in Costa Rica (2017): 45.6 g/day of per capita animal protein intake, higher than the Central America (39 g/day) and world (32.8 g/day) averages. Fish contribution to animal protein intake (12.7 percent) was higher than the average in Central America (9.5 percent) yet lower than the world (17.1 percent) average.

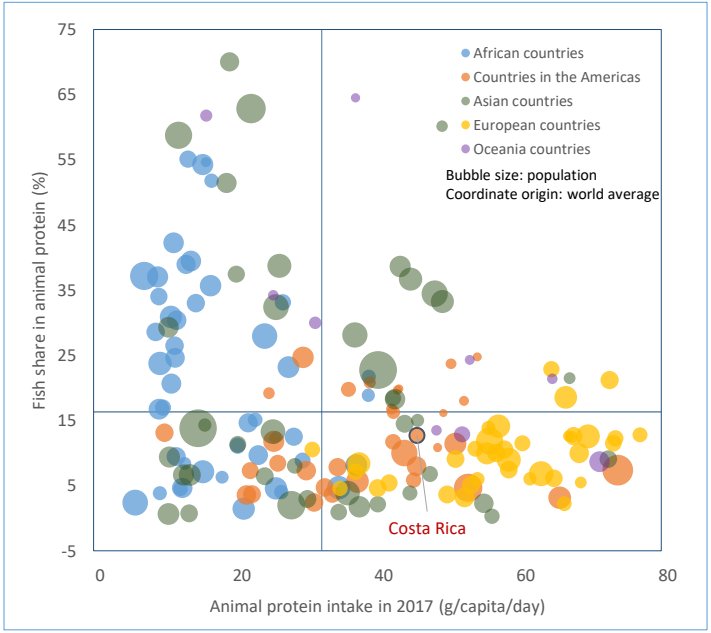


Data source: FAOSTAT New Food Balances (accessed in September 2020; http://www.fao.org/faostat/en/#data/FBS).
Note: See slide #4 for the scope of fish & seafood.

Costa Rica (2017): Animal protein intake higher than the world, regional, sub-regional and Developing Regions averages. Fish and seafood protein (5.8 g/day) higher than the world average, yet the fish share in animal protein (12.7 percent) lower than the world (17.1 percent) yet higher than Latin America and the Caribbean (7 percent).

Contribution of fish to animal protein, 2017

Country/area	Per capita protein intake in 2017 (g/capita/day)		Fish share (%)
	Fish & seafood	Animal products	
World	**5.6**	**32.8**	**17.1**
Developing Regions	5.3	26.9	19.8
Latin America and the Caribbean	3.0	43.2	7.0
Central America	3.7	39.0	9.5
Costa Rica + other countries in Central America			
Belize	3.1	25.5	12.2
Costa Rica	***5.8***	***45.6***	***12.7***
El Salvador	2.2	26.0	8.4
Guatemala	0.8	21.5	3.6
Honduras	0.8	22.3	3.7
Mexico	4.4	43.8	10.0
Nicaragua	1.6	22.1	7.3
Panama	5.0	42.2	11.7



Data source: FAOSTAT New Food Balances (accessed in September 2020; http://www.fao.org/faostat/en/#data/FBS).
Notes: The scope of Developing Regions (as opposed to Developed Regions) follows the original 1996 definition of the UN M49 standard. See slide #4 for the scope of fish & seafood.

Status and trend of fish and seafood supply and utilization in Costa Rica (1997–2017):

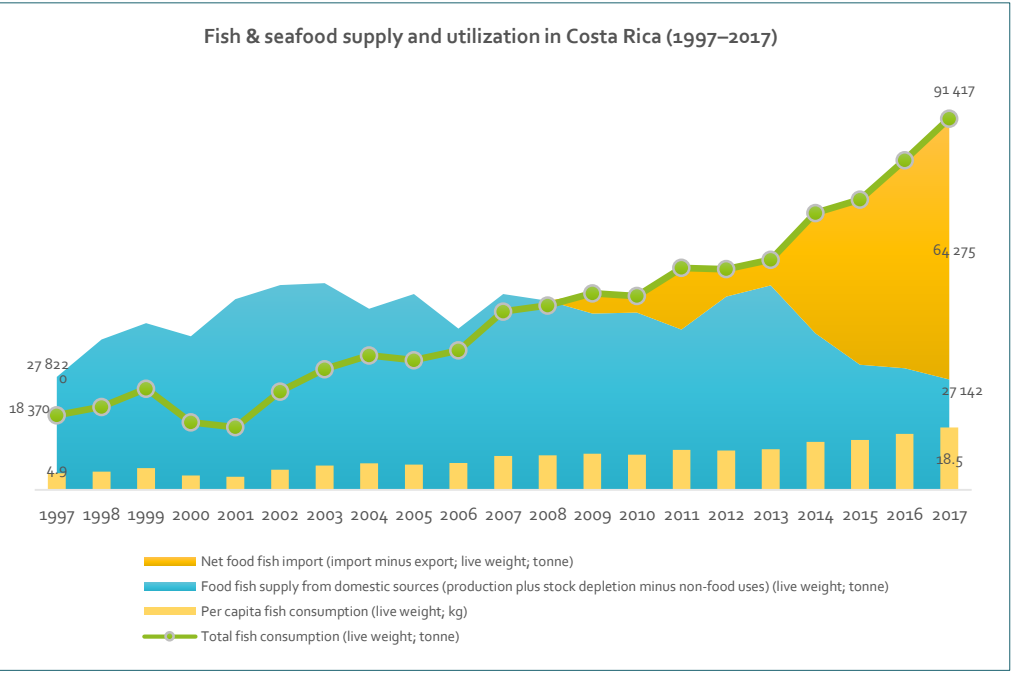
Food fish supply from domestic sources decreased from 27 822 tonnes in 1997 to 27 142 tonnes in 2017.

Total fish consumption increased from 18 370 tonnes to 91 417 tonnes between 1997 and 2017.

In 2008, Costa Rica turned from net exporter to net importer of food fish, and the net import increased to 64 275 tonnes in 2017.

In 2017, 91 417 tonnes food fish supply = 27 142 tonnes food fish supply from domestic sources + 64 275 tonnes net import.

Per capita fish consumption increased from 4.9 kg in 1997 to 18.5 kg in 2017.



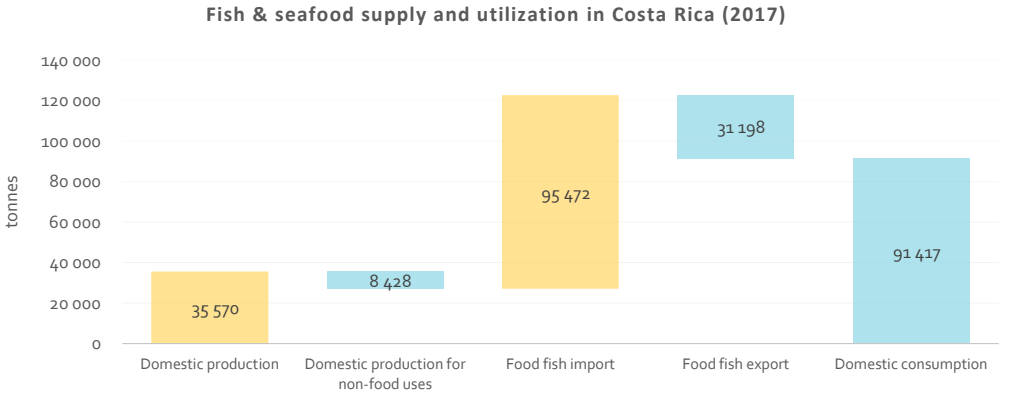
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2017 (FishStatJ; www.fao.org/fishery/statistics/software/fishstatj/en).
Note: See slide #4 for the scope of fish & seafood.

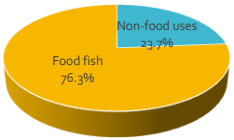
Costa Rica's food balance sheet for fish and seafood, 2017

35 570 tonnes domestic fish production – 8 428 tonnes for non-food use (23.7 percent of the 35 570 tonnes of total food and non-food production) = 27 142 tonnes domestic food fish production (76.3 percent).

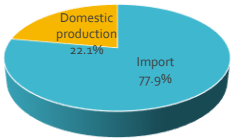
27 142 tonnes domestic food fish production (22.1 percent of food fish supply) + 95 472 tonnes food fish import (77.9 percent) = 122 614 tonnes food fish supply available for utilization.

122 614 tonnes food fish utilization = 31 198 tonnes food fish export (25.4 percent of food fish utilization) + 91 417 tonnes (food) fish consumption (74.6 percent of food fish utilization).

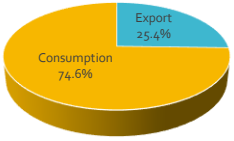




Domestic production (2017): 35 570 tonnes



Food fish supply (2017): 122 614 tonnes



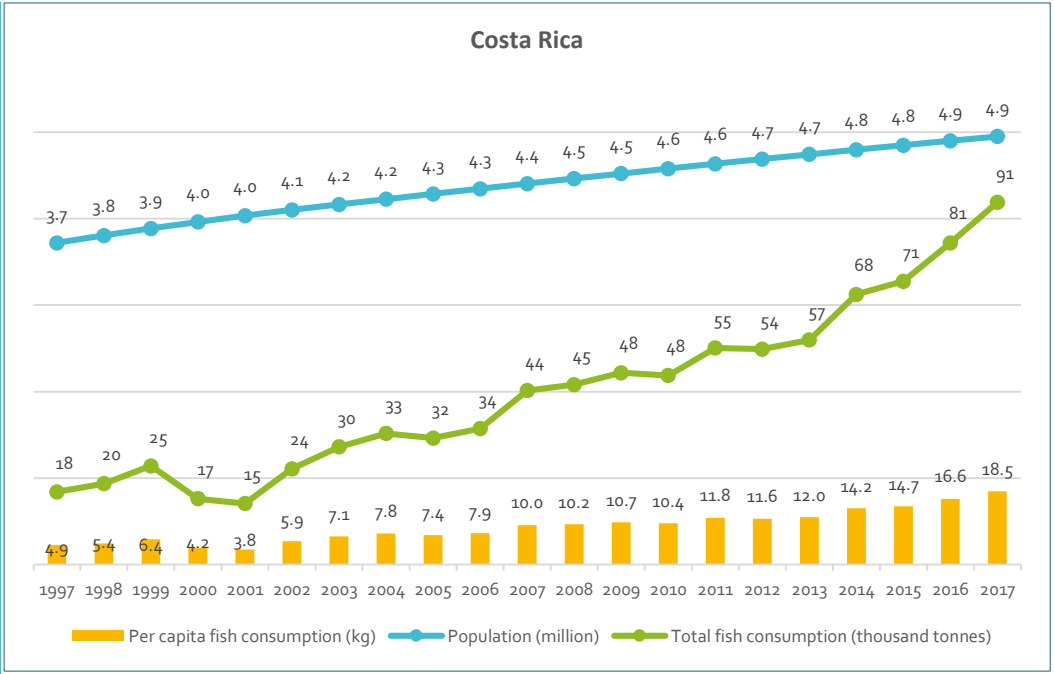
Food fish utilization (2017): 122 614 tonnes

Data source: FAO. 2020. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2017 (FishStatJ; www.fao.org/fishery/statistics/software/fishstatj/en).
Note: See slide #4 for the scope of fish & seafood. Numbers may not add up exactly due to rounding.

Domestic fish market (fish consumption)

Status and trend of fish and seafood consumption in Costa Rica (1997–2017):

The increase in total fish and seafood consumption from 18 thousand tonnes in 1997 to 91 thousand tonnes in 2017 was driven by the increase in population, from 3.7 million in 1997 to 4.9 million in 2017, and an increase in per capita fish and seafood consumption from 4.9 kg in 1997 to 18.5 kg in 2017.

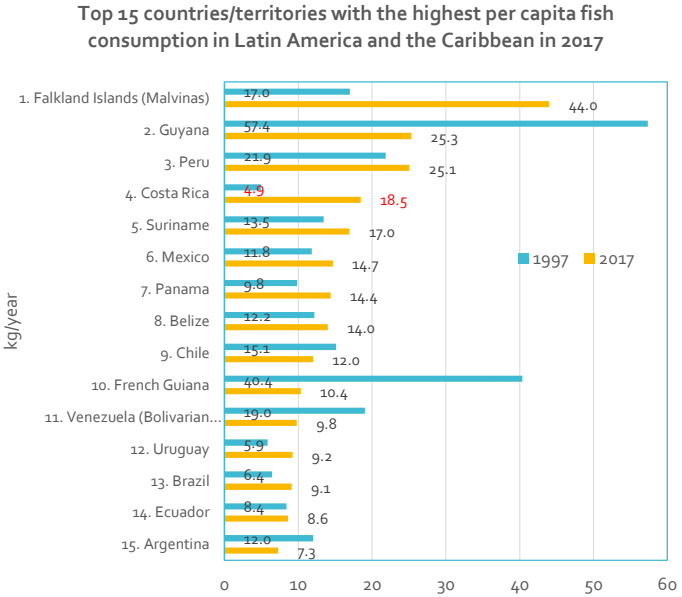


Data source: FAO. 2020. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2017 (FishStatJ; www.fao.org/fishery/statistics/software/fishstatj/en).
Note: See slide #4 for the scope of fish & seafood.

Per capita fish consumption in Costa Rica (1997 versus 2017): Per capita fish and seafood consumption increased from 4.9 kg in 1997 to 18.5 kg in 2017, which was the highest in Central America and the fourth highest in Latin America and the Caribbean.

Status and trend of per capita fish & seafood consumption

Country/area	Per capita fish & seafood consumption (kg/year)		Annual growth (%)
	1997	2017	
World	**15.5**	**20.3**	**1.4**
Developing Regions	13.0	19.4	2.0
Latin America and the Caribbean	9.4	10.5	0.5
Central America	9.5	12.4	1.3
Costa Rica + other countries in Central America			
Belize	12.2	14.0	0.7
Costa Rica	***4.9***	***18.5***	***6.8***
El Salvador	2.6	6.6	4.8
Guatemala	1.1	3.2	5.4
Honduras	4.4	2.7	-2.4
Mexico	11.8	14.7	1.1
Nicaragua	1.7	6.9	7.3
Panama	9.8	14.4	1.9

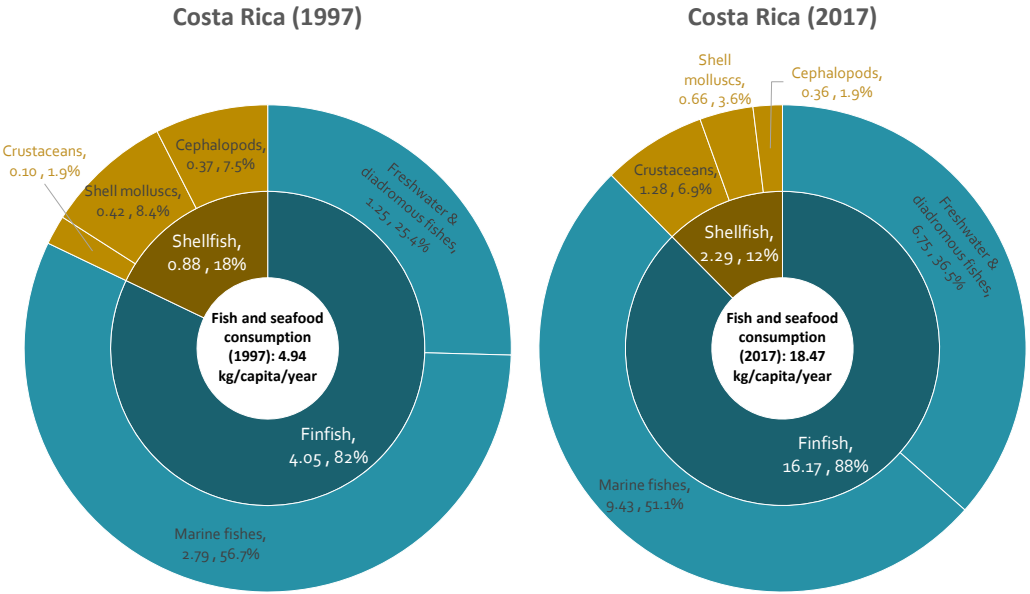


Data source: FAO. 2020. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2017 (FishStatJ; www.fao.org/fishery/statistics/software/fishstatj/en).
Notes: The scope of Developing Regions (as opposed to Developed Regions) follows the original 1996 definition of the UN M49 standard. See slide #4 for the scope of fish & seafood.

Per capita fish and seafood consumption in Costa Rica (1997 versus 2017):

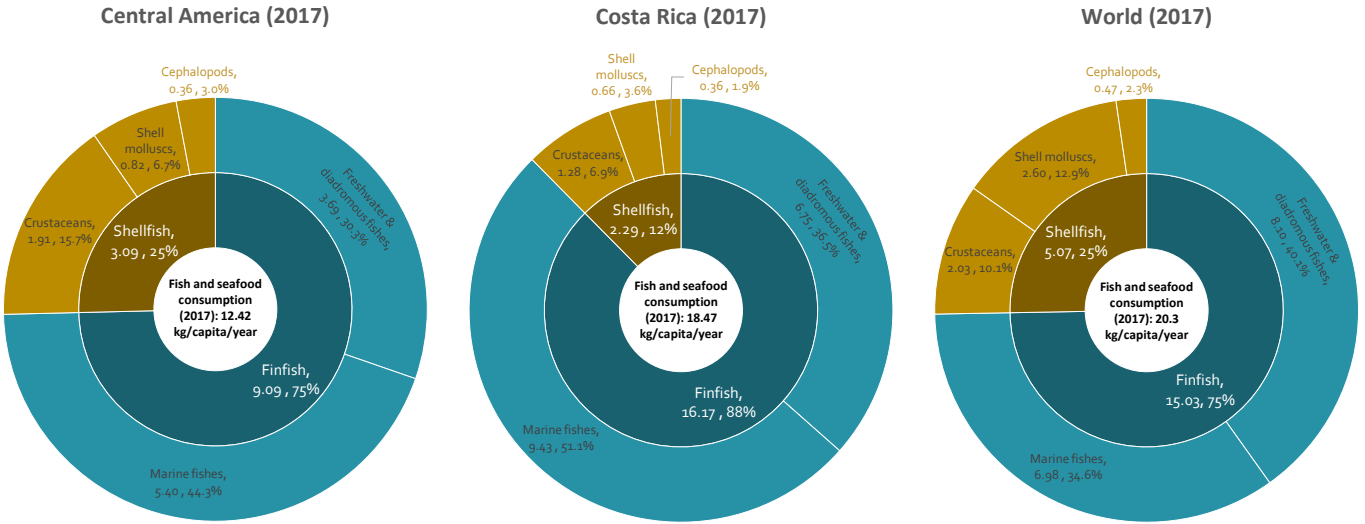
Per capita fish and seafood consumption increased from 4.94 kg in 1997 to 18.47 kg in 2017, primarily driven by the increase in finfish consumption (from 4.05 kg to 16.17 kg).

Per capita shellfish consumption increased from 0.88 kg to 2.29 kg. In particular, the share of crustaceans increased from 1.9 percent to 6.9 percent, whereas those of shell molluscs and cephalopods decreased.



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2017 (FishStatJ; www.fao.org/fishery/statistics/software/fishstatj/en).
Note: See slide #4 for the scope of fish & seafood.

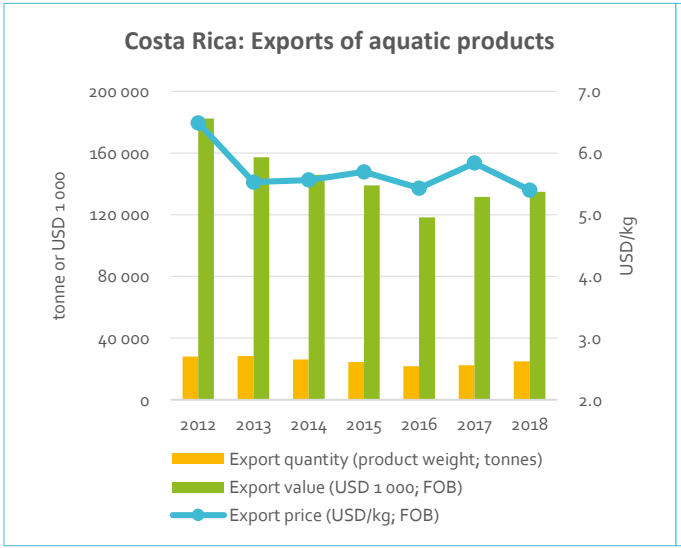
Costa Rica (2017): The 18.47 kg of per capita fish consumption in 2017 was composed by 88 percent of finfish (51.1 percent marine fishes and 36.5 percent freshwater and diadromous fishes) and 12 percent of shellfish (6.9 percent crustaceans, 3.6 percent shell molluscs and 1.9 percent cephalopods). The shellfish share was lower than the world and Central America averages.

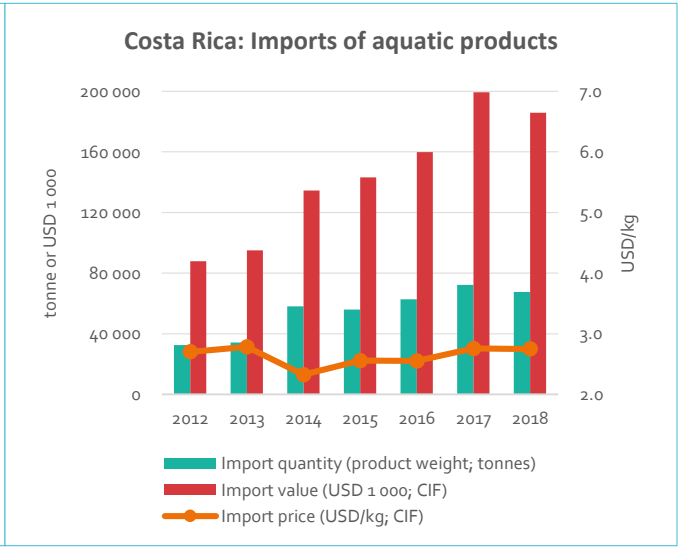


Data source: FAO. 2020. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2017 (FishStatJ; www.fao.org/fishery/statistics/software/fishstatj/en).
Note: See slide #4 for the scope of fish & seafood.

Fish trade

Status and trend of fish trade in Costa Rica, 2012–2018

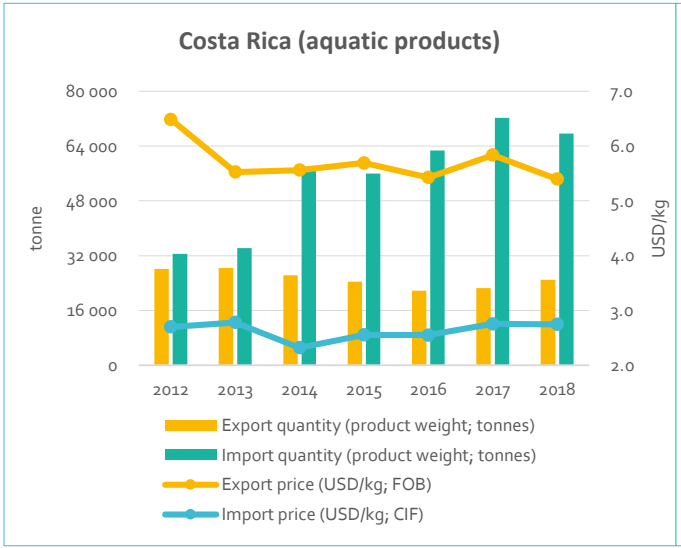


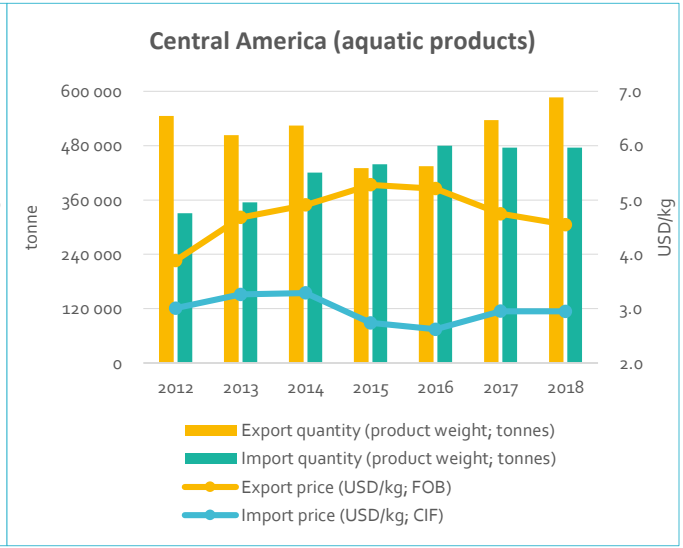


Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).

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.

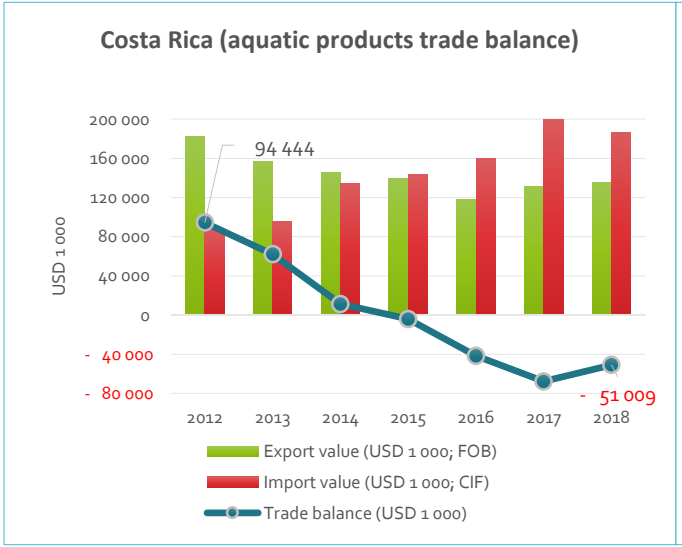
Costa Rica (2012–2018): Fish export quantity << fish import quantity (different from the pattern of Central America); fish export price > fish import price (similar to the pattern of Central America).

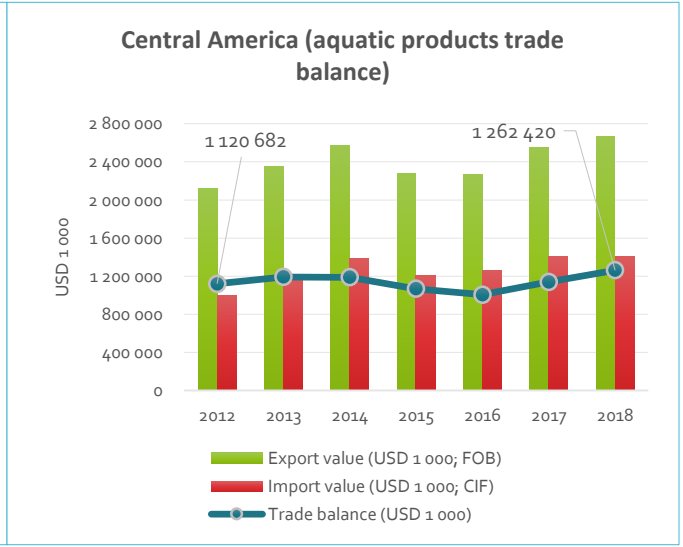




Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Includes all aquatic commodities recorded in the data source; see slide #4 for the scope of aquatic products. CIF = Cost, insurance and freight; FOB = Free on board.

Fish trade balance in Costa Rica turned from a USD 94.444 million surplus into a USD 51.009 million deficit between 2012 and 2018; whereas the trade surplus in Central America increased from USD 1.120 billion to USD 1.262 billion during the period.





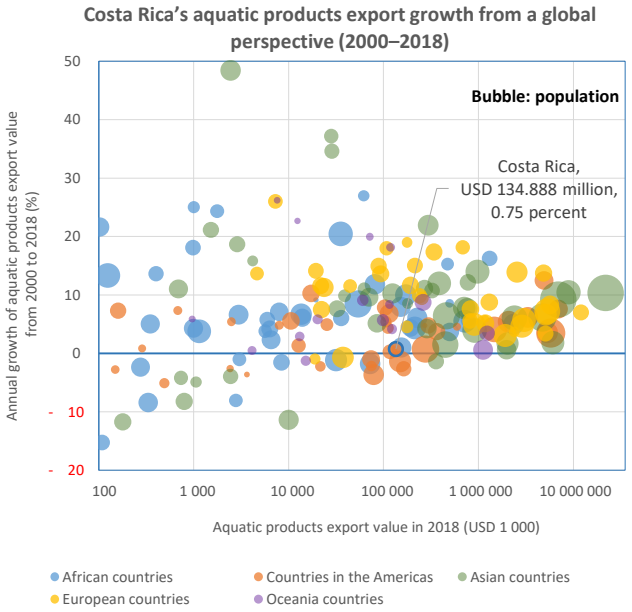
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Includes all aquatic commodities recorded in the data source; see slide #4 for the scope of aquatic products. CIF = Cost, insurance and freight; FOB = Free on board.

Fish export

Costa Rica exported USD 134.888 million of aquatic products in 2018; the 0.8 percent annual growth rate during 2000–2018 was lower than the world, regional, sub-regional and Developing Regions averages.

Status and trend of aquatic products export (2000–2018)

Country/area	Aquatic products export value (USD 1 000)		Annual growth (%)
	2000	2018	
World	**55 833 945**	**166 737 152**	**6.3**
Developing Regions	28 357 805	90 466 936	6.7
Latin America and the Caribbean	7 032 971	21 265 254	6.3
Central America	1 501 686	2 667 154	3.2
Guatemala + other countries in Central America			
Belize	32 284	21 539	-2.2
Costa Rica	***117 891***	***134 888***	***0.8***
El Salvador	26 613	103 660	7.8
Guatemala	35 063	114 782	6.8
Honduras	188 693	363 745	3.7
Mexico	710 620	1 468 076	4.1
Nicaragua	127 792	297 603	4.8
Panama	262 730	162 861	-2.6



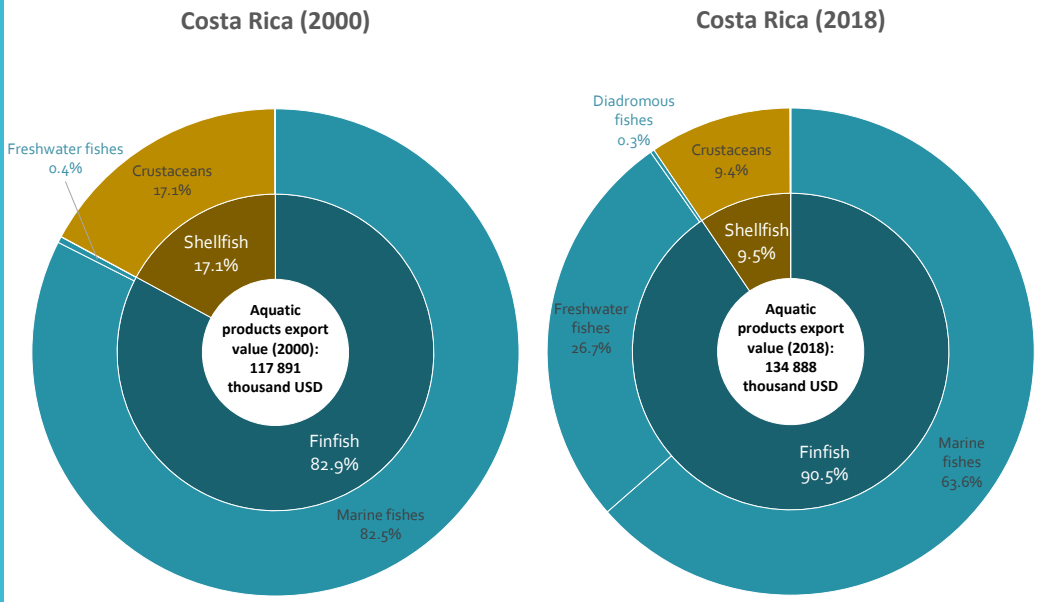
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Includes all aquatic commodities recorded in the data source; see slide #4 for the scope of aquatic products.

Costa Rica's export of aquatic products (2000 versus 2018):

Aquatic commodities export increased from USD 117.891 million in 2000 to USD 134.888 million in 2018.

The share of shellfish, entirely contributed by crustaceans, decreased from 17.1 percent to 9.5 percent.

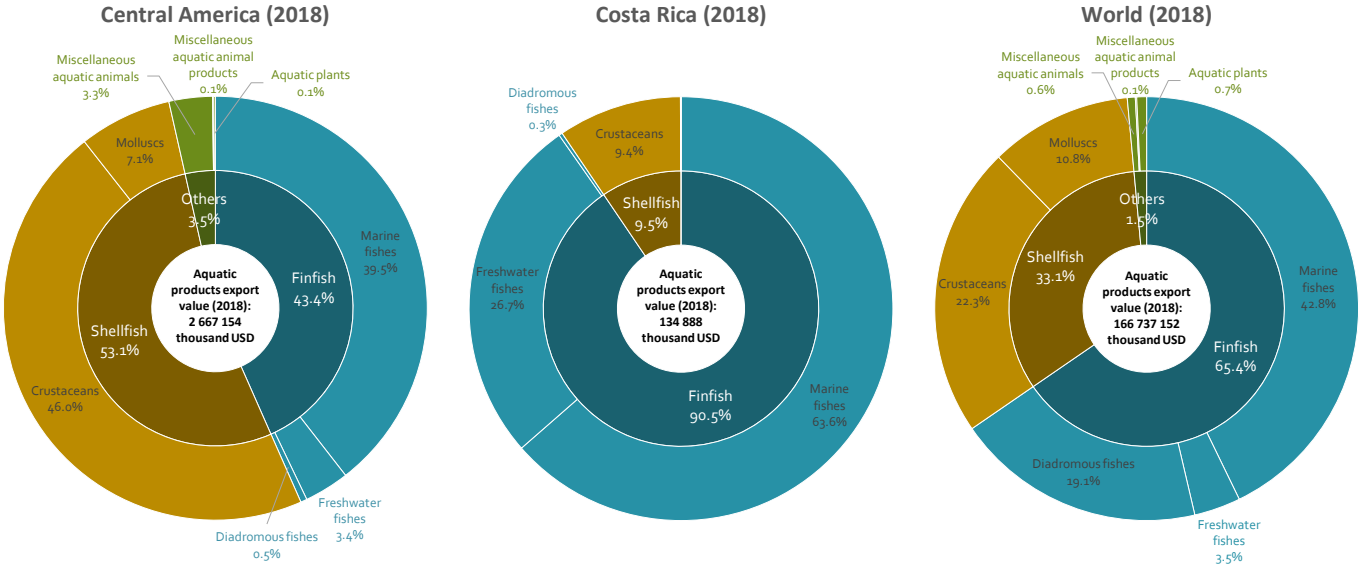
The share of finfish increased from 82.9 percent to 90.5 percent, reflecting the increase in freshwater fishes from 0.4 percent to 26.7 percent.



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).

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.

Costa Rica's export of aquatic products (2018): The USD 134.888 million of aquatic products export comprised 90.5 percent of finfish (63.6 percent marine fishes, 26.7 percent freshwater fishes and 0.3 percent diadromous fishes) and 9.5 percent of shellfish (crustaceans). The shellfish share was much lower than the Central America and world averages, and the country's aquatic products export did not include any aquatic plants.



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).

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.

Costa Rica (2018): Aquatic product export had a relatively diverse species composition, with tunas/bonitos/billfishes and tilapias and other cichlids being the two largest species groups. Tilapia export accounted for 1 percent of world total in tonnage and 2.4 percent in value

Costa Rica's aquatic products export, 2018

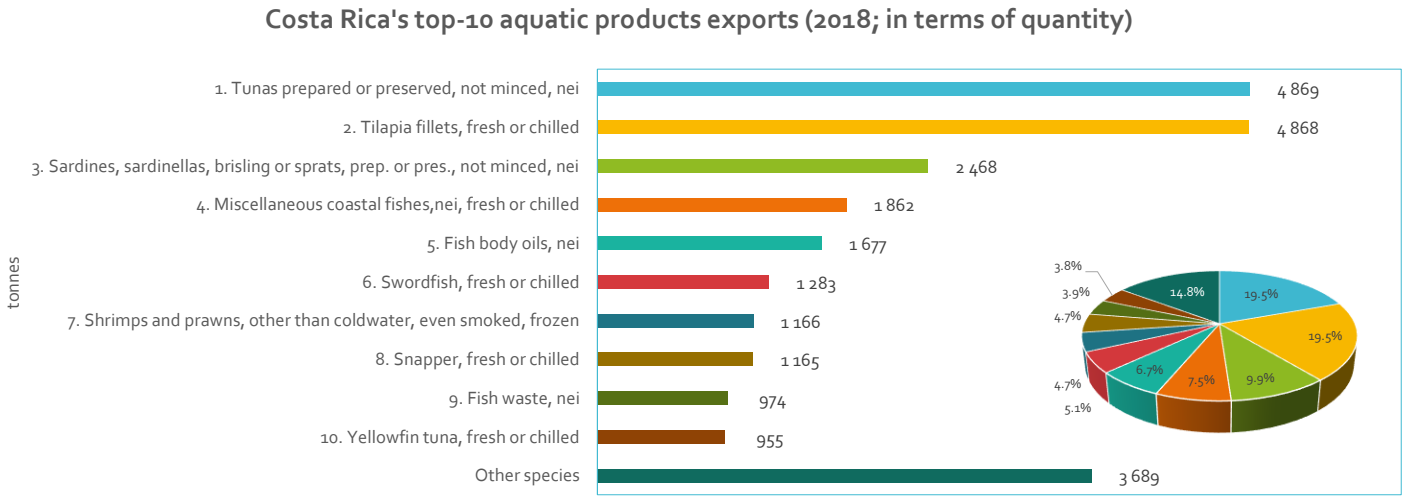
Export species groups in terms of quantity			
ISSCAAP groups	Product weight (tonnes)	Share of Costa Rica's total export of all aquatic commodities (%)	Share of world export of the same species group (%)
1. Tunas, bonitos, billfishes	7 401	29.63	0.18
2. Tilapias and other cichlids	5 404	21.64	1.00
3. Marine fishes not identified	4 694	18.79	0.05
4. Miscellaneous coastal fishes	3 242	12.98	0.61
5. Herrings, sardines, anchovies	2 684	10.75	0.09
6. Shrimps, prawns	1 202	4.81	0.04
7. Miscellaneous pelagic fishes	179	0.72	0.00
8. Sharks, rays, chimaeras	106	0.42	0.08
9. Salmons, trouts, smelts	45	0.18	0.00
10. Squids, cuttlefishes, octopuses	19	0.08	0.00
Aquatic products	**24 976**	**100.00**	**0.06**

Export species groups in terms of value			
ISSCAAP groups	FOB value (USD 1 000)	Share of Costa Rica's total export of all aquatic commodities (%)	Share of world export of the same species group (%)
1. Tunas, bonitos, billfishes	41 697	30.91	0.25
2. Tilapias and other cichlids	35 998	26.69	2.41
3. Miscellaneous coastal fishes	20 470	15.18	0.87
4. Marine fishes not identified	14 099	10.45	0.06
5. Shrimps, prawns	12 729	9.44	0.05
6. Herrings, sardines, anchovies	5 537	4.10	0.13
7. Sharks, rays, chimaeras	3 673	2.72	0.68
8. Salmons, trouts, smelts	361	0.27	0.00
9. Miscellaneous pelagic fishes	268	0.20	0.00
10. Squids, cuttlefishes, octopuses	56	0.04	0.00
Aquatic products	**134 888**	**100.00**	**0.08**

Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).

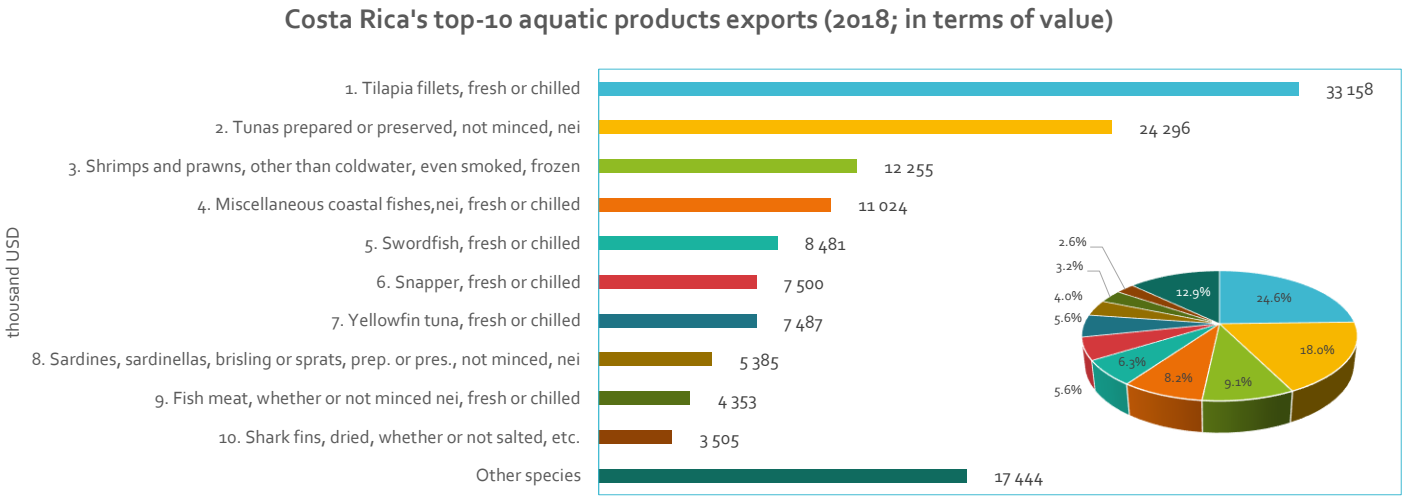
Notes: Includes all aquatic commodities recorded in the data source; see slide #4 for the scope of aquatic products. FOB = Free on board; ISSCAAP = International Standard Statistical Classification of Aquatic Animals and Plants.

Top 10 commodities (in terms of quantity) in Costa Rica's export of aquatic products (2018)



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Includes all aquatic commodities recorded in the data source. Nei = not elsewhere included.

Top 10 commodities (in terms of value) in Costa Rica's export of aquatic products (2018)



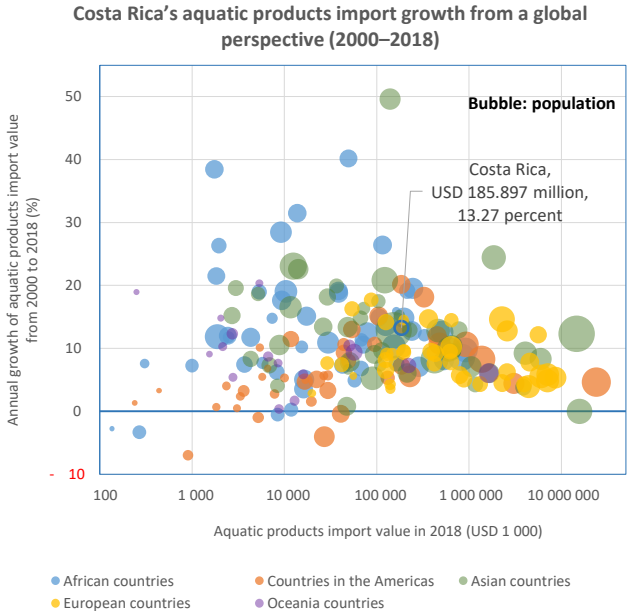
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Includes all aquatic commodities recorded in the data source. Nei = not elsewhere included.

Fish import

Costa Rica's aquatic products import increased from USD 19.732 million in 2000 to USD 185.897 million in 2018; the 13.3 percent annual growth rate was higher than the world, regional, sub-regional and Developing Regions averages and most of other countries in Central America.

Status and trend of aquatic products import (2000–2018)

Country/area	Aquatic products import value (USD 1 000)		Annual growth (%)
	2000	2018	
World	**61 012 560**	**162 103 726**	**5.6**
Developing Regions	10 449 006	50 495 109	9.1
Latin America and the Caribbean	1 119 232	5 154 138	8.9
Central America	229 232	1 404 734	10.6
Guatemala + other countries in Central America			
Belize	3 313	905	-7.0
Costa Rica	***19 732***	***185 897***	***13.3***
El Salvador	8 846	44 049	9.3
Guatemala	8 334	105 454	15.1
Honduras	16 395	29 558	3.3
Mexico	149 985	927 069	10.6
Nicaragua	7 226	16 616	4.7
Panama	15 401	95 186	10.6



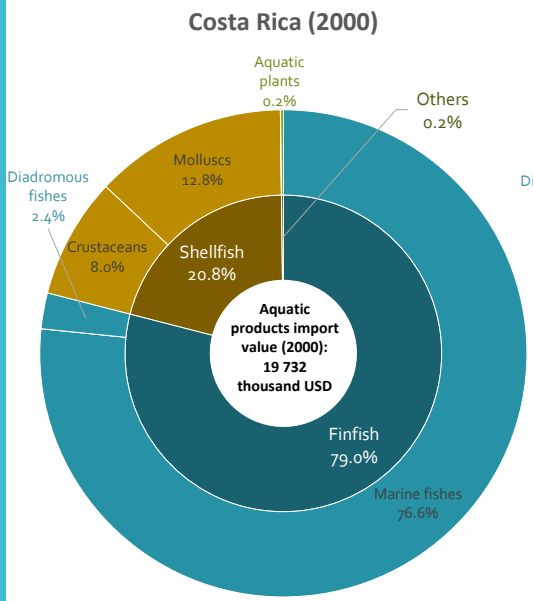
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Includes all aquatic commodities recorded in the data source; see slide #4 for the scope of aquatic products.

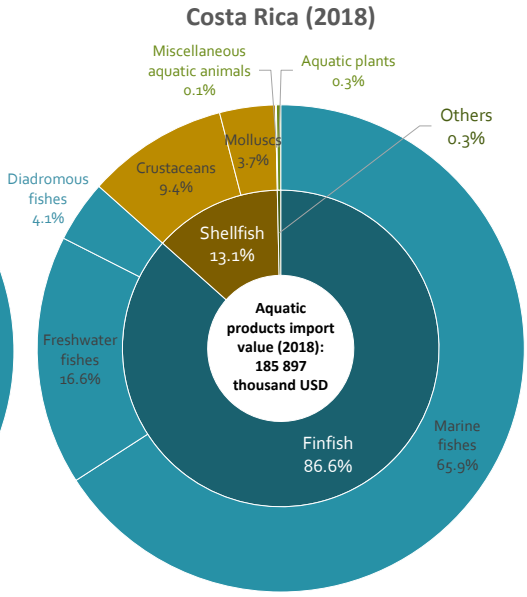
Costa Rica's import of aquatic products (2000–2018):

Aquatic commodities import increased from USD 19.732 million in 2000 to USD 185.897 million in 2018.

The share of finfish increased from 79 percent to 86.6 percent, reflecting the increase in diadromous fishes and freshwater fishes from 2.4 percent to 4.1 percent and from nil to 16.6 percent, respectively.

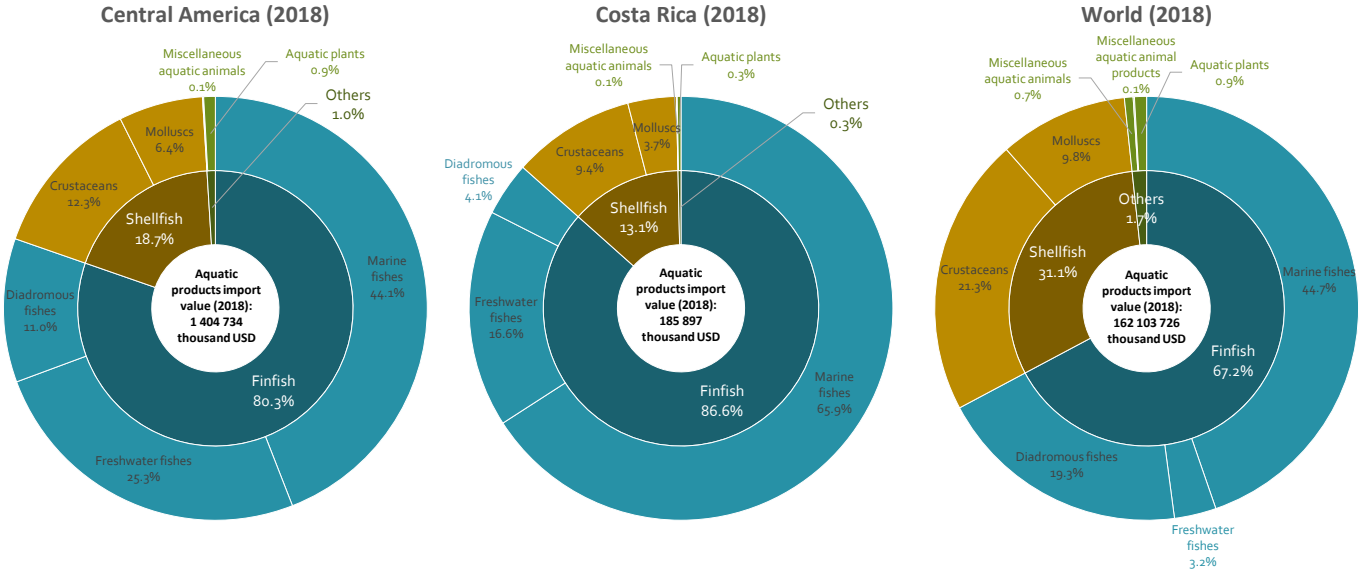
The share of shellfish decreased from 20.8 percent to 13.1 percent, primarily driven by the decrease in molluscs.





Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
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.

Costa Rica's import of aquatic products (2018): The USD 185.897 million of aquatic products import in 2018 was composed of 86.6 percent of finfish, 13.1 percent of shellfish and 0.3 percent of aquatic plants. The shares of diadromous fishes, molluscs and aquatic plants were lower than the respective averages in Central America and the world.



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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.

Costa Rica (2018): "Tunas/bonitos/billfishes" and "tilapias and other cichlids" were both the largest export species groups but also the largest import species groups.

Costa Rica's aquatic products import in 2018

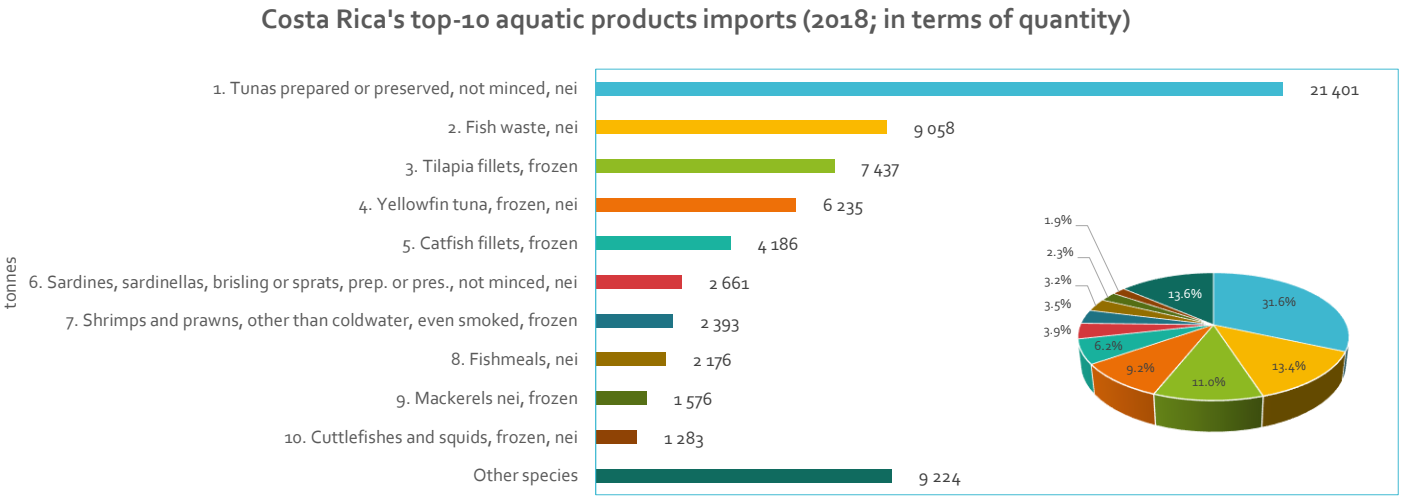
Top 10 import species groups in terms of quantity			
ISSCAAP groups	**Product weight (tonnes)**	**Share of Costa Rica's total import of all aquatic commodities (%)**	**Share of world import of the same species group (%)**
1. Tunas, bonitos, billfishes	29 812	44.08	0.71
2. Marine fishes not identified	13 691	20.24	0.15
3. Tilapias and other cichlids	8 888	13.14	1.65
4. Miscellaneous freshwater fishes	4 275	6.32	0.44
5. Herrings, sardines, anchovies	3 510	5.19	0.12
6. Shrimps, prawns	2 545	3.76	0.09
7. Squids, cuttlefishes, octopuses	1 715	2.54	0.08
8. Miscellaneous pelagic fishes	1 576	2.33	0.04
9. Salmons, trouts, smelts	685	1.01	0.02
10. Miscellaneous coastal fishes	285	0.42	0.05
Others	648	0.96	
Aquatic products	**67 630**	**100.00**	**0.17**

Top 10 import species groups in terms of value			
ISSCAAP groups	**CIF value (USD 1 000)**	**Share of Costa Rica's total import of all aquatic commodities (%)**	**Share of world import of the same species group (%)**
1. Tunas, bonitos, billfishes	102 202	54.98	0.61
2. Tilapias and other cichlids	24 449	13.15	1.64
3. Shrimps, prawns	16 656	8.96	0.07
4. Marine fishes not identified	10 380	5.58	0.05
5. Salmons, trouts, smelts	7 623	4.10	0.03
6. Herrings, sardines, anchovies	6 837	3.68	0.16
7. Miscellaneous freshwater fishes	6 378	3.43	0.19
8. Squids, cuttlefishes, octopuses	5 398	2.90	0.05
9. Miscellaneous pelagic fishes	1 594	0.86	0.03
10. Miscellaneous coastal fishes	1 325	0.71	0.06
Others	3 055	1.64	
Aquatic products	**185 897**	**100.00**	**0.11**

Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global Fisheries commodities production and trade 1976-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).

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.

Top 10 commodities (in terms of quantity) in Costa Rica's import of aquatic products (2018)



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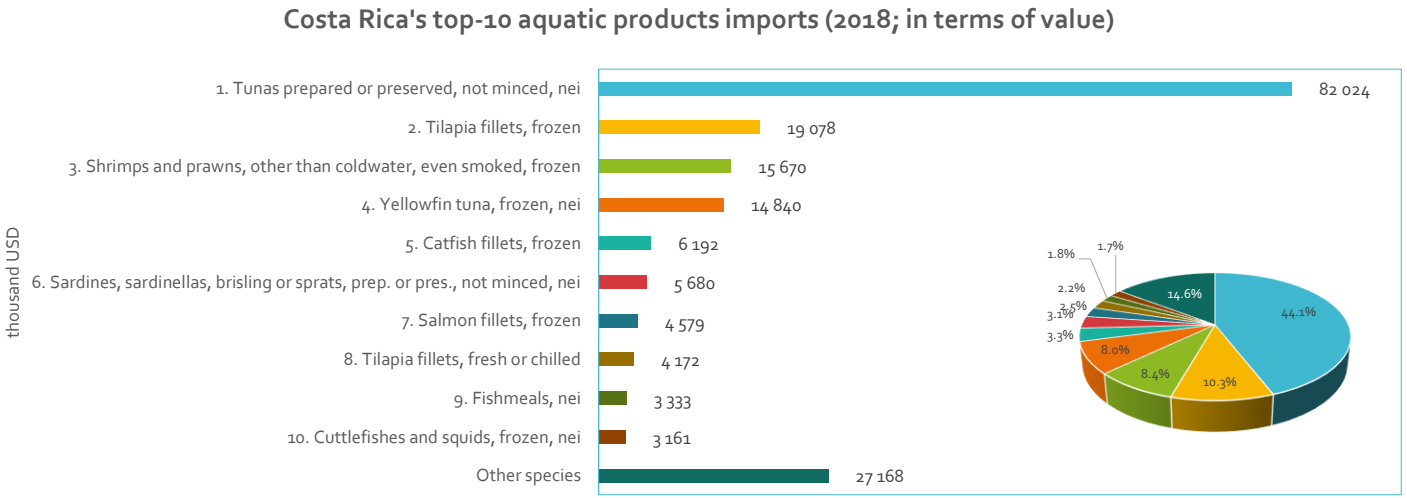
Top 10 commodities (in terms of value) in Costa Rica's import of aquatic products (2018)



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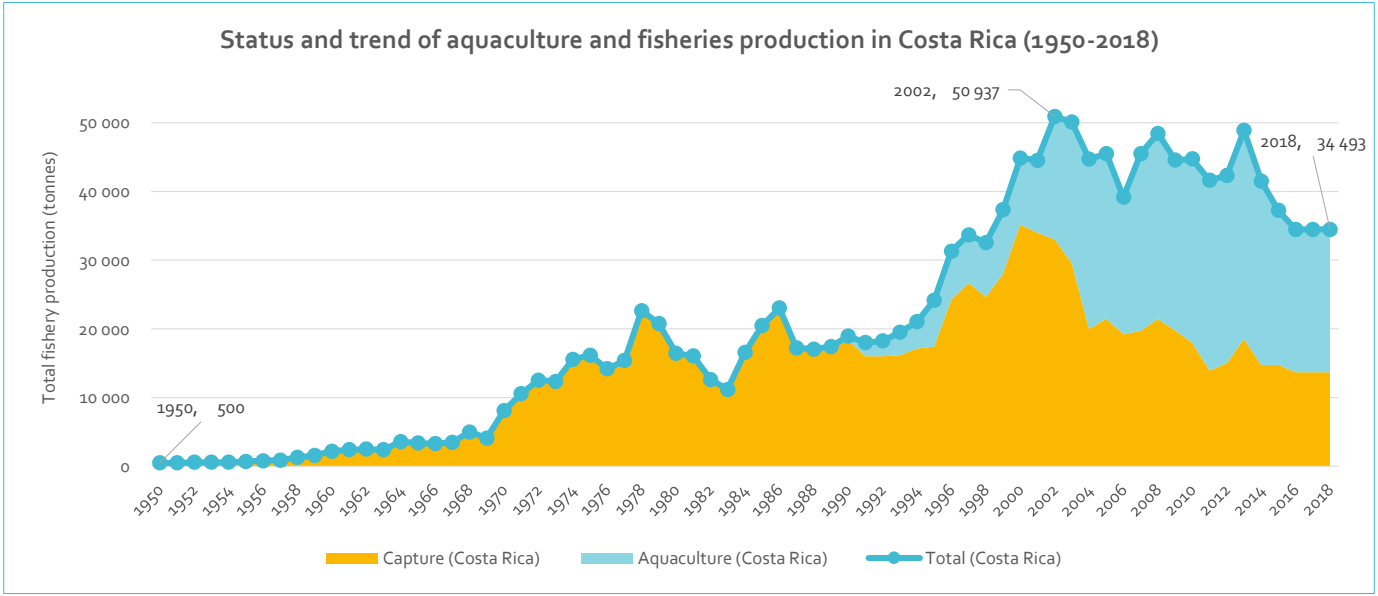
Notes: Includes all aquatic commodities recorded in the data source. Nei = not elsewhere included.

Total fishery production

Costa Rica (1950–2018): Total fishery production increased from 500 tonnes in 1950 to 50 937 tonnes in 2002, then declined to 34 493 tonnes in 2018, primarily due to the decline in capture fisheries.



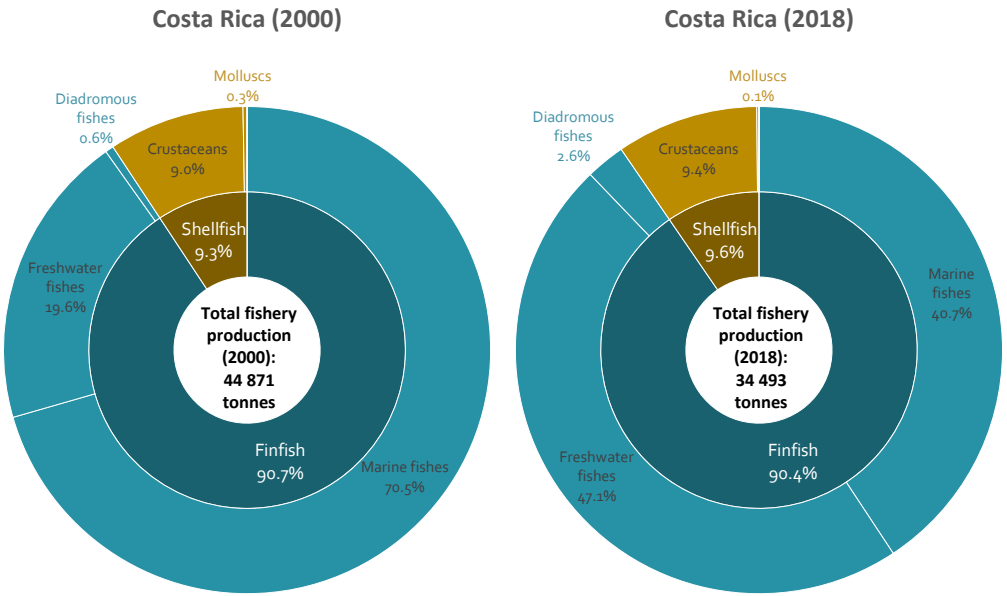
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global production by production source 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all aquatic products measured in tonnage; see slide #4 for the scope of aquatic products.

Total fishery production in Costa Rica (2000 versus 2018):

Total fishery production declined from 44 871 tonnes in 2000 to 34 493 tonnes in 2018.

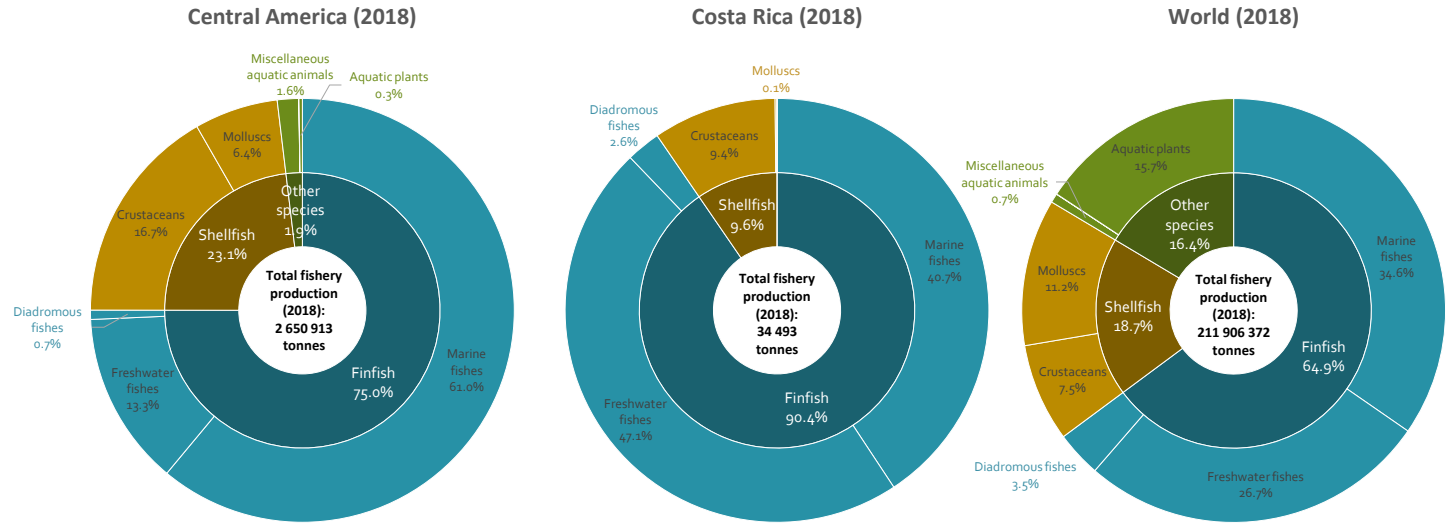
The share of finfish slightly declined from 90.7 percent to 90.4 percent, primarily reflecting the decrease in marine fishes, whereas the share of freshwater fishes increased from 19.6 percent to 47.1 percent.

The share of shellfish increased from 9.3 percent to 9.6 percent, mainly reflecting the increase in crustaceans (from 9 percent to 9.4 percent).



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global production by production source 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all aquatic products measured in tonnage; see slide #4 for the scope of aquatic products. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Total fishery production in Costa Rica (2018): Finfish and shellfish accounted for, respectively, 90.4 percent and 9.6 percent of total fishery production. The country's total fishery composition was less diversified than the Central America and world averages.



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

Capture fisheries production

Capture fisheries in Costa Rica (2000 versus 2018):

Capture fisheries production decreased from 35 163 tonnes in 2000 to 13 673 tonnes in 2018.

The downward trend (a 5.11 percent annual decline) was steeper than the 1.71 percent annual decline in Latin America and the Caribbean.

Status and trend of capture fisheries production, 2000 versus 2018

Country/area	Capture fisheries production (tonnes)		Annual growth (%)
	2000	2018	
World	**94 778 335**	**97 398 330**	**0.15**
Developing Regions	66 001 485	72 378 016	0.51
Latin America and the Caribbean	20 123 538	14 739 992	-1.71
Central America	1 732 071	2 240 477	1.44
Costa Rica + other countries in Central America			
Belize	30 322	216 107	11.53
Costa Rica	***35 163***	***13 673***	***-5.11***
El Salvador	9 590	53 697	10.04
Guatemala	39 203	17 009	-4.53
Honduras	17 915	10 600	-2.87
Mexico	1 349 763	1 699 290	1.29
Nicaragua	22 519	54 554	5.04
Panama	227 596	175 547	-1.43

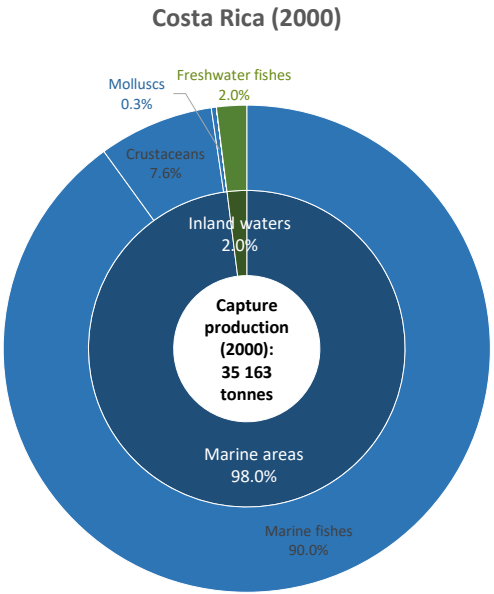
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global capture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all aquatic products measured in tonnage; see slide #4 for the scope of aquatic products.

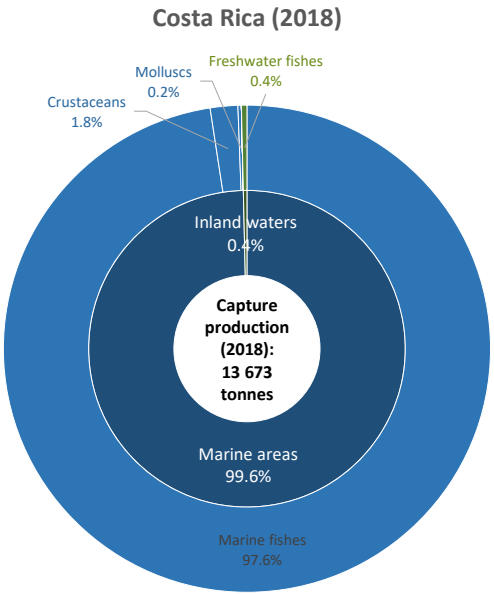
Capture fisheries in Costa Rica (2000 versus 2018):

Capture fisheries production decreased from 35 163 tonnes in 2000 to 13 673 tonnes in 2018.

Capture production from marine areas increased from 98 percent to 99.6 percent, primarily driven by the increase in marine fishes, whereas the shares of crustaceans and molluscs decreased.

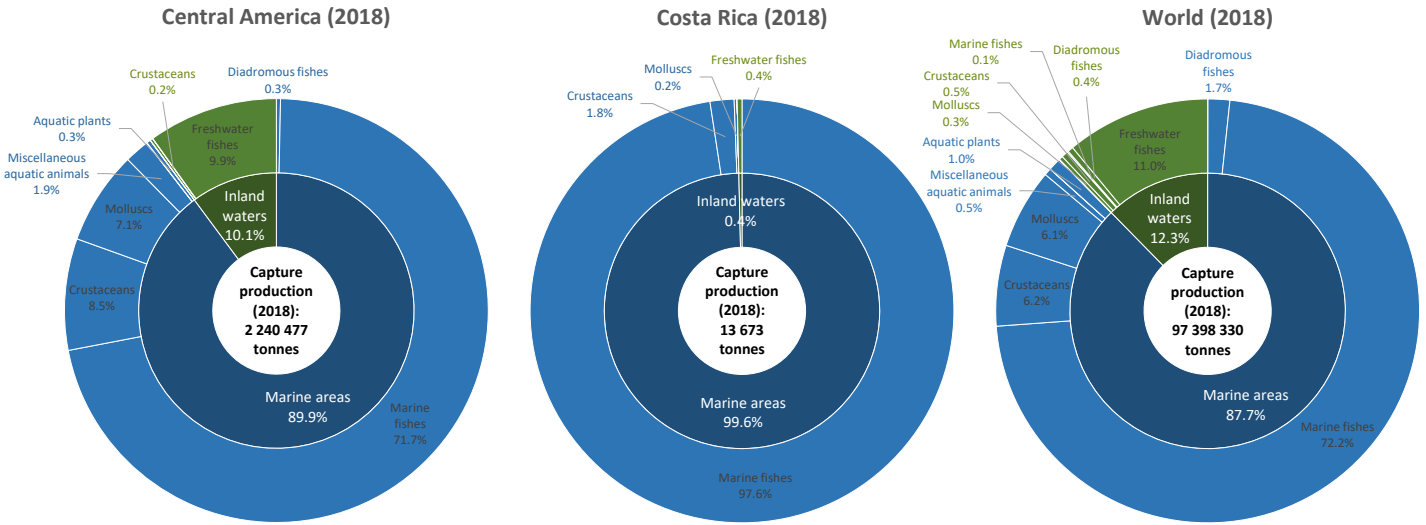
Capture production from inland waters, entirely contributed by freshwater fishes, decreased from 2 percent to 0.4 percent.





Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global capture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products. Marine areas including coastal areas. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Capture fisheries in Costa Rica (2018): Marine fisheries contributed to nearly the entire capture fisheries production (99.6 percent; compared to 89.9 percent in Central America and 87.7 percent in the world). Marine fishes from marine areas accounted for 97.6 percent of the capture fisheries production, higher than in Central America (71.7 percent) and the world (72.2 percent).



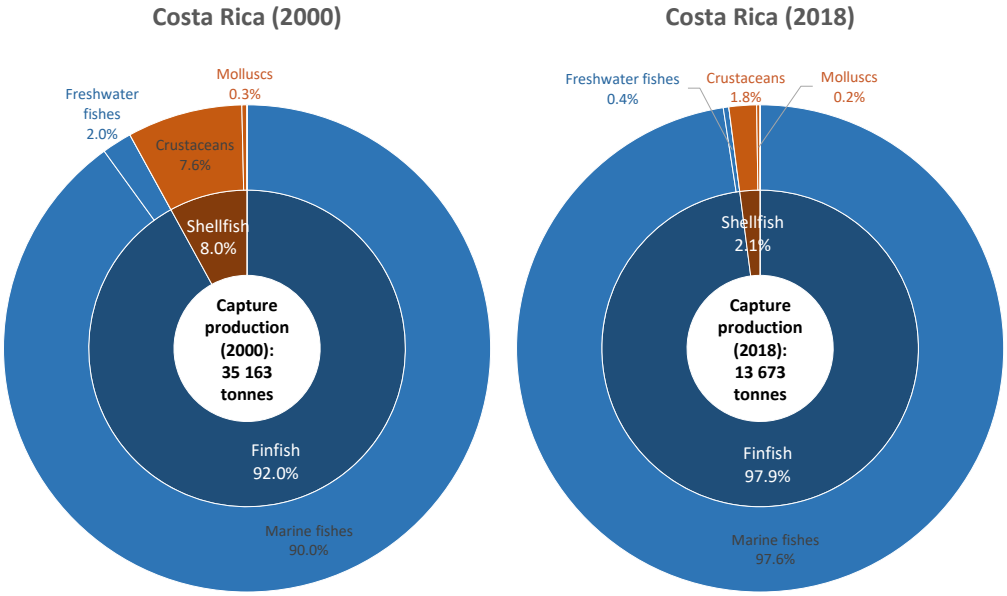
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global capture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products. Marine areas including coastal areas. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Taxonomic composition in Costa Rica's capture fisheries (2000 versus 2018):

Capture fisheries production decreased from 35 163 tonnes in 2000 to 13 673 tonnes in 2018.

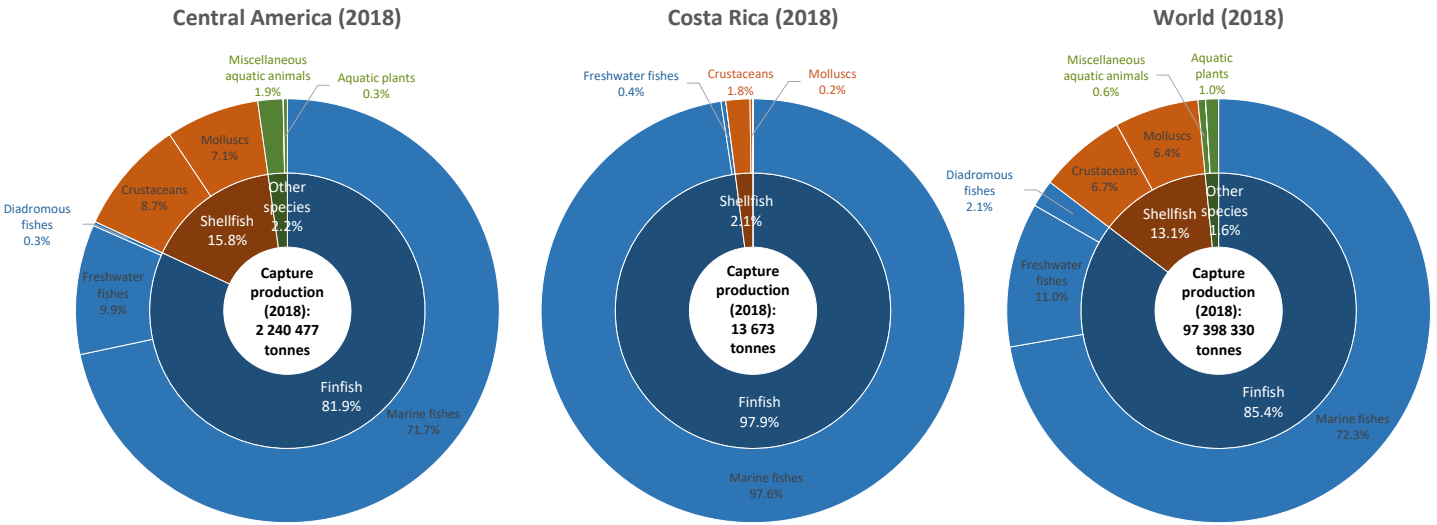
The share of finfish increased from 92 percent to 97.9 percent, reflecting the increase in marine fishes, while freshwater fishes decreased from 2 percent to 0.4 percent.

The share of shellfish decreased from 8 percent to 2.1 percent, primarily reflecting the decrease in crustaceans.



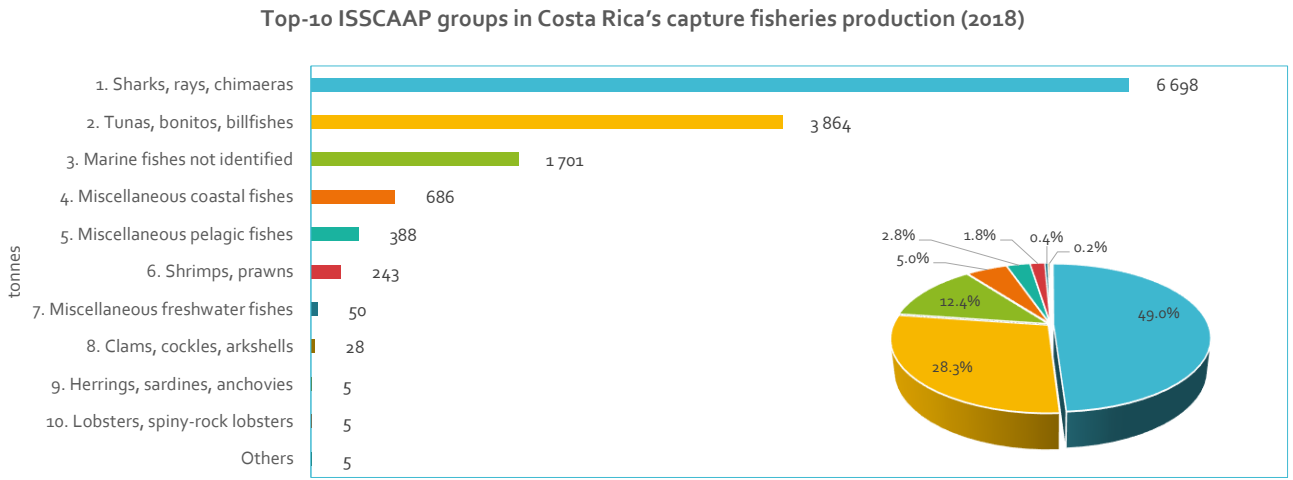
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global capture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Taxonomic composition in Costa Rica's capture fisheries (2018): The 13 673 tonnes of capture fisheries production in 2018 comprised 97.9 percent finfish and 2.1 percent shellfish. The share of marine fishes was higher than that of Central America and the world. The shares of freshwater fishes, crustaceans and molluscs were much lower than the Central America and world averages.



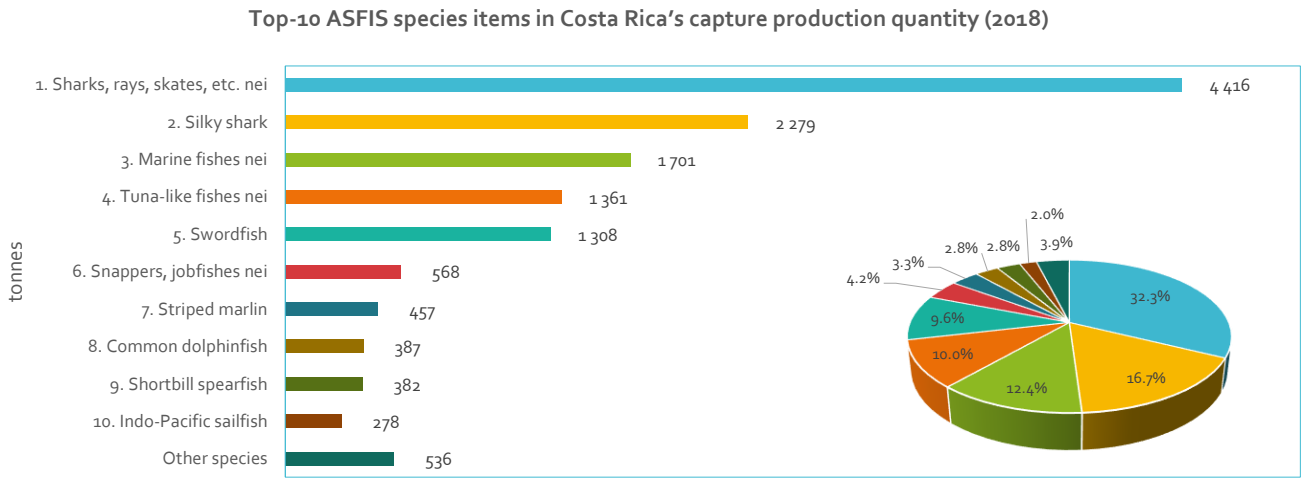
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global capture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products. Species accounting for less than 0.1 percent of total production not labelled in the charts.

Top 10 ISSCAAP groups in Costa Rica's capture fisheries production in terms of quantity (2018)



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global capture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: ISSCAAP = International Standard Statistical Classification of Aquatic Animals and Plants; more information about ISSCAAP groups can be found at www.fao.org/tempref/FI/DOCUMENT/cwp/handbook/annex/AnnexS2listISSCAAP2000.pdf

Top 10 ASFIS species items in Costa Rica's capture fisheries production in terms of quantity (2018)



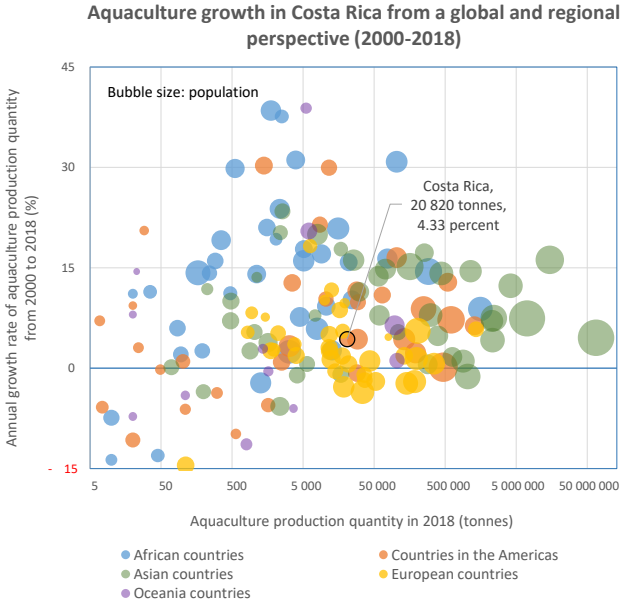
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global capture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: ASFIS = Aquatic Sciences and Fisheries Information System; more information about ASFIS species items can be found at www.fao.org/fishery/collection/asfis/en.
Nei = not elsewhere included.

Aquaculture production

Aquaculture production in Costa Rica (2000-2018): Aquaculture production increased from 9 708 tonnes in 2000 to 20 820 tonnes in 2018; the 4.33 percent annual growth rate was lower than the regional (7.41 percent), sub-regional (8.88 percent), Developing Regions (5.91 percent) and world (5.59 percent) growth rates.

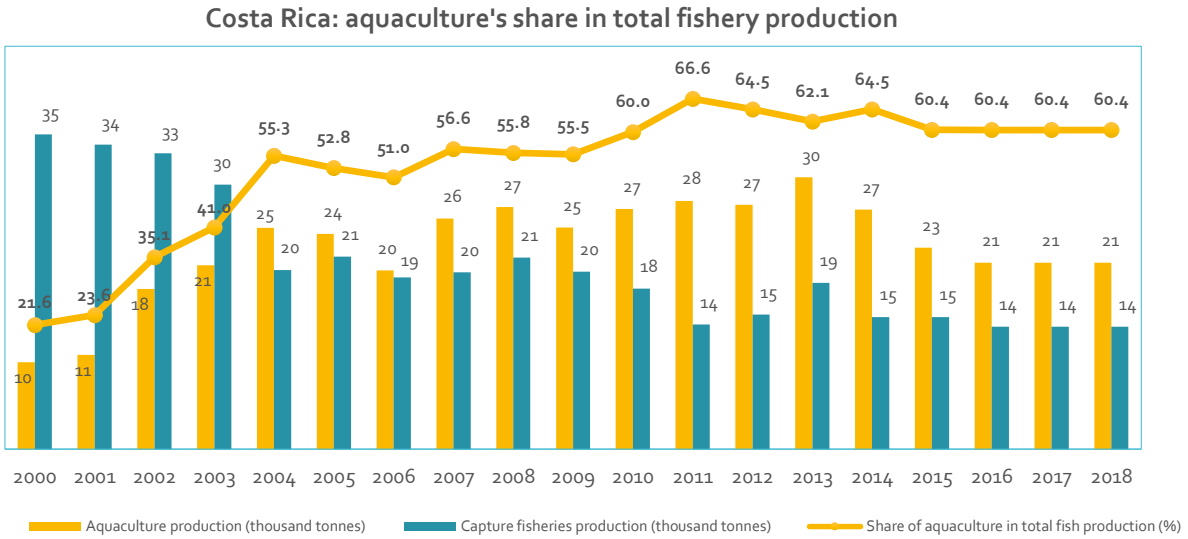
Status and trends of aquaculture production (2000-2018)

Country/area	Aquaculture quantity of aquatic products (tonnes)		Annual growth (%)
	2000	2018	
World	**43 014 088**	**114 508 042**	**5.59**
Developing Regions	38 941 767	109 509 509	5.91
Latin America and the Caribbean	872 516	3 161 618	7.41
Central America	88 747	410 436	8.88
Costa Rica + other countries in Central America			
Belize	3 630	563	-9.84
Costa Rica	***9 708***	***20 820***	***4.33***
El Salvador	261	8 600	21.43
Guatemala	3 963	28 317	11.54
Honduras	10 053	65 000	10.93
Mexico	53 918	247 222	8.83
Nicaragua	5 435	29 468	9.85
Panama	1 779	10 445	10.33



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products.

Aquaculture's contribution to total fishery in Costa Rica increased from 21.6 percent in 2000 to 60.4 percent in 2018.



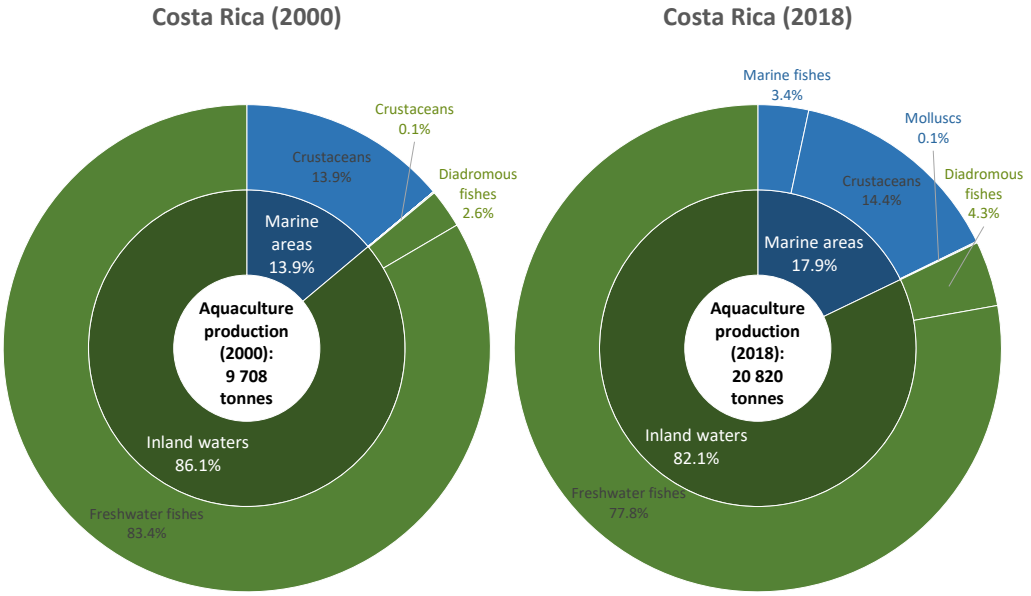
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products.

Aquaculture production in Costa Rica (2000 versus 2018):

Aquaculture production increased from 9 708 tonnes in 2000 to 20 820 tonnes in 2018.

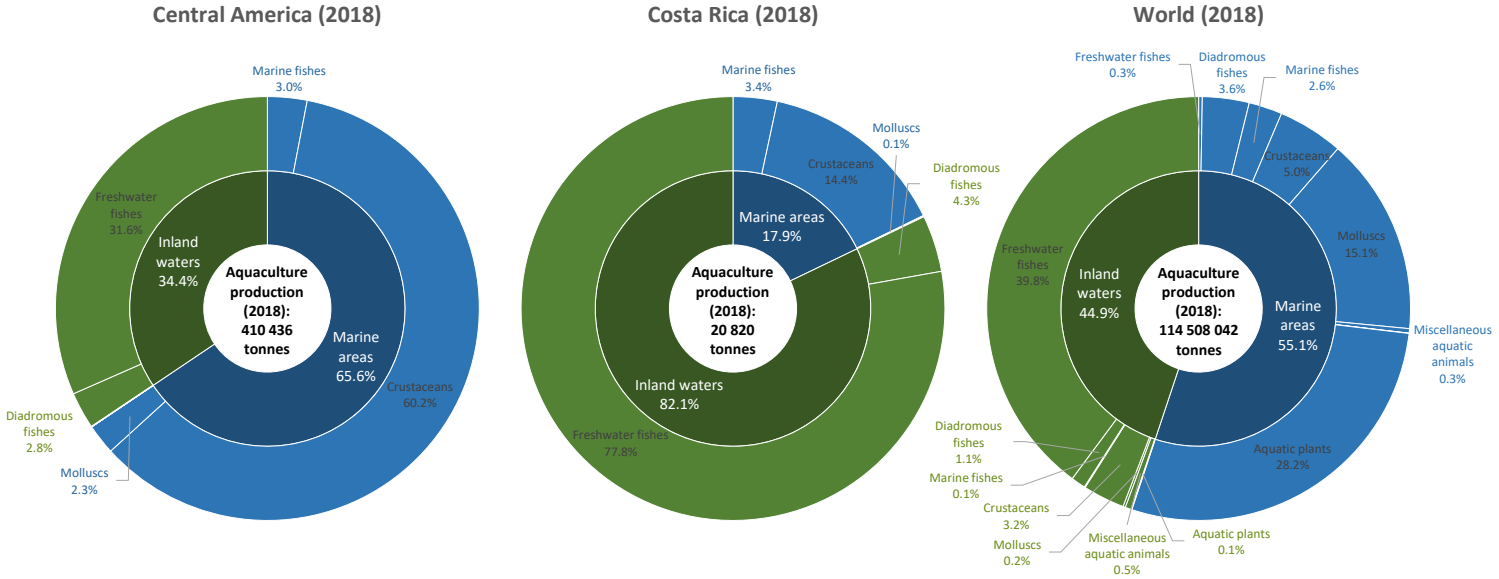
The share of crustaceans from marine aquaculture increased from 13.9 percent to 14.4, while the share of marine fishes from marine aquaculture increased from nil to 3.4 percent.

The share of inland aquaculture, contributed primarily by freshwater fishes, decreased from 86.1 percent to 82.1 percent.



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products. Species group less than 0.1 percent of total production may not be labelled.

Aquaculture production in Costa Rica (2018): Inland aquaculture accounted for 82.1 percent of the country's aquaculture production quantity in 2018; the share was much higher than in Central America (34.4 percent) and the world (44.9 percent).



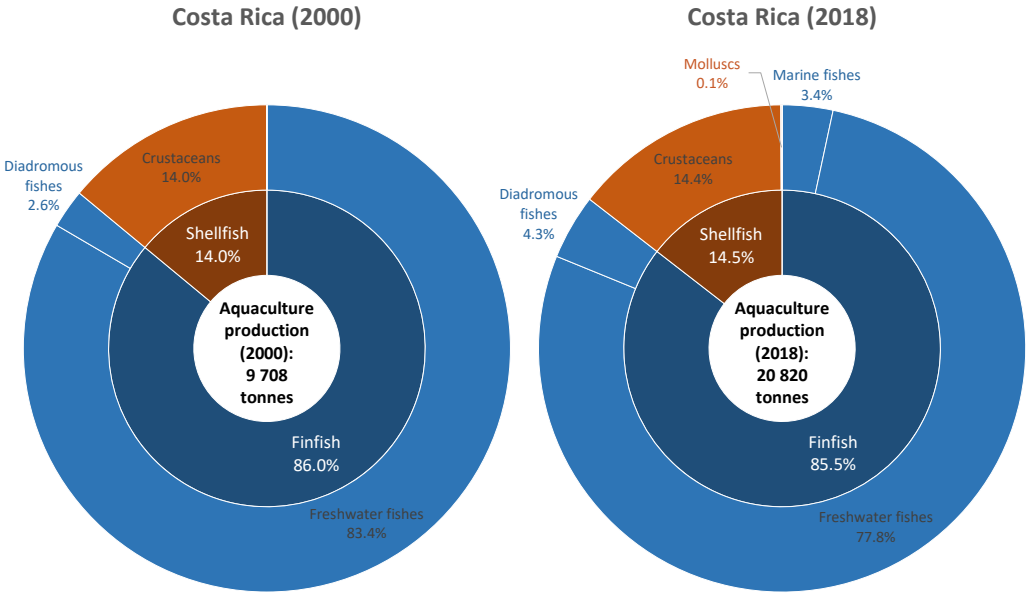
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Constructed by the FAO WAPI Aquaculture Production Module (WAPI-AQPRN); see Figure 1.5 in WAPI-AQPRN v.2018.1 for a similar example (www.fao.org/fishery/statistics/software/wapi/en).
Production covers all species measured in tonnage. Species group less than 0.1 percent of total production may not be labelled.

Taxonomic composition in Costa Rica's aquaculture production (2000 versus 2018):

Aquaculture production increased from 9 708 tonnes in 2000 to 20 820 tonnes in 2018.

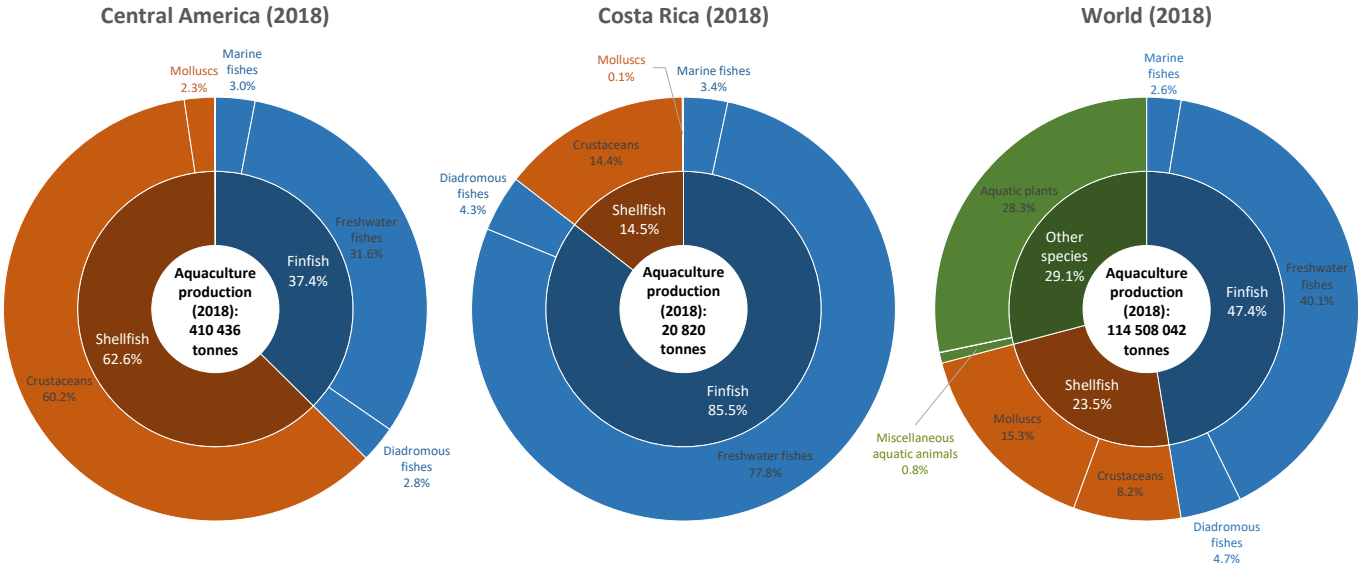
The share of shellfish, entirely contributed by crustaceans, increased from 14 percent to 14.5 percent.

The share of finfish decreased from 86 percent to 85.5 percent, mainly reflecting the decline in freshwater fishes, whereas the shares of diadromous fishes and marine fishes increased from 2.6 percent to 4.3 percent and from nil to 3.4 percent, respectively.



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products. Species group less than 0.1 percent of total production may not be labelled.

Taxonomic composition in Costa Rica's aquaculture production (2018): The 20 820 tonnes of aquaculture production were contributed by 85.5 percent of finfish (mainly freshwater fishes) and 14.5 percent of shellfish (almost entirely crustaceans). The 77.8 percent share of freshwater fishes was much higher than the Central America (31.6 percent) and world (40.1 percent) averages.



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Production covers all species measured in tonnage; see slide #4 for the scope of aquatic products. Species group less than 0.1 percent of total production may not be labelled.

Aquaculture species groups in Costa Rica by tonnage (2018): The 20 820 tonnes of aquaculture production comprised six species groups, with tilapias and other cichlids (77.81 percent of total aquaculture production) and marine shrimps and prawns (14.41 percent) being the two largest groups.

Aquaculture production in Costa Rica by species groups		Year 2018 (in terms of quantity)			
WAPI species groups	ISSCAAP division	Number of species in the group farmed by the country	The country's production quantity of each species group (live weight; tonnes)	Share of the country's production quantity of all species (%)	Share of world production of the same species group (%)
1. Tilapias and other cichlids (ISSCAAP group)	Freshwater fishes	2	16 200	77.81	0.2686
2. Marine shrimps and prawns (ISSCAAP group)	Crustaceans	1	3 000	14.41	0.0500
3. Salmons, trouts, smelts (ISSCAAP group)	Diadromous fishes	1	900	4.32	0.0253
4. Marine perch-like fishes (Percoidea, marine)	Marine fishes	1	700	3.36	0.0521
5. Oysters (ISSCAAP group)	Molluscs	1	19	0.09	0.0003
6. Freshwater shrimps and prawns (Natantia, freshwater)	Crustaceans	1	1	0.00	0.00
Aquatic products		**7**	**20 820**	**100.00**	**0.0182**

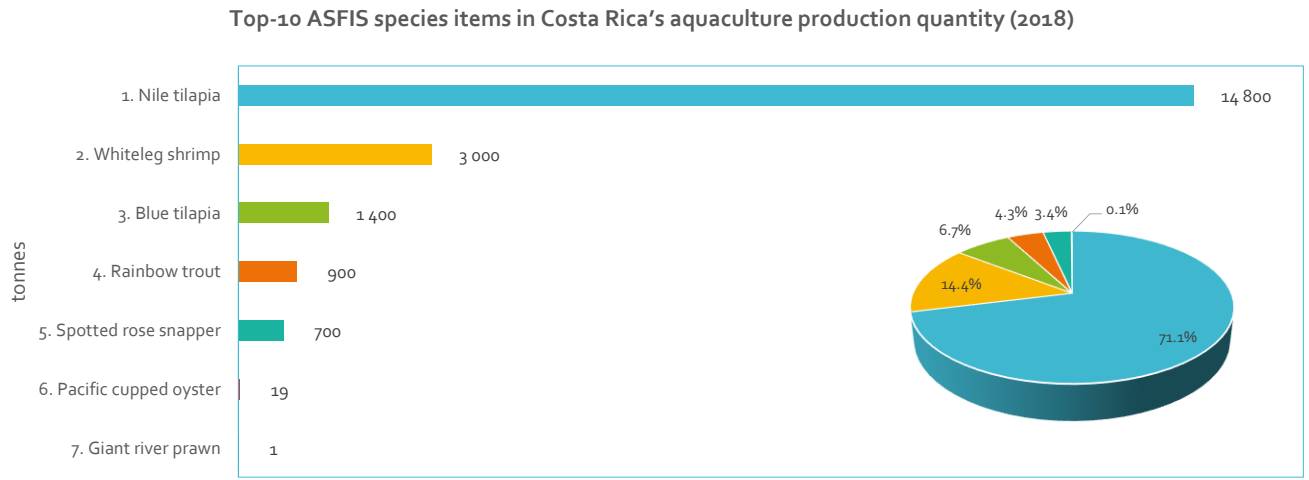
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishstatJ); www.fao.org/fishery/statistics/software/fishstatj/en
Notes: ISSCAAP (International Standard Statistical Classification of Aquatic Animals and Plants) grouping can be found at www.fao.org/tempref/FI/DOCUMENT/cwp/handbook/annex/AnnexS2listISSCAAP2000.pdf. The taxonomic scope of WAPI species groups indicated in bracket. More information about the WAPI species grouping can be found at http://www.fao.org/3/ca9245en/ca9245en.pdf.

Aquaculture species groups in Costa Rica by value (2018): The main species groups in the country's USD 98.596 million of aquaculture production value in 2018 were similar to those in terms of quantity (see previous slide).

Aquaculture production in Costa Rica by species groups		Year 2018 (in terms of value)			
WAPI species groups	ISSCAAP division	Number of species in the group farmed by the country	The country's production quantity of each species group (farmgate value; USD 1 000)	Share of the country's production value of all species (%)	Share of world production of the same species group (%)
1. Tilapias and other cichlids (ISSCAAP group)	Freshwater fishes	2	79 380	80.51	0.7069
2. Marine shrimps and prawns (ISSCAAP group)	Crustaceans	1	12 000	12.17	0.0312
3. Salmons, trouts, smelts (ISSCAAP group)	Diadromous fishes	1	3 780	3.83	0.0166
4. Marine perch-like fishes (Percoidea, marine)	Marine fishes	1	3 150	3.19	0.0618
5. Oysters (ISSCAAP group)	Molluscs	1	285	0.29	0.0039
6. Freshwater shrimps and prawns (Natantia, freshwater)	Crustaceans	1	1	0.00	0.00
Aquatic products		**7**	**98 596**	**100.00**	**0.0374**

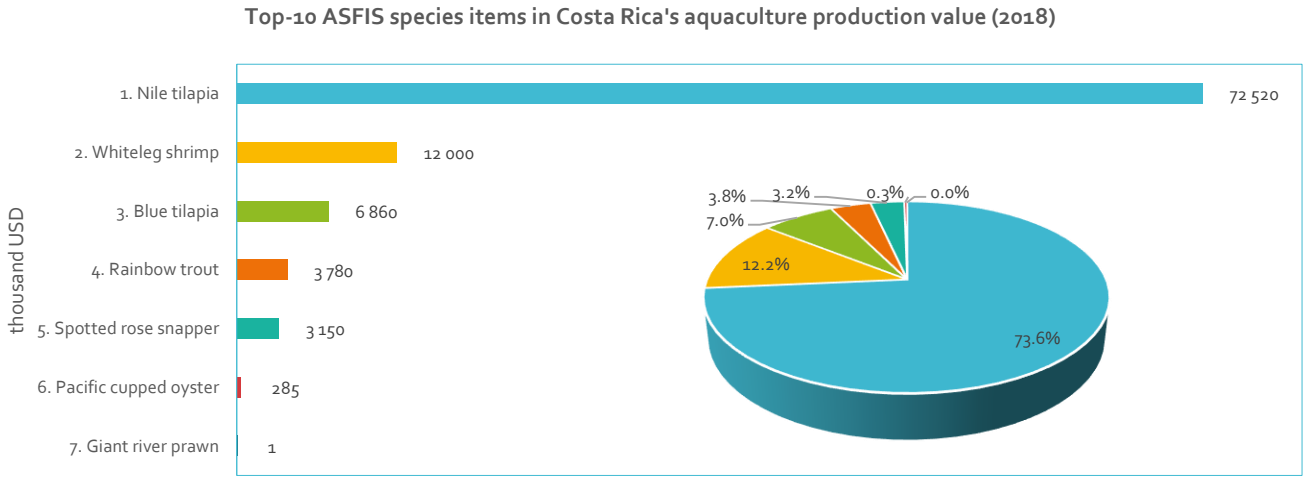
Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishstatJ); www.fao.org/fishery/statistics/software/fishstatj/en
Notes: ISSCAAP (International Standard Statistical Classification of Aquatic Animals and Plants) grouping can be found at www.fao.org/tempref/FI/DOCUMENT/cwp/handbook/annex/AnnexS2listISSCAAP2000.pdf. The taxonomic scope of WAPI species groups indicated in bracket. More information about the WAPI species grouping can be found at http://www.fao.org/3/ca9245en/ca9245en.pdf.

Costa Rica (2018): Farmed ASFIS species items ranked by quantity



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Species item less than 1 percent of total production may not be labelled in the pie chart. ASFIS = Aquatic Sciences and Fisheries Information System; more information about ASFIS species items can be found at www.fao.org/fishery/collection/asfis/en.

Costa Rica (2018): Farmed ASFIS species items ranked by value



Data source: FAO. 2020. Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ; www.fao.org/fishery/statistics/software/FishStatJ/en).
Notes: Species item less than 1 percent of total production may not be labelled in the pie chart. ASFIS = Aquatic Sciences and Fisheries Information System; more information about ASFIS species items can be found at www.fao.org/fishery/collection/asfis/en.

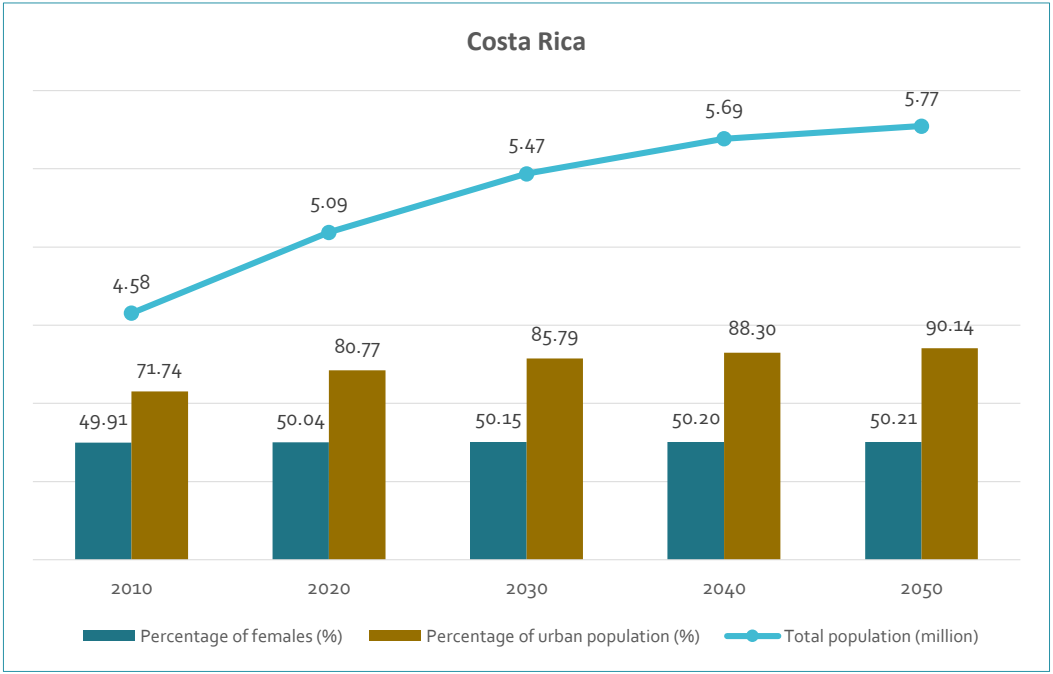
Outlook

Population prospects in Costa Rica (2010–2050):

Total population is expected to increase from 5.09 million in 2020 to 5.77 million in 2050.

The ratio of urban population is expected to rise to 90.14 percent in 2050.

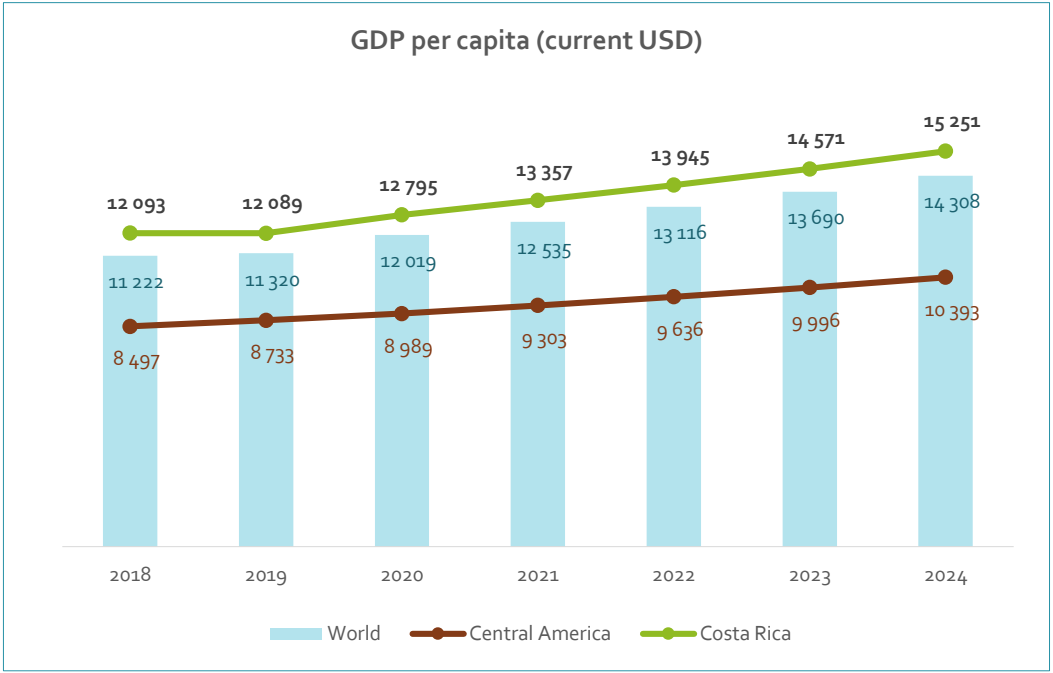
The female ratio in total population is expected to increase from 50.04 percent in 2020 to 50.21 percent in 2050.



Data sources: United Nations World Population Prospects (2019 revision; https://esa.un.org/unpd/wpp/Download/Standard/Population). United Nations World Urbanization Prospects (2018 revision; https://population.un.org/wup).

Costa Rica GDP prospects (2018-2024):

According to IMF's **pre-COVID-19 projection**, Costa Rica's GDP per capita expected to increase from USD 12 795 to USD 15 251 between 2020 and 2024, staying above the sub-regional and world average levels.



Data sources: IMF World Economic Outlook (WEO) database (October 2019; https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/download.aspx).
Note: United Nations World Population Prospects (2019 revision; https://esa.un.org/unpd/wpp/Download/Standard/Population) used to calculate GDP indicators at the regional level.

Costa Rica (2018–2030): Aquaculture growth potential from the demand-side perspective

Costa Rica (fish & seafood)	Baseline (2018)	Projection to 2030	
		Population growth as the driving force	
		Year 2030	2030 compared to baseline
1. Per capita fish demand (kg/capita/year)	18.47	18.47	-
2. Population (thousand)	4 999	5 468	469
3. Total fish demand (tonnes)	92 335	100 989	8 655

Notes: Fish & seafood includes finfish, crustaceans, molluscs and miscellaneous aquatic animals. 1. The 2017 level of per capita fish consumption in Costa Rica (18.47 kg; according to FAO. 2020. Fishery and Aquaculture Statistics. Food balance sheets of fish and fishery products 1961-2017 published via FishStatJ; www.fao.org/fishery/statistics/software/fishstatj/en) assumed to remain the same in 2018 and 2030. 2. Population data from UN World Population Prospects (2019 revision). 3. Equal to (1) x (2).

- Given the 18.47 kg baseline per capita fish and seafood consumption, 92 335 tonnes of fish and seafood were needed to satisfy the fish demand of Costa Rica's 4.999 million total population in 2018.
- According to the UN projection, Costa Rica's population is expected to increase to 5.468 million in 2030. Given the same per capita fish consumption as the baseline level (i.e. 18.47 kg), its total fish demand would reach 100 989 tonnes in 2030, which is 8 655 tonnes higher than the baseline level.
- Given its 20 820 tonnes of aquaculture production in 2018, aquaculture in Costa Rica would need to grow 3 percent a year between 2018 and 2030 in order to generate enough extra supply to cover the 8 655 tonnes of demand growth driven by its population growth.

Costa Rica: Aquaculture growth potential from the supply-side perspective

- Costa Rica's share in world aquaculture production tonnage (0.02 percent):
  - **Smaller than** its share in world population (0.07 percent).
- Costa Rica's share in world marine aquaculture production (0.01 percent):
  - **Smaller than** its share in world coastline length (0.16 percent)
- Costa Rica's share in world inland aquaculture production (0.03 percent):
  - **Larger than** its share in world surface area of inland waterbodies (0.01 percent).
  - **Smaller than** its share in world renewable water resources (0.21 percent).

Costa Rica	Share of world total (%)
Total country area (excluding coastal waters, 2013-2017)[1]	0.04
Surface area of inland waterbodies (2015)[2]	0.01
Coastline length (2019)[3]	0.16
Total renewable water resources (2013-2017)[1]	0.21
Population (2018)[4]	0.07
Aquaculture production (all areas, 2018)[5]	**0.02**
Aquaculture production (inland waters, 2018)[5]	**0.03**
Aquaculture production (marine areas, 2018)[5]	**0.01**

Data sources: 1. FAO. 2016. AQUASTAT Main Database – Food and Agriculture Organization of the United Nations (FAO). Website accessed on 16 May 2019. 2. FAOSTAT Land Cover database (updated June 2019; CCI_LC). 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 (2019 revision). 5. FAO. 2020. FAO Fishery and Aquaculture Statistics. Global aquaculture production 1950-2018 (FishStatJ).

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: http://www.fao.org/fishery/naso/search/en
- 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: http://www.fao.org/fishery/nalo/search/en

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: http://www.fao.org/fishery/statistics/software/wapi/en
- World Aquaculture Performance Indicators (WAPI) banner: http://www.fao.org/3/CA0198EN/ca0198en.pdf
- *World Aquaculture Performance Indicators (WAPI) – Information, Knowledge and Capacity for Blue Growth* (brochure): http://www.fao.org/3/I9622EN/i9622en.pdf
- *The Potential of World Aquaculture Performance Indicators as a Research and Educational Tool* (FAN article, April 2017): http://www.fao.org/3/a-i7171e.pdf
- *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): http://www.fao.org/3/a-i3539e.pdf