



## An Overview of Recently Published Global Aquaculture Statistics

With Botswana included as the newest aquaculture producer country, the FAO Global Aquaculture Production Statistics Dataset for 1950-2015 released in March 2017 has registered a total of 201 currently existing countries and territories with aquaculture production statistical data. The new dataset now contains records of 591 aquatic species and species groups ever farmed in inland freshwater, inland saline water, coastal brackish water and marine water.

Not unexpectedly, world aquaculture production continued its growth in 2015. The newly released FAO aquaculture statistics has recorded another all-time high

world aquaculture production of 106 million tonnes in live weight in the year 2015, with a total estimated first-sale value of US\$163 billion (Table 1). This total production comprised *farmed aquatic animals, aquatic plants and non-food products* (pearls and shells).

The growth of world aquaculture production of aquatic animals in the first 15 years in the new millennium has gradually slowed down and the 2001-2015 average annual growth rate was 5.9%, which is significantly lower than the double digit growth percentage rate seen in the 1980s and the 1990s. At continent level, African aquaculture growth during 2001-2015 averaged at 10.4%, followed by Asia (6%) and Americas (5.7%). In Oceania and Europe aquaculture growth were only 2.9% and 2.5%, respectively, in the last 15 years.

In 2015 world food fish aquaculture increased by 4%, the lowest annual growth rate in the

past few decades. Americas and Oceania experienced negative growth in 2015 (Table 2).

By production volume, the sub-sector of aquaculture of aquatic animals has been dominated by finfish farming, which represents the major aquaculture product in many countries (Figure 1). The contribution of finfish has been maintained between 63-68% in the last two decades. Molluscs farming, which used to count for about 30% of the total food fish farming production around the year 2000, has gradually declined to 21% in 2015. In contrast, crustacean farming improved its share from less than 5% before 2000 to close to 10% in the past decade. Aquatic plants farming counted for 27.7% in 2015 in the total production volume when aquatic plants and animals are combined.

The composition of major groups of species of farmed aquatic animals vary greatly across the world. Finfish farming is the most



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important type of aquaculture operation in volume terms on all continents. In 2015 finfish farming counted for 67.8% of total aquaculture output of aquatic animals (Table 3).

Aquaculture has made steadily increasing contribution to the

Table 1 – World aquaculture production in 2015

	Quantity (live weight)	Value (first sale)
Food fish*	76.6 million tonnes	US\$157.9 billion
Aquatic plants**	29.4 million tonnes	US\$4.8 billion
Non-food products	41.1 thousand tonnes	US\$208.2 million
<b>Total</b>	<b>106 million tonnes</b>	<b>US\$163 billion</b>

\* Food fish includes finfish, crustaceans, molluscs and other aquatic animals such as sea urchins and sea cucumbers, frogs and aquatic turtles, etc. Farmed crocodile and alligators are excluded.

\*\* Aquatic plants include mostly seaweeds, plus some microalgae.

Table 2 – World aquaculture production of food fish by continent (live weight in thousand tonnes)

	2000	2002	2004	2006	2008	2010	2012	2014	2015	2015 share in world total	2015 growth
Africa	400	453	559	755	942	1 286	1 484	1 711	1 772	2.3%	3.6%
Americas	1 423	1 801	2 143	2 369	2 470	2 514	2 990	3 347	3 273	4.3%	-2.2%
Asia	28 422	32 361	36 895	41 780	47 001	52 452	58 956	65 506	68 393	89.3%	4.4%
Europe	2 051	2 043	2 173	2 193	2 327	2 523	2 827	2 929	2 975	3.9%	1.6%
Oceania	121	128	139	161	175	190	186	189	186	0.2%	-1.5%
<b>World</b>	<b>32 418</b>	<b>36 786</b>	<b>41 909</b>	<b>47 257</b>	<b>52 915</b>	<b>58 964</b>	<b>66 443</b>	<b>73 681</b>	<b>76 600</b>	<b>100%</b>	<b>4.0%</b>

world fish supply. Within 15 years in the new millennium, the aquaculture contribution to the world production of aquatic animals (captured and farmed combined) has increased from 25.7% in 2000 to 45.3% in 2015 (Figure 2).

To the production of aquatic animals from marine and brackish water, aquaculture (including mariculture and coastal

Figure 1 – World aquaculture production of farmed aquatic animals and plants (1990-2015)

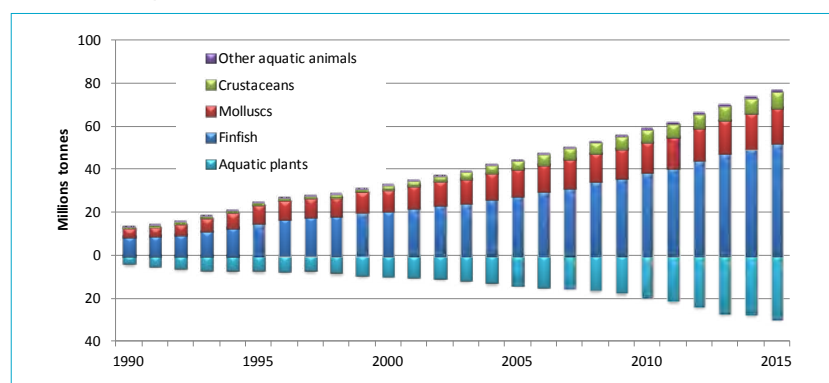


Table 3 – 2015 world aquaculture production by continent by main species group (thousand tonnes in live weight)

INLAND AQUACULTURE	Africa	Americas	Asia	Europe	Oceania	WORLD
1. Finfish	1 749 712	1 017 534	41 849 837	475 253	5 013	45 097 349
2. Crustacea	17	63 954	2 792 441	51	162	2 856 625
3. Molluscs		0	283 744			283 744
4. Other aquatic animals		531	521 106	0		521 637
<b>Sub-total</b>	<b>1 749 729</b>	<b>1 082 019</b>	<b>45 447 128</b>	<b>475 304</b>	<b>5 175</b>	<b>48 759 355</b>
MARINE AND COASTAL AQUACULTURE	Africa	Americas	Asia	Europe	Oceania	WORLD
1. Finfish	15 152	1 003 191	3 855 936	1 863 068	72 775	6 810 121
2. Crustacea	3 716	722 869	3 761 188	259	6 693	4 494 725
3. Molluscs	3 769	465 296	14 946 627	636 520	96 032	16 148 245
4. Other aquatic animals	25		381 831	8	5 593	387 456
<b>Sub-total</b>	<b>22 662</b>	<b>2 191 356</b>	<b>22 945 582</b>	<b>2 499 855</b>	<b>181 093</b>	<b>27 840 547</b>
TOTAL AQUACULTURE	Africa	Americas	Asia	Europe	Oceania	WORLD
1. Finfish	1 764 864	2 020 726	45 705 773	2 338 320	77 788	51 907 471
2. Crustacea	3 733	786 823	6 553 629	310	6 854	7 351 350
3. Molluscs	3 769	465 296	15 230 371	636 520	96 032	16 431 989
4. Other aquatic animals	25	531	902 936	8	5 593	909 093
<b>TOTAL</b>	<b>1 772 391</b>	<b>3 273 375</b>	<b>68 392 710</b>	<b>2 975 159</b>	<b>186 268</b>	<b>76 599 902</b>

Note: Several rows and columns may not add up to the total due to rounding.

aquaculture) contributed 25.5% to the total production, up from 13.8% in 2000 (Figure 3). Within inland water total production of captured and farmed aquatic animals, aquaculture consolidated

its dominating share from 68.6% in 2000 to 81% in 2015 (Figure 4).

With almost all farmed aquatic animals destined for human

consumption, aquaculture supplied 10.42 kg of food fish for human consumption on world average in 2015, a level further up by 0.28 kg from 10.14 kg in 2014.

Figure 2 – Comparison of World Capture and Aquaculture in the total production of aquatic animals (excluding algae)

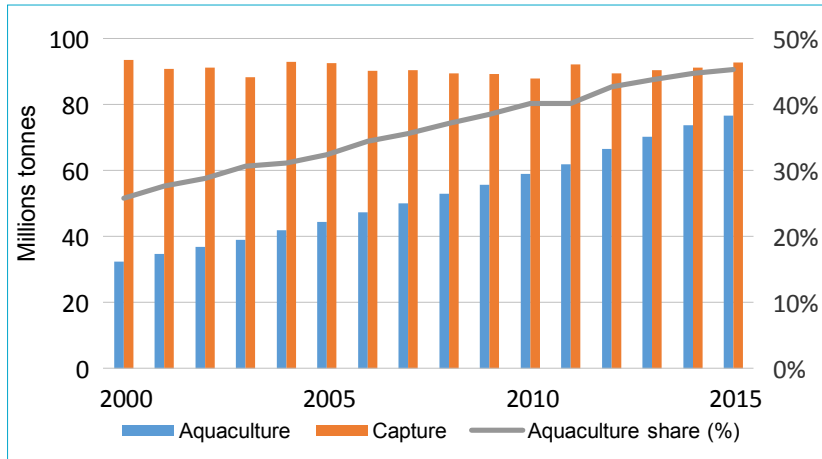


Figure 3 – Comparison of World Capture and Aquaculture in the production of aquatic animals from marine and coastal brackish water (excluding algae)

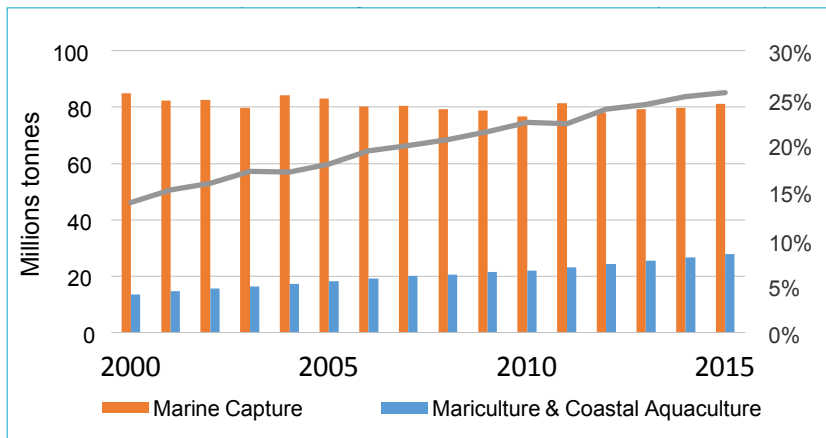
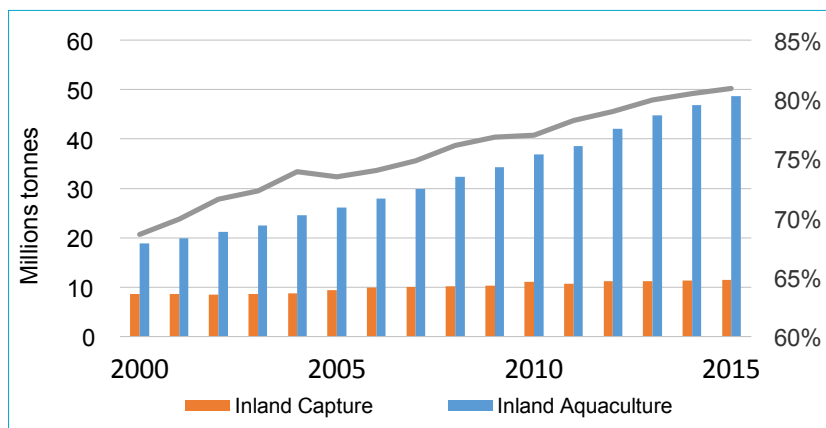


Figure 4 – Comparison of World Capture and Aquaculture in the production of aquatic animals from inland water (excluding algae)



FAO is mandated to collect annual statistics on fisheries and aquaculture worldwide for release to the public as integral part of its regular programme or work. To monitor and report on the sector development status and trend, FAO also publish the State of World Fisheries and Aquaculture biannually, which is largely based on the worldwide collected statistics. However, the situation of national aquaculture statistics collection and reporting to FAO remains unsatisfactory. For 2015 data collection, FAO received data reports from 118 countries and territories only, representing 58% of the aquaculture producer countries and territories in the world. Irrespective of the “developing” and “developed” status, non-reporting countries include a considerable number of global and regional major aquaculture producer countries.

Among the received data reports, the majority of them have substandard reporting quality in terms of completeness, timeliness, consistency and accuracy, etc. In the absence of national reporting (including incomplete reporting), FAO has to harvest national data from known official sources or make estimates based on the best available evidence from various alternative sources. In 2015 about 66 million tonnes (88.7%) of the world food fish aquaculture production quantity corresponds to reported data, while the rest (8.7 million tonnes, 21.3%) corresponds to harvested data and FAO estimates.