



Aquaculture Production in the Kingdom of Thailand and Its Social Role

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Thailand Fishery Balance Sheet of 2021

Production (54.77%)
2,383,933 tons

Import (45.23%)
1,969,000 tons

Total
4,352,933 tons

Consumption (52.52%)
2,286,052 tons

Export (47.48%)
2,066,881 tons



Quantity

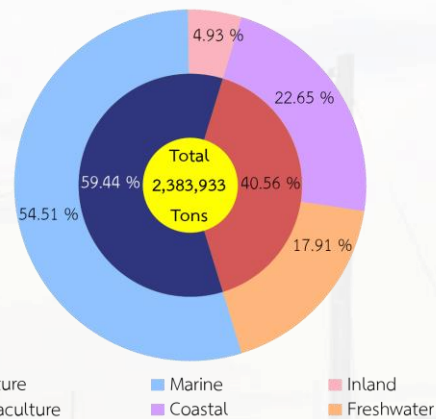
Fisheries Quantity and Value of Capture and Culture in 2021

➤ Capture (59.44 %)

- Marine (54.51 %)
- Inland (4.93 %)

➤ Aquaculture (40.56 %)

- Coastal (22.65 %)
- Freshwater (17.91 %)



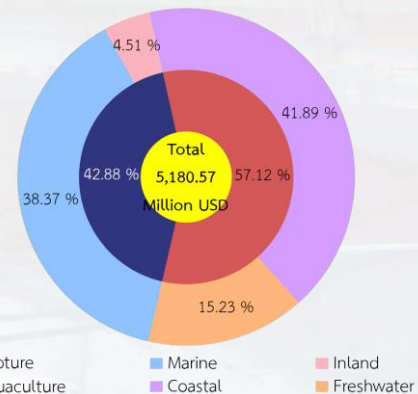
Value

➤ Capture (42.88 %)

- Marine (38.37 %)
- Inland (4.51 %)

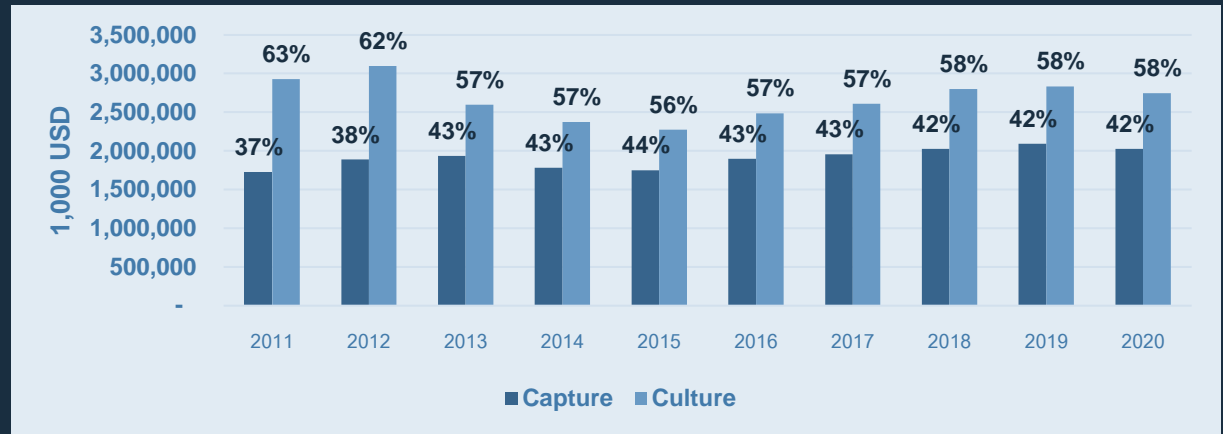
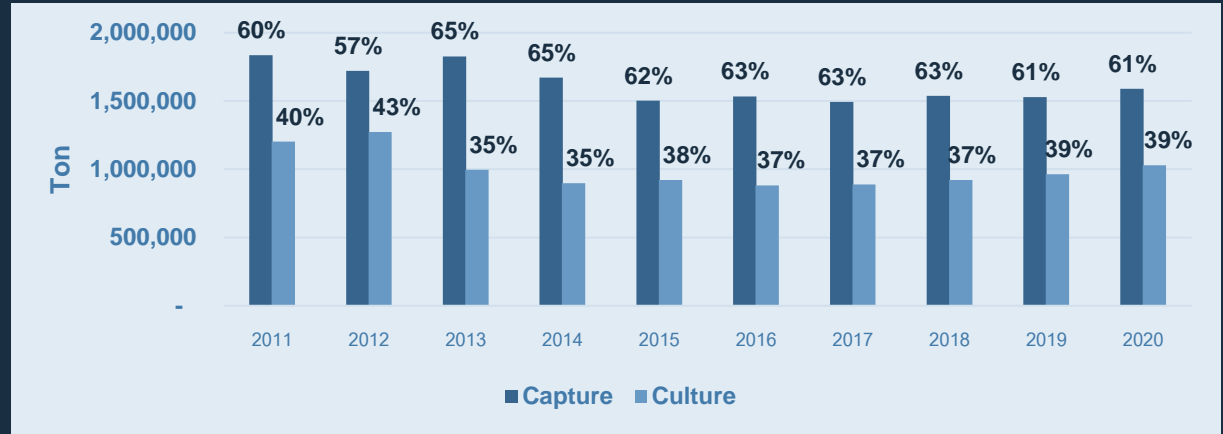
➤ Aquaculture (57.12 %)

- Coastal (41.89 %)
- Freshwater (15.23 %)



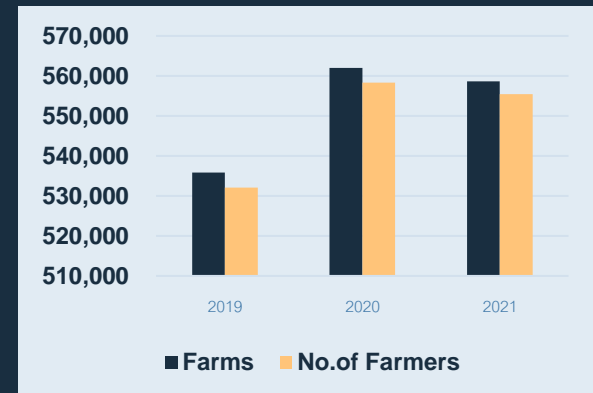
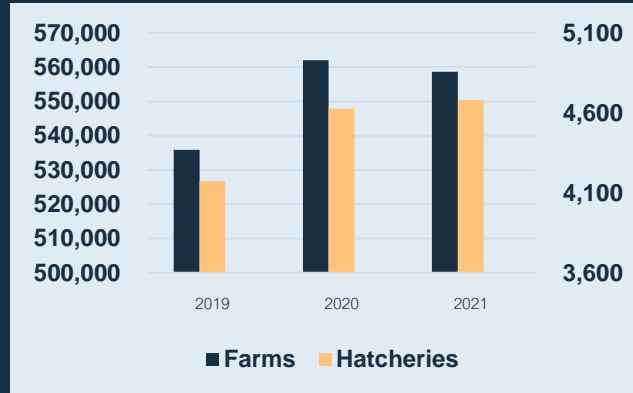
Quantity and Value of Capture and Culture in Thailand

Years	Capture Quantity (Ton)	Capture Value (Thousand USD)	Culture Quantity (Ton)	Culture Value (Thousand USD)
2011	1,835,124	1,721,923	1,201,402	2,927,740
2012	1,719,628	1,887,795	1,271,996	3,094,868
2013	1,824,829	1,935,627	997,255	2,595,677
2014	1,670,037	1,782,967	897,762	2,371,723
2015	1,501,318	1,746,292	920,389	2,272,067
2016	1,532,180	1,897,472	881,770	2,483,630
2017	1,493,044	1,957,010	888,606	2,609,870
2018	1,536,756	2,023,363	921,876	2,798,752
2019	1,527,182	2,089,527	963,416	2,832,916
2020	1,588,859	2,024,843	1,028,048	2,747,179



Aquaculture in Thailand

Year	Number of Farms	Number of Hatcheries	Number of Farmers
2021	558,662	4,679	555,468
2020	561,993	4,626	558,345
2019	535,831	4,172	532,097



Aquaculture in Thailand

Year	Aquaculture (Unit : Ton)						
	Total	Coastal					Freshwater
		Total	Shrimp	Fish	Clam	Crab	
2011	1,201,402	817,049	611,437	18,883	186,729	-	384,353
2012	1,271,996	817,742	609,727	22,155	185,860	-	454,254
2013	997,255	561,490	325,395	19,256	216,839	-	435,765
2014	897,762	482,638	279,982	19,087	183,569	-	415,124
2015	920,389	508,861	294,947	19,509	194,405	-	411,528
2016	881,770	500,190	335,044	19,219	145,927	-	381,580
2017	888,606	481,398	360,687	22,455	98,256	-	407,208
2018	921,876	496,036	375,404	41,108	78,203	1,321	425,840
2019	963,416	536,467	396,792	48,989	88,973	1,713	426,949
2020	1,028,125	556,887	388,673	46,654	119,002	2,558	471,238
2021	1,002,626	581,423	386,924	50,755	140,024	3,720	421,203

Aquaculture in Thailand





Nile Tilapia
(*Oreochromis niloticus*)



Giant Freshwater Prawn
(*Macrobrachium rosenbergii*)



Walking Catfish
(*Clarias* sp.)



Striped Catfish
(*Pangasianodon hypophthalmus*)



Silver barb
(*Barbonymus gonionotus*)

9 Economic freshwater aquatic animal in Thailand

Giant gourami
(*Osphronemus goramy*)



Snake skin gourami
(*Trichogaster pectoralis*)



Striped Snake-head fish
(*Channa striata*)

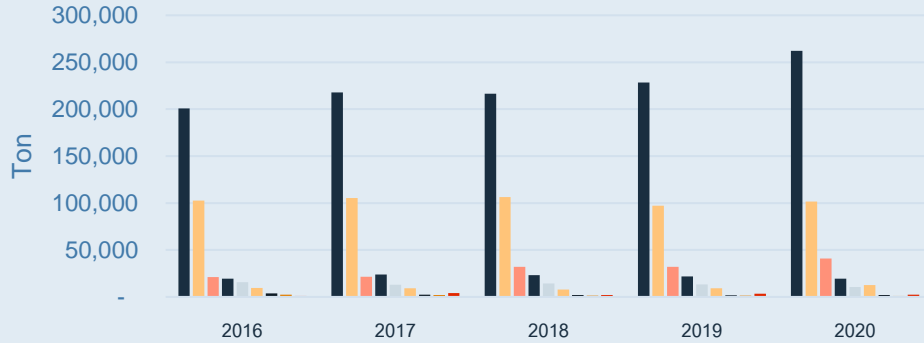


Rugosed Frog
(*Rana tigerina*)



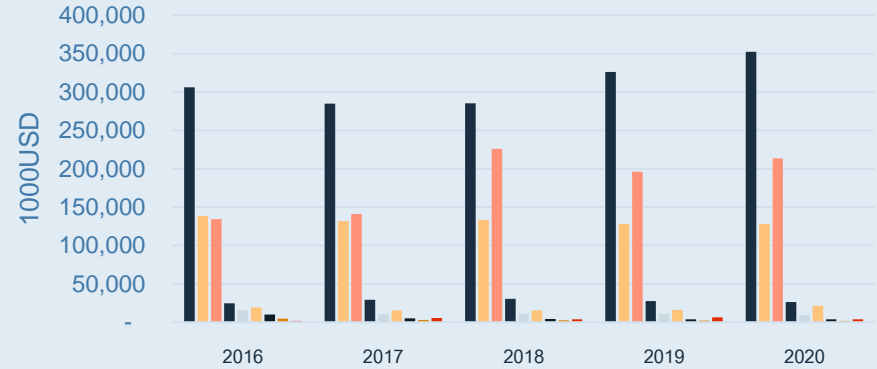
Freshwater Aquaculture in Thailand

Quantity



- Nile Tilapia
- Silver Barb
- Striped snake head
- Catfish
- Striped Catfish
- Giant Gourami
- Freshwater Prawn
- Snake skin gourami
- Rugosed Frog

Value



- Nile Tilapia
- Silver Barb
- Striped snake head
- Catfish
- Striped Catfish
- Giant Gourami
- Freshwater Prawn
- Snake skin gourami
- Rugosed Frog

	2016		2017		2018		2019		2020	
	Quantity	Value (1000USD)	Quantity	Value (1000USD)	Quantity	Value (1000USD)	Quantity	Value (1000USD)	Quantity	Value (1000USD)
Nile Tilapia	200,764	306,412	217,928	285,011	216,602	285,179	228,601	326,236	262,090	352,637
Catfish	102,444	138,388	105,144	131,933	106,201	133,348	97,151	127,918	101,579	128,122
Freshwater Prawn	20,883	134,490	21,415	141,077	31,838	225,920	31,984	196,133	40,675	213,785
Silver Barb	19,312	24,453	23,647	29,380	23,124	30,256	21,767	27,319	19,283	26,278
Striped Catfish	15,497	15,570	12,751	10,439	14,257	11,418	13,316	10,932	10,308	9,096
Snake skin gourami	9,470	19,053	8,977	15,232	7,773	15,518	9,136	15,911	12,379	21,450
Striped snake head	3,469	10,034	2,421	5,155	1,810	4,070	1,663	3,673	1,781	3,808
Giant Gourami	2,253	4,501	1,861	3,084	1,367	2,370	1,150	2,244	791	1,515
Rugosed Frog	901	1,792	3,956	5,473	1,795	3,555	3,402	6,354	2,108	3,780



Freshwater Aquaculture in Thailand

Type	2019	2020	2019	2020	2019	2020	2019	2020
	Number of Farms		Area (Hectare)		Quantity (Tons)		Value (Million USD)	
Pond	478,900	544,947 ↑	8,940	8,872 ↓	33,925	33,526 ↓	93	95 ↑
Paddy-field	961	972 ↑	766	822 ↑	1,820	1,881 ↑	0.0024	0.0022 ↓
Ditch	7,177	7,714 ↑	2,349	2,366 ↑	6,702	5,104 ↓	0.010	0.007 ↓
Cage	5,859	7,471 ↑	189	220 ↑	31,978	52,335 ↑	0.062	0.094 ↑

4 Economic Coastal aquatic animal aquaculture in Thailand



Pacific white shrimp
(*Litopenaeus vannamei*)



Giant Tiger Prawn
(*Penaeus monodon*)



Asian Seabass
(*Lates calcarifer*)



Grouper
(*Epinephelus sp.*)

Coastal Aquaculture in Thailand



Type	2019	2020	2019	2020	2019	2020	2019	2020
	Number of Farms		Area (Hectare)		Quantity (Tons)		Value (Million USD)	
Grouper	2,525	2,199 ↓	171	157 ↑	1,786	1,239 ↓	11	7 ↓
Seabass	7,083	6,807 ↓	3,362	3,957 ↑	47,203	45,415 ↓	152	130 ↓
Pacific white shrimp	24,608	26,700 ↑	51,903	54,731 ↑	378,508	343,633 ↓	1,632	1580 ↓
Giant Tiger Prawn					17,954	14,820 ↓	128	94 ↓
Blood cockles	1,659	1,637 ↓	8,940	8,872 ↓	33,925	33,526 ↓	93.2	95 ↑
Mussels	1,885	2,251 ↑	2,611	3,105 ↑	69,330	52,067 ↓	18	17 ↓
Serrated mud crab	3,211	4,584 ↑	26,158	44,739 ↑	1,713	2,556 ↑	0.02	0.03 ↑

Aquaculture Farm Standards in Thailand

National Standards



• Good Aquaculture Practice (GAP)



• Code of conduct (CoC)



• Organic Agriculture Certification Thailand



• Thai Agricultural Standard (TAS)

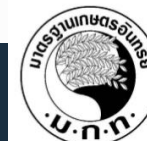
International Standards



• Best Aquaculture Practice (BAP)



• Aquaculture Stewardship Farm Standard (ASC)



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ACCREDITED



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Genetic Improvement

Breeding Improvement

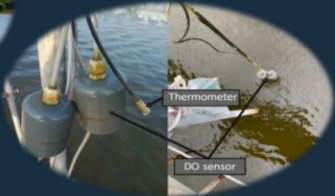


Innovation in Aquaculture Sector



Water Quality Improvement

Feeding Improvement



The role of aquaculture in the social sector

Farm

Transport

Storage

Wholesale

Processing

Market



The role of aquaculture in the social sector

1. **Economic Role:** Boost economy by increasing employment throughout the supply chain, from production , collection , processing, logistic and distribution sectors.
Nowaday there are about **800,000** worker in fishery sector.
2. **Farmers' livelihood:** Generate income, provide protein that is sufficient and reduce food cost for households.
3. **Institutional Role:** Local fishery organizations are registered
883 local aquaculture organizations (35,923 members)
402 local processing organizations (9,622 members)



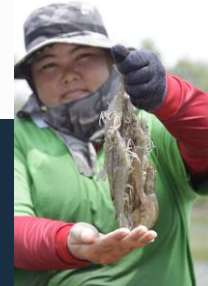
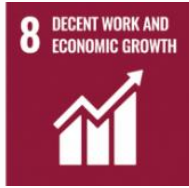
Market promotion



- Promoted large scale aquaculture – extension system projects.



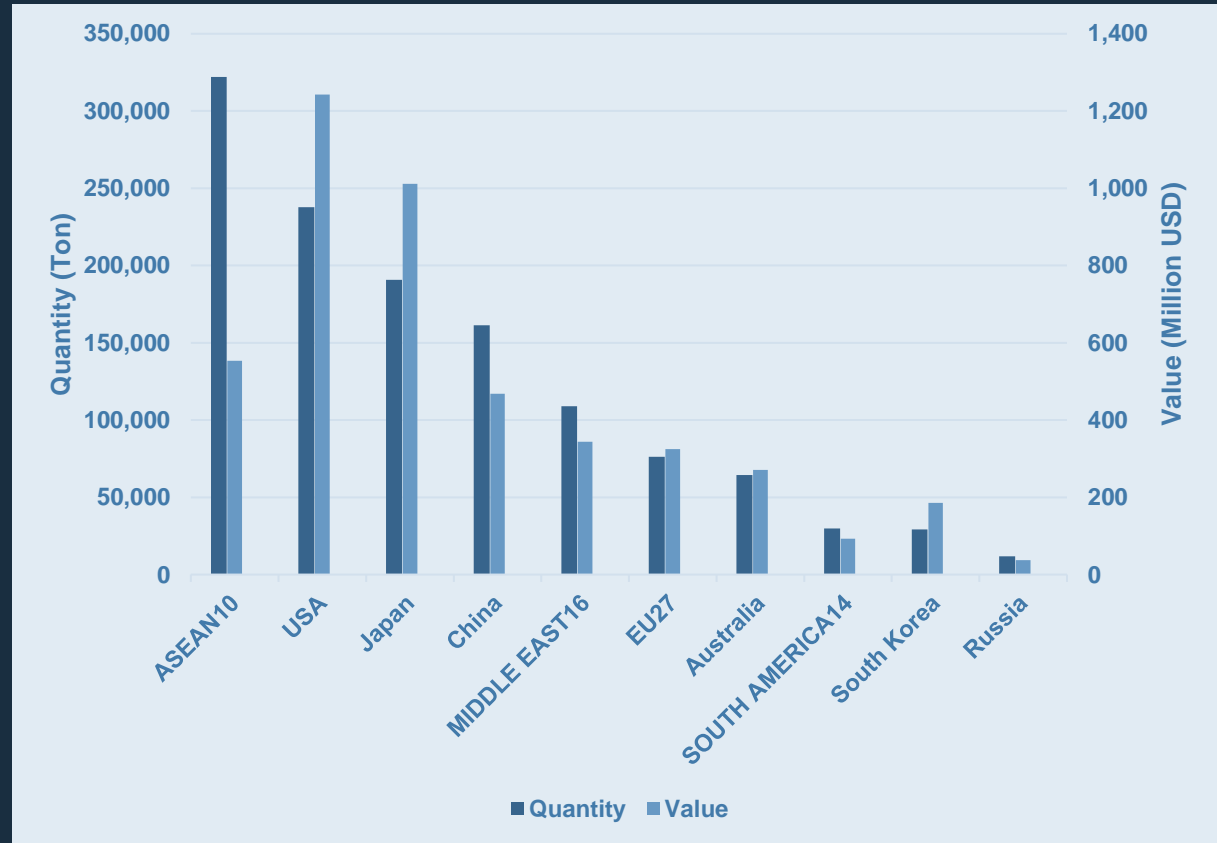
- Established offline/online market for SME groups by the Department of Fishery's market access channel called "Fisherman Shop".



SDGs Dimension

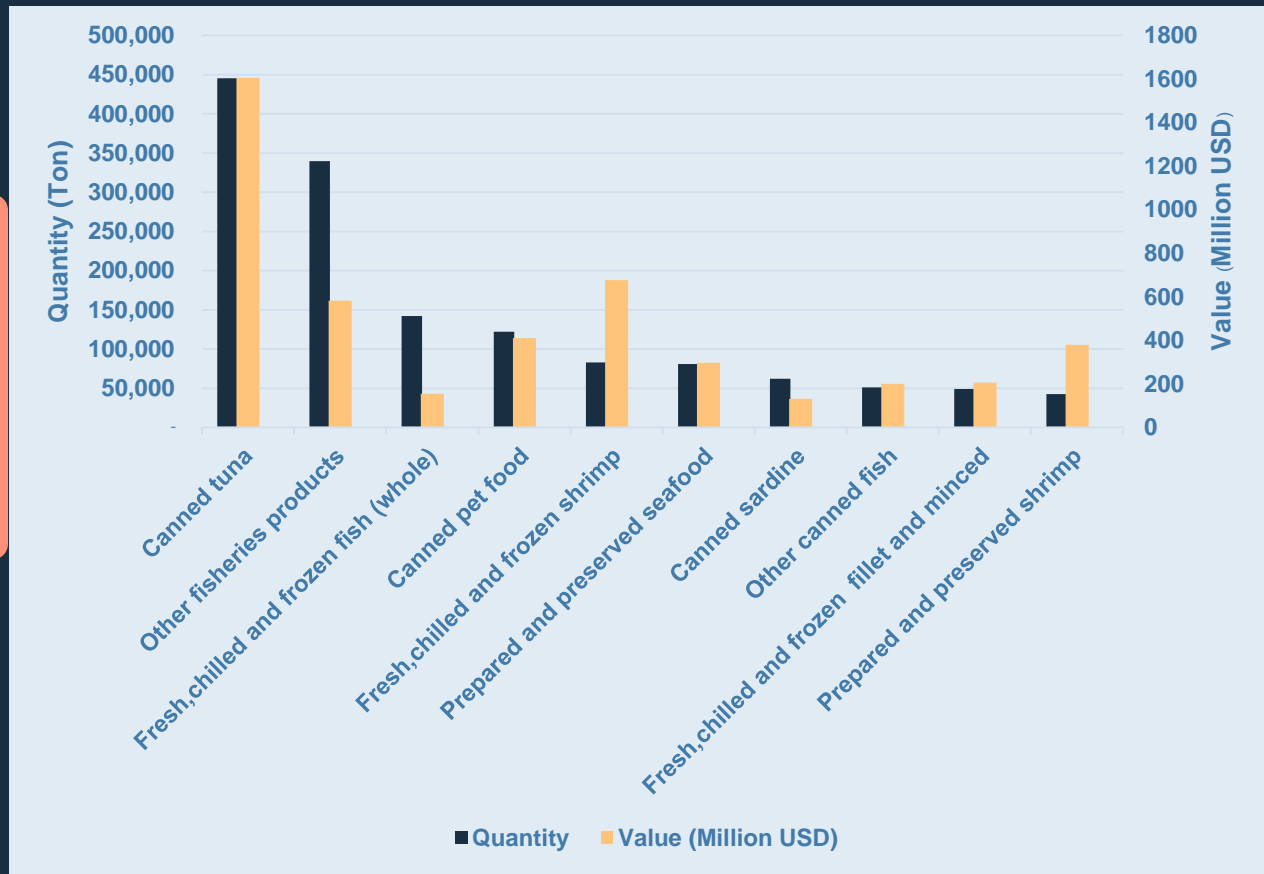
Thailand Export of Fisheries Product

No.	Country	Quantity (Ton)	Value (Million USD)
1	ASEAN10	321,926	553
2	USA	237,638	1,242
3	Japan	190,798	1,012
4	China	161,386	468
5	MIDDLE EAST 16	109,067	344
6	EU27	76,161	325
7	Australia	64,500	271
8	South America 14	29,977	93
9	South Korea	29,287	186
10	Russia	11,889	38
Total		1,232,629	4,532



Top 10 of Fisheries Product

No.	List	Quantity (Ton)	Value (Million USD)
1	Canned Tuna	445,250	1,605
2	Other fisheries product	339,795	583
3	Fresh, chilled and frozen fish	141,939	155
4	Canned pet food	122,213	410
5	Fresh, chilled frozen shrimp	83,092	676
6	Prepared and preserved seafood	80,688	297
7	Canned sardine	62,136	131
8	Other canned fish	51,186	201
9	Fresh, chilled and frozen fillet and minced	49,158	206
10	Prepared and preserved shrimp	42,632	380



Thank You