

Report: TDAP-Fisheries

Series: 01/2021

# Fisheries: Potential of Pakistan

Researcher: Salma Nusrat  
Research Associate

Research Editor: Salman Raza

Research Head: Dr. Khalid Mustafa



Research Wing

Trade Development Authority Pakistan

December, 2021



## **Disclaimer**

The findings, interpretations and conclusions expressed do not necessarily reflect the views of Board of Directors and Members of the Trade Development Authority Pakistan (TDAP). Any conclusions and analysis based on the data from ITC Trade Map, ITC Market Access Map, Pakistan Bureau of Statistics, Ministry of Finance, Ministry of Food and Security, are the responsibility of author and do not necessarily reflect the opinion of TDAP. Although every effort has been made to cross-check and verify the authenticity of the data, TDAP, or the author, do not guarantee the data included in this work.

For any queries or feedback regarding this report, please contact

[Salma.nusrat@tdap.gov.pk](mailto:Salma.nusrat@tdap.gov.pk)



## Table of Contents

Disclaimer .....	I
List of Tables .....	III
List of Figures .....	IV
List of Acronyms .....	V
Executive Summary .....	VI
Chapter 1. Introduction.....	1
Chapter 2. Fish production in Pakistan.....	2
2.1 Aquaculture Production.....	3
2.2 Capture and Aquaculture Fish Production by categories .....	4
Chapter 3. Processing for Value Addition of Fisheries Products .....	6
3.1 Process Flow: .....	6
3.2 Machineries Required for Value Addition Process:.....	7
Chapter 4. Exports & Imports of Fisheries of Pakistan .....	8
4.1 Top 10 Importers and Exporters of Pakistan.....	8
4.2 Trend of the top five importers of Pakistan’s fisheries sector.....	9
4.3 Top Exports of Fish from Pakistan at HS Code-04.....	10
Imports of Fish by Pakistan and top 3 exporting countries (HS 4 digit).....	12
Chapter 5. Analysis of Imports at HS-06 .....	13
5.1 Duties Imposed on Catfish (Pangasius and Tilapia) .....	16
5.2 Farming of Pangasius and Tilapia fish in Pakistan .....	17
Chapter 6. Export Analysis.....	18
6.1 Top Exports at HS-06.....	18
6.2 Exports at HS-06 and Price Comparison among top importers .....	19
Chapter 7. Issues impacting growth of fisheries in Pakistan .....	22
7.1 Policy Recommendations .....	23
References .....	24
Annexure I .....	25
Annexure II.....	26



## List of Tables

Table 1 Comparison of Aquaculture Production .....	4
Table 2 Machineries used for Processing .....	7
Table 3 Top 10 Export and Import Destinations of Pakistan for Fish at HS-02.....	9
Table 4 Average Exports and top 3 importers of Pakistan .....	11
Table 5 Imports of Fish by Pakistan and top 3 exporting countries HS-04.....	12
Table 6 Catfish Duties .....	16
Table 7 Import duty on the instruments and equipment's used for Fish Farming.....	18
Table 8 Top Exports of from Pakistan at HS-06.....	19
Table 9 Top 3 Importers of fish and crustaceans and price comparison at HS-06.....	20



## List of Figures

Figure 1 Fish Production province-wise .....	2
Figure 2 Fish Production by type .....	3
Figure 3 Aquaculture Production .....	5
Figure 4 Capture Production .....	6
Figure 5 Process Flow Diagram .....	6
Figure 6 Total Imports and Exports at HS-02 .....	8
Figure 7 Trend in the top importers of Pakistani Fish .....	10
Figure 8 Imports of Frozen Pangasius and Tilapia .....	14
Figure 9 Trend in the Imports of Pangasius and Tilapia .....	15
Figure 10 Price Comparison of Imported fishes .....	16
Figure 11 Applied Tariff and MFN on imports from Pakistan .....	22



## List of Acronyms

MFN	Most Favored Nation
FAO	Food Agriculture Organization
EU	European Union
GDP	Gross Domestic Product
HS	Harmonized System
CPFTA	China Pakistan Free Trade Agreement
FDB	Fish Development Board
HACCAP	Hazard Analysis Critical Control Point



## **Executive Summary**

Aquaculture is one of the fastest growing sector in the world. However, in Pakistan, aquaculture has received attention in recent years and the government has now established several fish hatcheries and training facilities for fish farmers. Pakistan has the lowest level of aquaculture fish production among the Asian countries but the trend in aquaculture production is increasing manifolds.

The major fish imports of Pakistan are Pangasius and Tilapia. Both of the categories of catfish are imported entirely from Vietnam and the import duties are 61% including 20% custom duty, 35% regulatory duty and 6% additional custom duties. Pangasius and Tilapia are aquaculture and can be easily farmed. Pakistan has now started farming of both Tilapia & Pangasius and the experiments have remained successful. In terms of exports, frozen flat fish belonging to demersal species of fish is the most exported category among all other categories at HS-06 followed by Shrimps & prawns.

The value chain constraints for processing include lack of storage capacity, poor handling of fish catches, poor compliance with SPS measures, and non-availability of modern machineries for processing which ultimately affects the quality.

Covid-19 has affected fisheries sector to a great extent. Major issues reported by exporters is shortage of containers and this shortage is due to delays in shipment because of Covid-19 protocols implemented by China and other countries. According to exporters, the freight costs have increased by almost 50% due to global shortage and supply chain issues. Overall, it is impacting the profitability of exporters, hence causing decline in overall exports. Another major hurdle is the ban on some species of fish from Pakistan by the European Union. EU authorities have allowed only two exporters from Pakistan to export fish, cuttlefish and shrimps after 100% laboratory test. To overcome these issues the following actions are required: trainings on aquaculture, value-added processing, and quality control, upgrading of hygienic controls in the fishing value chain, restriction on fishing to control exhaustion of fish stocks, & chilling units need revision.

## **Chapter 1. Introduction**

Fisheries as a subsector of agriculture, plays a significant role in the national economy and towards food security of the country. Fisheries contribute directly to food supplies, a source of livelihood for the coastal inhabitants, export earnings and boosting the economy (Ahmed N. , 2017). Fishing in Pakistan accounts for less than one percent of the GDP, but it still plays a crucial role in developing the economy of Pakistan by providing employment to a significant number of people residing in impoverished societies and backward regions of Balochistan and Sindh (Khan, 2020).

In 2020, exports of fisheries were estimated to be 373.392 million dollars which represented 1.6% of the total exports of Pakistan. Fishery plays an important role in the domestic economy. The major 10 importing countries of Pakistan for Fisheries are Thailand, China, Vietnam, UAE, Republic of Korea, Malaysia, Kuwait, Japan, Saudi Arabia, & Indonesia. Over the years, Pakistan's fish imports have almost declined from 22 million in 2017 to 6 million in 2020. The marine fisheries sector is the main category contributing about 64 % as compared to inland which contributes 36% in terms of production. Marine fish is concentrated in the southern part of Pakistan including Sindh and Balochistan and inland fish is found in Sindh, Punjab and KPK including Gilgit-Balistan. According to the Economic Survey of Pakistan FY2020-21, the fishing sector has a share of 2.01 percent in agriculture value addition and 0.39 percent in GDP. The growth of fishing was 5.75% in FY2015 however it has declined over the year and the current FY2020-21(P) growth is reported to be 0.73% (Survey, 2020-21).

Fishery products are one of the most traded foods and feed commodities all over the world. Global food fish consumption has increased at an average annual rate of 3.1 percent from 1961 to 2017, a rate almost twice that of annual world population growth (1.6 percent) for the same period, and higher than that of all other animal protein foods (meat, dairy, milk, etc.), which has increased by 2.1 percent per year (FAO, 2020).

Pakistan has many marine and inland fishery resources. The commercially important resources include nearly 250 demersal fish species, 50 small pelagic fish species, 15 medium-sized pelagic species and 20 large pelagic fish species. In addition to this, there are also 15 commercial species of shrimp, 12 of cephalopods and 5 of lobster.



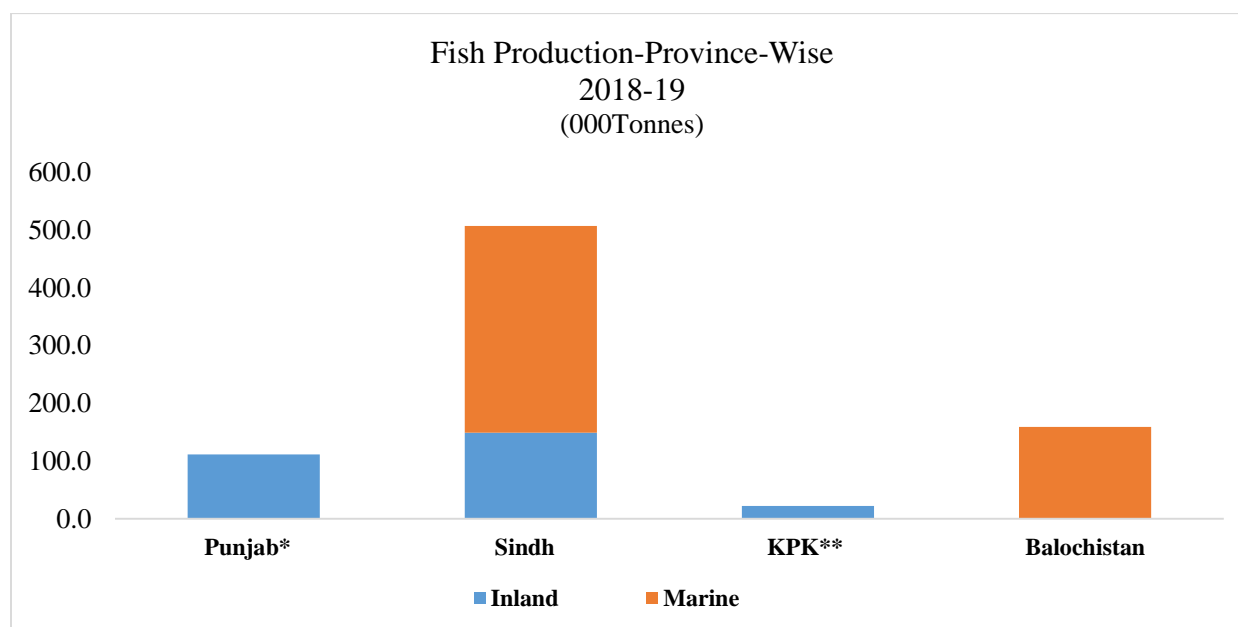


## Chapter 2. Fish production in Pakistan

On the coast of Pakistan, there are more than 30 species of shrimps, 10 species of crabs, five species of lobster and about 70 commercial species of fish including Sardine, Hilsa, Shark, Mackerel, Butterfish, Pomfret, Sole, Tuna, Sea Bream, Jew Fish, Cat Fish and Eel (Ahmed A. , 2006).

Fisheries are mainly categorized in three types’ Inland fisheries, Marine fisheries, and fisheries through aquaculture<sup>1</sup>. Figure 3 shows the production of fish in Pakistan across the provinces for the year 2018-19. In Pakistan, fish is mainly caught from marine and inland sources alongside the coastlines of Sindh and Balochistan<sup>2</sup>.

**Figure 1**  
**Fish Production province-wise**



*Source: Ministry of Food and Security*

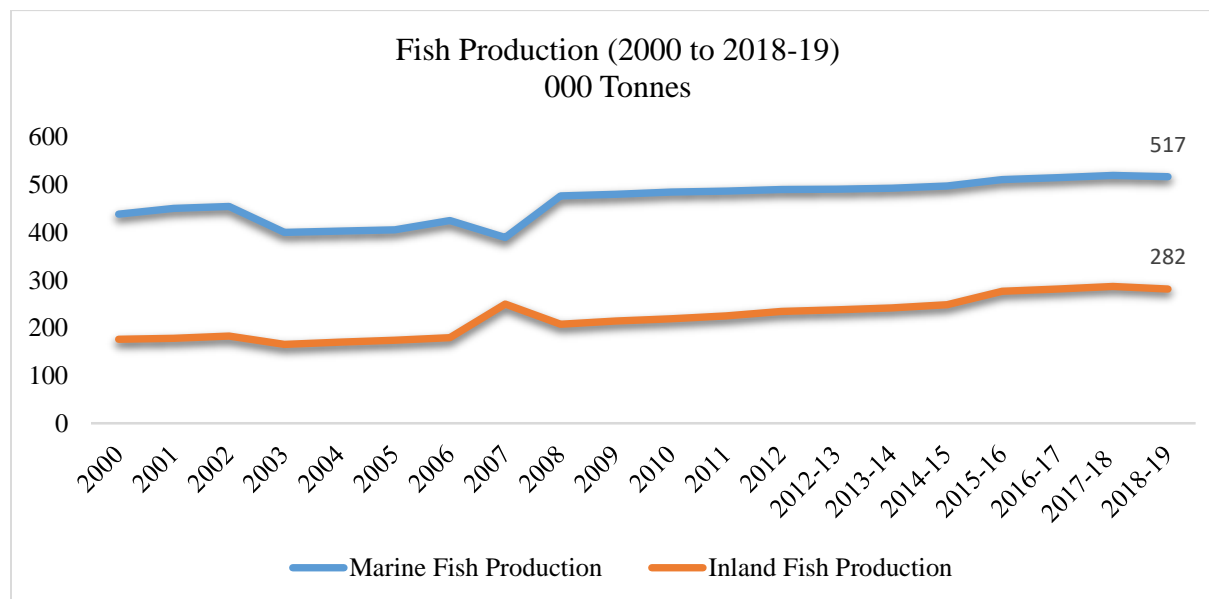
The total fish production in thousand tonnes for the year 2018-19 is given in the figure 1. In Punjab and KPK, there are only inland fishes, in Balochistan, marine fishes are found whereas in Sindh both Inland and Marine fishes are found. The data for Punjab includes fish production in Mangla Dam and the data for KPK also includes fish production in Gilgit-Balistan.

<sup>1</sup> <https://www.fisheriesindia.com/2020/08/world-fish-production-and-top-fish.html>

<sup>2</sup> <https://efp.org.pk/wp-content/uploads/2020/01/Fisheries-Industry-and-Trade-with-China-under-CPFTA-Phase-2.pdf>



**Figure 2**  
**Fish Production by type**



Source: Ministry of Food and Security

Marine has always remained high as compared to inland production in Pakistan. The trend for fish production can be seen in Figure 2 which shows the inland and marine fish production has remained almost stagnant for a period of almost two decades from 2000 to 2019 for both categories of fish production. The detailed data of fish production for inland and marine fish across provinces, types and over years is given in annexure I and Annexure II in the end.

## 2.1 Aquaculture Production

Aquaculture farming seems to have gained tremendous popularity among local investors of Punjab and Khyber Pakhtunkhwa (KPK). This type of fishing practice refers to freshwater farming where fish is considered to be a crop, like sugarcane or maize. Table 1 shows comparison of aquaculture production of Pakistan with some of the Asian countries and it can be seen that production of Pakistan is low as compared to other countries. According to FAO, United Nations China has the highest 47 million aquaculture production among other Asian countries and there is a regular increase in the production. India stands at 2<sup>nd</sup> followed by Indonesia, Vietnam and Bangladesh. Pakistan has increased its aquaculture manifold from 12,000 tons in the year 2000 to 159,000 tons in 2018.



**Table 1**  
**Comparison of Aquaculture Production**

Aquaculture Fish Production in Regions (000 tonnes)						
Region/selected countries	1995	2000	2005	2010	2015	2018
Pakistan	14.8	12.5	80.6	140.1	151.2	159.1
China	15,855.7	21,522.1	28,120.7	35,513.4	43,748.2	47,559.1
India	1,658.8	1,942.5	2,967.4	3,785.8	5,260	7,066
Indonesia	641.1	788.5	1,197.1	2,304.8	4,342.5	5,426.9
VietNam	381.1	498.5	1437.3	2,683.1	3,462.4	4134
Bangladesh	317.1	657.1	882.1	1,308.5	2,060.4	2,405.4

Source: FAO, 2019

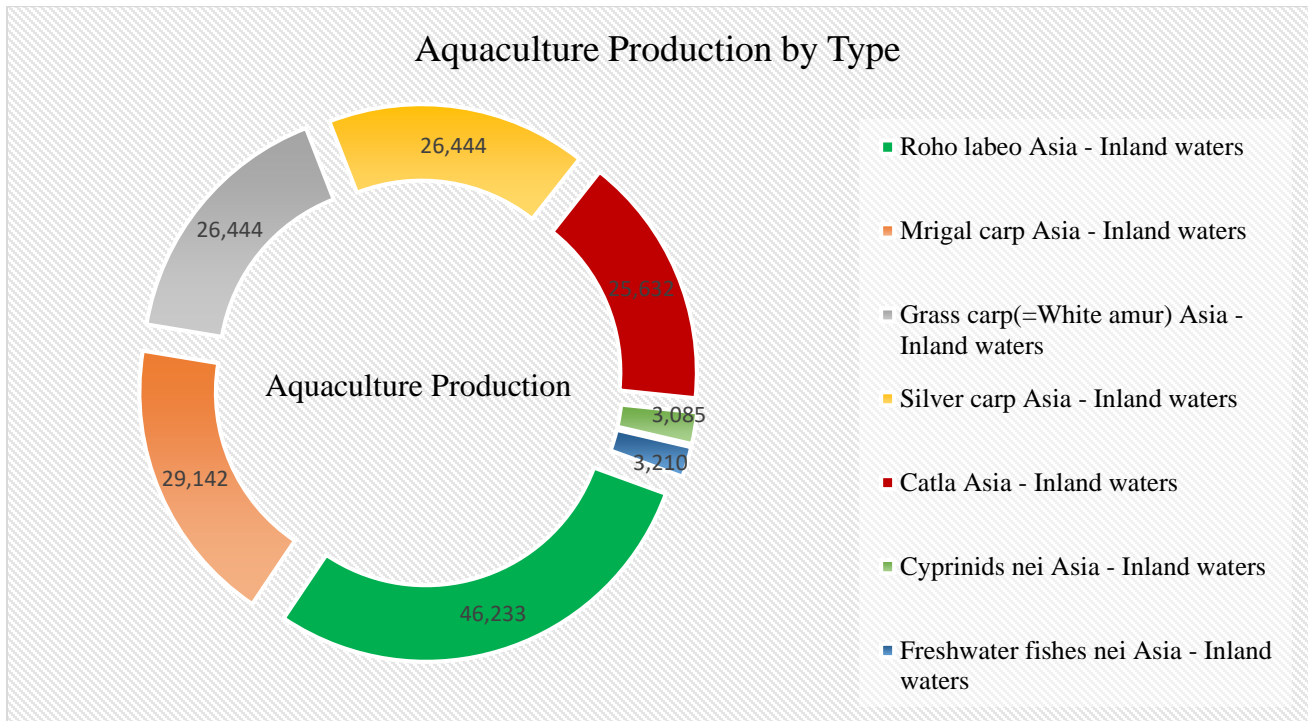
Aquaculture is slowly gaining momentum in Pakistan with hatcheries of different species of crustaceans (mostly shrimps) opening up in Karachi. The province of KP has immense potential for trout cultivation where government has provided open support towards its cultivation but these are not for export purposes.

## 2.2 Capture and Aquaculture Fish Production by categories

The below figures 3 & 4 show aquaculture-Inland production and capture production by different types. Roho, different types of carps, catla, cyprinids, and fresh water fish are among the top aquaculture production category in Pakistan as shown in figure 3.



**Figure 3**  
**Aquaculture Production**

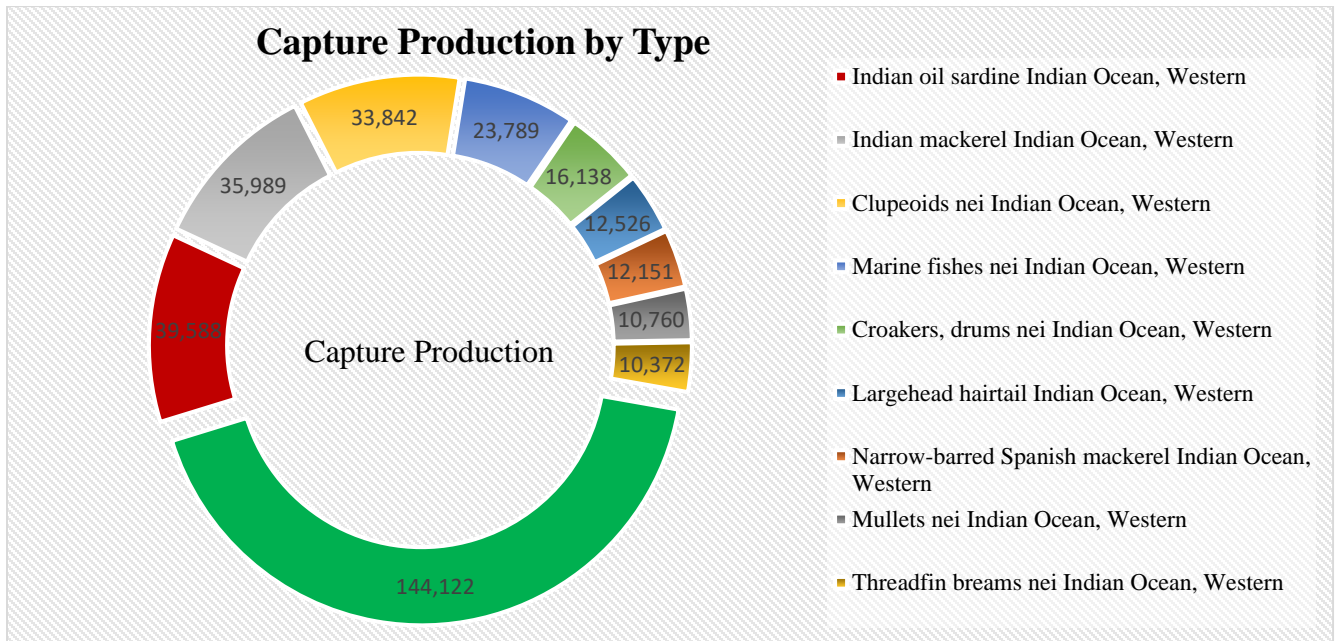


Source: FAOSTAT

Figure 4 indicates the types of capture production of more than 10,000 tons in Pakistan. Indian oil sardine, Indian mackerel, Clupeoids, croakers and others are among the top captures production in Pakistan.



**Figure 4  
Capture Production**



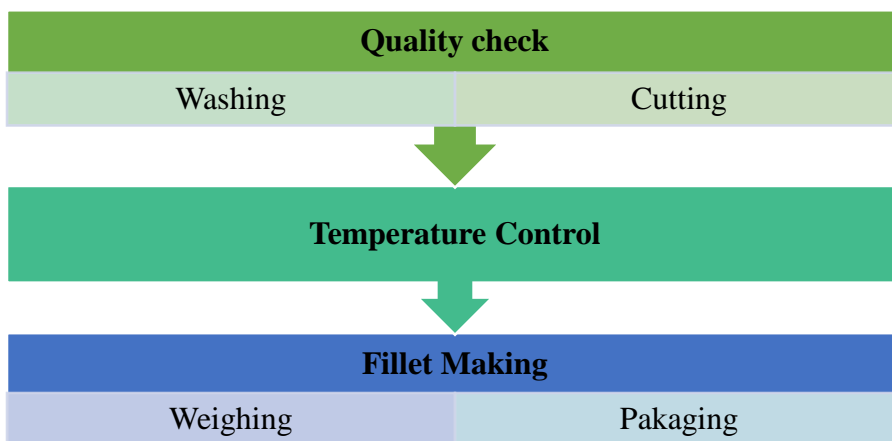
Source: FAOSTAT

### Chapter 3. Processing for Value Addition of Fisheries Products

#### 3.1 Process Flow:

In order to make value added products of seafood following process is followed. However, there are certain specifications for various categories of fishes. This below diagram shows the detailed processing of Surimi and Cuttlefish only.

**Figure 5 Process Flow Diagram**



Source: Qadri Noori Enterprise



The overall process includes a quality check of caught fish in terms of weight and temperature, three-times washing, and cutting of fish. Cuttlefish requires manual scrapping of scales whereas the surimi involves end-to-end machine processing. The chiller machines called IQF (Individual Quick Freezing Machine) are used to make cuttlefish frozen followed by subsequent immersion in ice water, this process brings shine and color to the Cuttlefish. The processing of Cuttlefish involves value-addition as it is peeled off and made into fillets for export.

Metal detectors are used to scrap out any piece of metal in fish, and a range of other small processors. As a result of processing, blocks of minced meat are produced each weighing 10 kg that goes later for packages. Each cartel carries a maximum of 2 blocks. Surimi is exported to Vietnam and other destinations where it is used in making food products like spring rolls, nuggets, and fish balls. Reverse Osmosis Plant is required at this stage that regulates the supply and suction of water. Ice Making Factory meets the everyday need of chilling and freezing fish.

### 3.2 Machineries Required for Value Addition Process:

The modern machines used by the top fish and seafood exporters of Pakistan for value addition are given in table 2. This is the ideal scenario but most of the exporters are using traditional and labor intensive methods.

**Table 2**  
**Machineries used for Processing**

Machineries
Fish Meat Separator
Individual Quick Freezing Machine (IQF)
Icing Machine
Metal Detector Machine
Contact Plate Freezer
Machine for Chilling

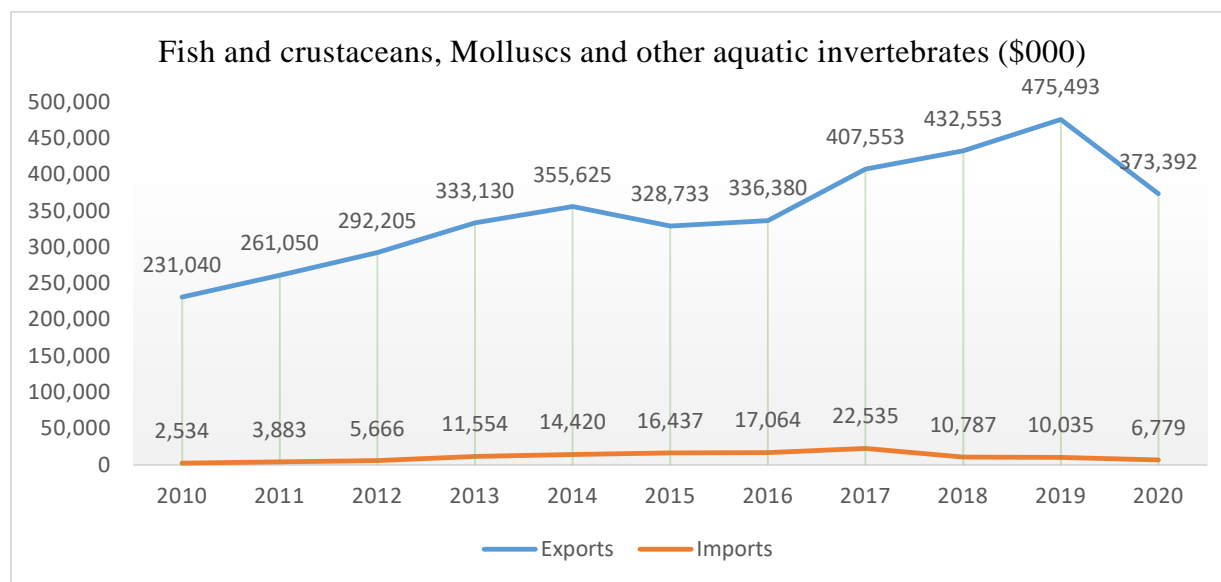
*Source: Qadri Noori Enterprises*



## Chapter 4. Exports & Imports of Fisheries of Pakistan

Figure 6 shows the imports and exports of Pakistan for fish and aquatic animals from the year 2010 to 2020. The trade surplus has remained in an increasing trend over the years except for the Covid-19 year 2020. Pakistan’s exports of Fish and crustaceans, molluscs and other aquatic invertebrates to the world has remained quite higher than its imports from the world which is a positive sign.

**Figure 6**  
**Total Imports and Exports at HS-02**



Source: ITC, Trade Map

### 4.1 Top 10 Importers and Exporters of Pakistan

Among the top importers of Pakistani fish and aquatic products are Thailand, China, Vietnam, UAE, and Korea, followed by Malaysia, Kuwait, Japan, Saudi Arabia, & Indonesia. Some of the top importers are also among the top 10 exporting countries to Pakistan like Thailand, Vietnam, China, etc. The values in table 3 are calculated on the average exported value from the year 2015 to 2020.



**Table 3**  
**Top 10 Export and Import Destinations of Pakistan for Fish at HS-02**

Top 10 Importing Countries		Top 10 Exporting Countries	
Importers of Pakistan	Average 2015-2020 (\$000)	Exporters to Pakistan	Average 2015-2020 (\$000)
Thailand	92,040.83	Vietnam	13,024.67
China	85,990	Thailand	443.50
Vietnam	72,118.83	Norway	107.00
United Arab Emirates	35,812.16	United Arab Emirates	106.33
Republic of Korea	17429.83	Montenegro	79.67
Malaysia	15,187.5	China	57.50
Kuwait	10,719.67	India	54.83
Japan	10265.5	Indonesia	15.50
Saudi Arabia	7,895.5	Sri Lanka	7.33
Indonesia	7,866.16	Japan	6.50

Source: ITC, Trade Map

#### 4.2 Trend of the top five importers of Pakistan's fisheries sector

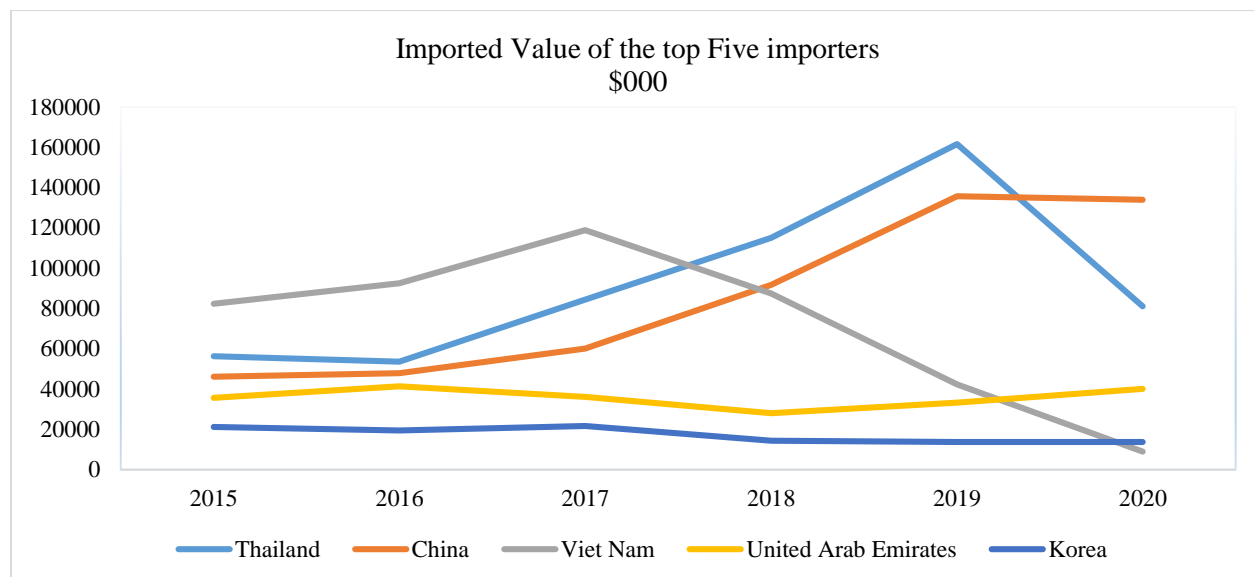
The trend for top five importers of Pakistan's fisheries indicates that the exports of Pakistan to China is increasing from the past five years. A sharp decline in exported value to Vietnam is observed after the year 2017. Similarly, a decline in the exported value to Thailand is also observed after 2019 which can be due to Covid-19.

For Korea and UAE the trend is almost stagnant. A significant reason for increase in China's imports of Pakistani fish is CPFTA-II, in which special emphasis has been laid on exportable items of Pakistan including fisheries.





**Figure 7**  
**Trend in the top importers of Pakistan Fish**



Source: ITC, Trade Map

### 4.3 Top Exports of Fish from Pakistan at HS Code-04

Table 4 shows the average exported value for the years 2015-2020 by categories and for each category of chapter 3 in HS codes, the top three importers are identified. The top 3 importers are sorted on the basis of average values.

The top three exports based on HS-04 are frozen fish worth 24 Million dollars, crustaceans worth 9 Million, & fish fillets worth 18 Million dollars followed by other categories. The top 3 importers of frozen fish from Pakistan are Thailand, Vietnam & China, for Crustaceans the top importers are UAE, China & Thailand and for Fish fillets and other fish meat category, Korea, Thailand & Japan are the top 3 importers.



**Table 4**  
**Average Exports and top 3 importers of Pakistan**

Exports of Fish from Pakistan				
Code	Product	Average Exports 2015-2020 (\$000)	Top 3 Importers of Pakistan	Average Exported Value (\$000)
0303	Frozen fish (excluding fish fillets and other fish meat)	243,949	Thailand	70,751
			Vietnam	60,608
			China	48,109.8
0306	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine	90,650.2	United Arab Emirates	23,303.16
			China	23,236.5
			Thailand	10,388.5
0304	Fish fillets and other fish meat, whether or not minced, fresh, chilled or frozen	18,919	Republic of Korea	6,391.17
			Thailand	5,919.67
			Japan	1,674.33
0305	Fish, fit for human consumption, dried, salted or in brine; smoked fish, fit for human consumption	13,196.3	China	6,572.66
			Vietnam	3,795.33
			Sri Lanka	1,604.5
0307	Molluscs, fit for human consumption, even smoked, whether in shell or not, live, fresh, chilled, ...	11,908.3	Thailand	4,682.5
			China	4,196.83
			Vietnam	2,039.10
0302	Fish, fresh or chilled (excluding fish fillets and other fish meat of heading 0304)	11,274	United Arab Emirates	2,687.16
			Kuwait	2,016
			Saudi Arabia	1,361.83
0301	Live fish	1,557.5	China	983
			Hong Kong	316.67
			Taipei, Chinese	60



0308	Aquatic invertebrates other than crustaceans and molluscs, live, fresh, chilled, frozen, dried	896.3	China	(4,999)*
------	--	-------	-------	----------

Source: ITC, Trade Map

Pakistan imports fish fillets worth 0.9 million and frozen fish worth 0.3 US dollars majorly from Vietnam (Table 4). Other imports include live fish, fish other than fish fillets etc, but the value of imports are not very high as seen in table 4.

**Table 5**  
**Imports of Fish by Pakistan and top 3 exporting countries (HS 4 digit)**

Imports by Pakistan				
Code	Product	Average Imports (2015-2020) (\$000)	Top Exporters	Average Imported (2015-2020) (\$000)
0304	Fish fillets and other fish meat, whether or not minced, fresh, chilled or frozen	9,484.5	Vietnam	9,389
			China	33.67
			Norway	33.67
0303	Frozen fish (excluding fish fillets and other fish meat)	3,701.3	Vietnam	3,597.83
			Montenegro	79.66
			Thailand	12.33
0301	Live fish	430.5	Thailand	395
			Indonesia	12.66
			Sri Lanka	7.33
0302	Fish, fresh or chilled (excluding fish fillets and other fish meat of heading 0304)	160.2	Norway	71.5
			United Arab Emirates	35
			Vietnam	34.83
	Molluscs, fit for human consumption, even		India	54.17



0307	smoked, whether in shell or not, live, fresh, chilled, ...	82.7	China	22
			Oman	3
0306	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine	71.2	United Arab Emirates	47.83
			Thailand	19.17
			Japan	1.83
0305	Fish, fit for human consumption, dried, salted or in brine; smoked fish, fit for human consumption	6.7	Japan	2.5
			Norway	1.67
			Nigeria	0.66
0308	Aquatic invertebrates other than crustaceans and molluscs, live, fresh, chilled, frozen, dried	2.5	Korea	13*

Source: ITC, Trade Map

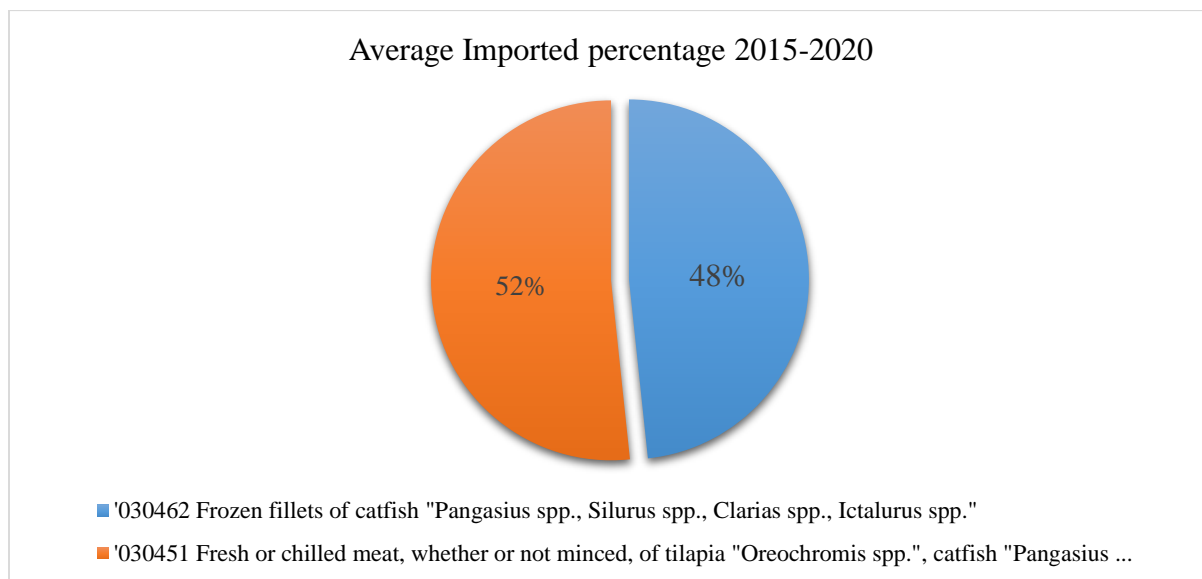
## Chapter 5. Analysis of Imports at HS-06

The leading exporters of catfish products ‘Frozen fillets of catfish "Pangasius, Silurus, Clarias , Ictalurus ”and Fresh or chilled meat, whether or not minced, of tilapia "Oreochromis ", to the world are Vietnam, China, Netherlands, Germany followed by Malaysia & Thailand. Imports of Frozen fish HS-0303 has declined over the years from 14 million dollars in 2015 to 7,000 dollars in 2020. So, this study completely focuses on HS-0304.

The below figure 8 shows the imports of Frozen fillets of catfish & fresh or chilled meat of tilapia or catfish. The figure shows that based on the average (2015-2020) imports, Pakistan has imported 48% frozen fillets of catfish and 52% fresh or chilled meat of catfish.



**Figure 8**  
**Imports of Frozen Pangasius and Tilapia**

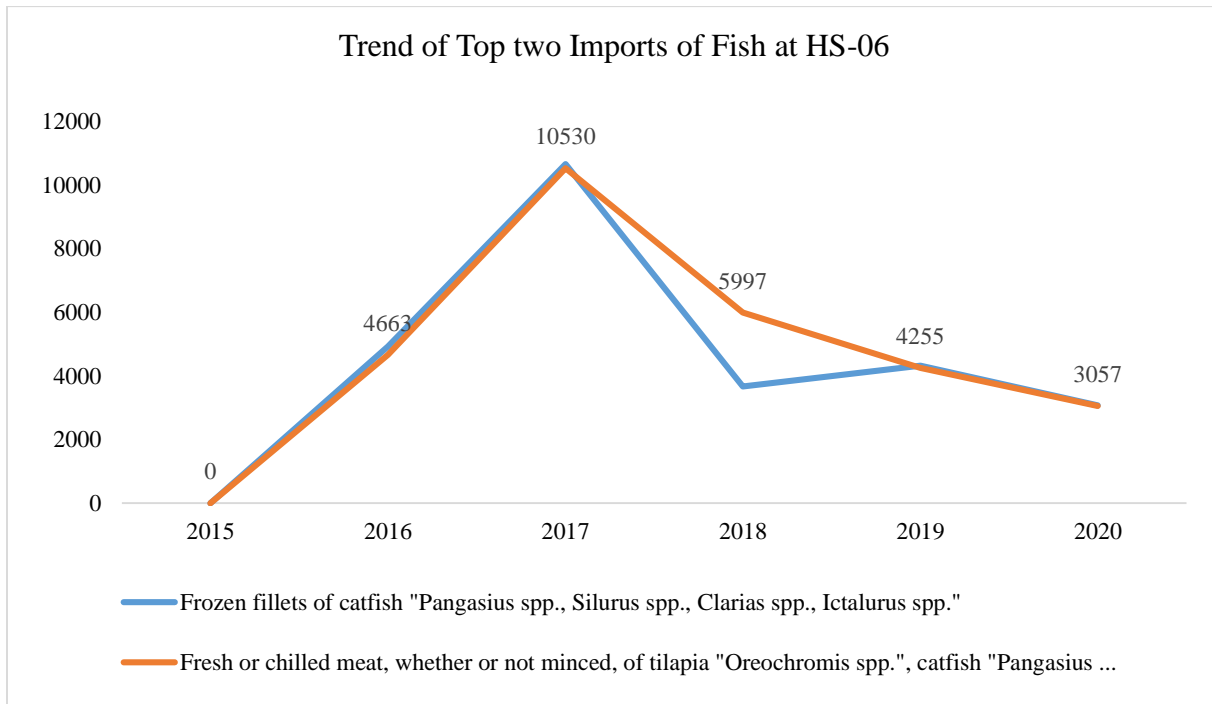


Source: ITC, Trade Map

Trend of both the products can be seen in the figure 9. In 2017, both the products were imported at maximum however, in 2018 a decline was observed in both products. One reason for decline in the imports of Pakistan of both Pangasius and Tilapia is domestic farming of these types.



**Figure 9**  
**Trend in the Imports of Pangasius and Tilapia**

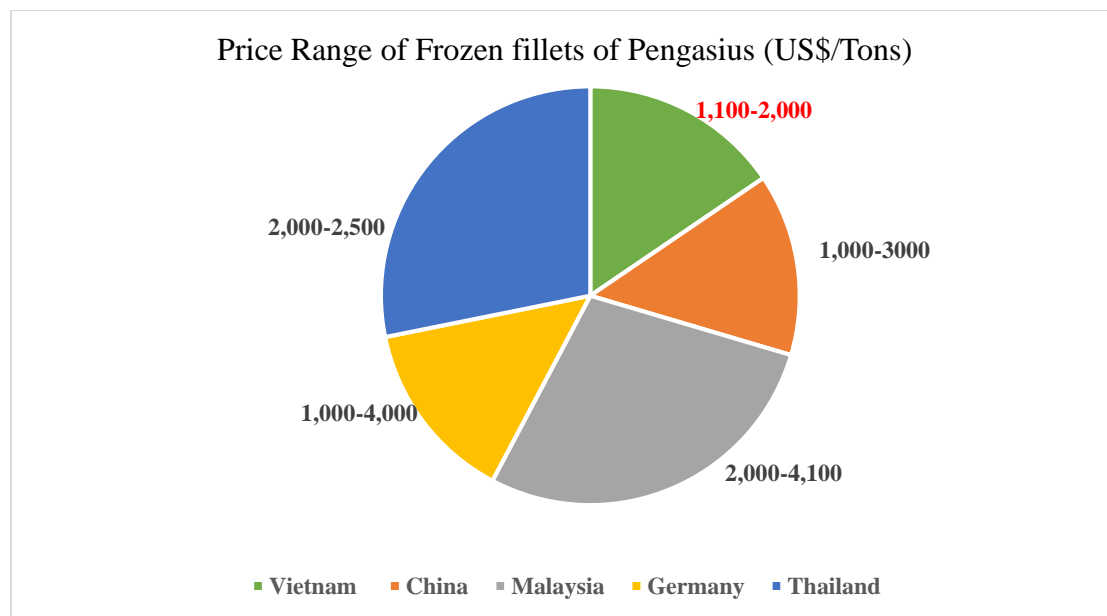


Source: ITC, Trade Map

Both the categories of catfish are imported totally from Vietnam. In order to analyze why these two products are imported from Vietnam this study has done a price comparison analysis of the top 5 exporting countries.



**Figure 10**  
**Price Comparison of Imported fishes**



Source: ITC, Trade Map

By doing the price range comparison of the top exporters of Pangasius in the world, it can be seen that, Vietnam has a reasonable price range as compared to China, Malaysia, Germany and Thailand. Pakistan imports Pangasius and tilapia completely from Vietnam, one of the reasons is low price and other reason described by importers is the quality.

### 5.1 Duties Imposed on Catfish (Pangasius and Tilapia)

The import duties on Pangasius and Tilapia in Pakistan is 61% which is significantly high. According to the Federal Board of Revenue Calculator, Pakistan has imposed 20% custom duties on catfish, 35% regulatory duty and additional 6% custom duty.

<b>Table 6 Catfish Duties</b>	
<b>Duties</b>	<b>Rates</b>
Custom Duty	20%
Regulatory Duty	35%
Additional Custom Duty	6%

Source: FBR Duty Calculator

Instead of paying high amount to import duties on Pangasius and Tilapia, it can be farmed in Pakistan to fulfill the domestic demand.



## 5.2 Farming of Pangasius and Tilapia fish in Pakistan

Aquaculture farming is being done in all provinces of Pakistan. The total area of fish ponds in Pakistan is about 60.47 thousand hectares, the total number of fish farms in Pakistan are around 13,000 and the highest potential of aquaculture is in Punjab and Sindh (Aslam, Nadeem, Baig, & Ahmed, 2020). Catfish Farming started in Pakistan in 2011-12 after the approval of Fish Development Board<sup>3</sup>.

Pangasius and Tilapia are aquaculture and can be easily farmed. According to one of the aquaculture farmers, aquaculture of these categories of catfish is easy. This fish is common in clean water and it is known all over the world for growing and producing four times more than other species of fish. A number of 8000 of Pangasius can be produced per acre yield. However, the feed and seed both are expensive, the feed and seed of Pangasius costs Rs.100-150/kg and Rs.9/kg respectively. The fish seeds/eggs of Pangasius are imported from Thailand and Tilapia seeds are imported from Malaysia.

Punjab Fisheries Department has successfully completed the process of artificial breeding of Pangasius fish in Pakistan. It is a significant development in the field of fish farming in Kasur District and fish seeds are now available in Pakistan (Islamabad Post, 2021). Fish waste is good for plants and vegetables, cabbage, tomatoes etc. and it can be grown around the fish farms. This practice of growing vegetables is being carried out at one of the aquaculture farms near Malir River.

Table 7 shows the instruments used for fish farming, their imported value in the year 2020 and types of import duties imposed on those instruments.

---

<sup>3</sup> <https://archive.pakistantoday.com.pk/2011/03/03/fishing-for-the-future/>





**Table 7**  
**Import duty on the instruments and equipment's used for Fish Farming**

Instruments	HS Code	Imported Value 2020 (US\$000)	Duties (%)
Fish Tank	3926.9099	37,271	Custom Duty 20% Regulatory Duty 10% Additional Custom Duty 6%
Air Pump Aquarium	8414.2000	1,214	5% Custom Duty
Compressor	8414.8090	-	5%
Generator	8502.1100	7,155	5% Custom Duty
Condenser	8502.1200	-	5%
Flat freezer	8418.9990	-	5%
Boast freezer	8418.3000	-	5%
Fiber glass tubs	8418.4000	-	5%
Insulated plants	7019.9090	-	5%
Flake ice plants	8418.6990	-	5%
Water aerators	8414.8090	-	2%
Feed pellet (Floating Type) machine	8438.8020	-	2%

Source: FBR, Duty Calculator

The top most imported instrument/equipment used for fish farming in Pakistan is Fish tank (fiberglass) despite of the high duties of 36% followed by Generator and Air pump aquarium. These instruments and equipment are also available in domestic market of Pakistan according to one of the fish farmers.

## Chapter 6. Export Analysis

Pakistan has a domestic and an international market for fish and crustaceans, the local demand for fish is less than its catch.

### 6.1 Top Exports at HS-06

On average basis among fish, frozen flat fish has the most exported value US\$ 127 million, followed by Salmod (excluding trout and Pacific, Atlantic and Danube salmon) US\$ 65million and Frozen Fish, US\$ 8 million. Whereas among crustaceans, Shrimps & Prawns have the highest exported value of US\$ 61 million followed by frozen crabs US\$ 12 million and crabs in other forms US\$ 5 million.



**Table 8**  
**Top Exports of from Pakistan at HS-06**

Frozen Fish in US\$000			Crustaceans inUS\$000		
Code	Product label	Average Exported Value 2015-2020	Code	Product Label	Average Exported 2015-2020
'030339	Frozen flat fish "Pleuronectidae, Bothidae, Cynoglossidae, Soleidae, Scophthalmidae and Citharidae" ...	127,692.7	'030617	Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns in ...	61,064.7
'030319	Frozen salmonidae (excluding trout and Pacific, Atlantic and Danube salmon)	65,042.7	'030614	Frozen crabs, even smoked, whether in shell or not, incl. crabs in shell, cooked by steaming ...	12,704.3
'030389	Frozen fish, n.e.s.	8,732.0	'030624	Crabs, even smoked, whether in shell or not, live, fresh, chilled, dried, salted or in brine, ...	5,075.3*

Source: ITC, Trade Map (\*= average 2015-2017)

Flat fish belongs to the demersal fish species and is considered a whitefish because of the high concentration of oils within its liver. Flatfish family comprises of plaice, lemon sole, dab, flounder, Dover sole, halibut, turbot and brill. Shrimps and prawns have high demand in Pakistan.

## 6.2 Exports at HS-06 and Price Comparison among top importers

Flat fish has the highest exported value among all other categories at HS-06. The top three importers of Frozen Flat Fish (030339) are Vietnam, Thailand, & China with per ton price of 2,188, 2,357 & 2,283 respectively. The per ton price for Thailand is high as compared to two other top importers of 030339.



**Table 9**  
**Top 3 Importers of fish and crustaceans and price comparison at HS-06**

Top 3 Importing Countries of each product at HS-06									
Code	Product label	Top 3 Importers	Value (000\$)	Unit Price (\$/ton)	Code	Product Label	Top 3 Importers (000\$)	Value (000\$)	Unit Price (\$/ton)
'030339	Frozen flat fish "Pleuronectidae, Bothidae, Cynoglossidae, Soleidae, Scophthalmidae and Citharidae"	Vietnam	33,724	2,188	'030617	Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns	UAE	20,224	6,550
		Thailand	28,520	2,357			China	13,295	4,711
		China	24,141	2,283			Japan	7,044	6,448
'030319	Frozen salmonidae (excluding trout and Pacific, Atlantic and Danube salmon)	Thailand	23,063	2,000	'030614	Frozen crabs, even smoked, whether in shell or not, incl. crabs in shell, cooked by steaming ...	Thailand	4,651	2,090
		Vietnam	22,743	3,903			Republic of Korea	4,431	3,230
		China	10,640	2,000			China	2,415	2,556
'030389	Frozen fish	China	5,035	1,965	'030624	Crabs, even smoked, whether in shell or not, live, fresh, chilled, dried, salted or in brine, ...	China	4,264	3,831
		Thailand	1,014	2,446			Thailand	303	3,571
		Republic of Korea	954	3,095			Honkong, China	256	7,000

Source: ITC, Trade Map

Similarly, salmonide (HS-030319) has the second highest exported value and among the top importers of this category are Thailand, Vietnam, and China with per ton price of US\$ 2,000, 3,903 & 2,000 respectively. The unit price for China and Thailand is same whereas Vietnam is purchasing at almost double price. For HS-030389, China, Thailand and Republic of Korea are the top three importers with price of US\$ 1,965, 2,446, & 3,095 individually. The price for Korea is more than Thailand and China but still Pakistan is exporting less to Korea.



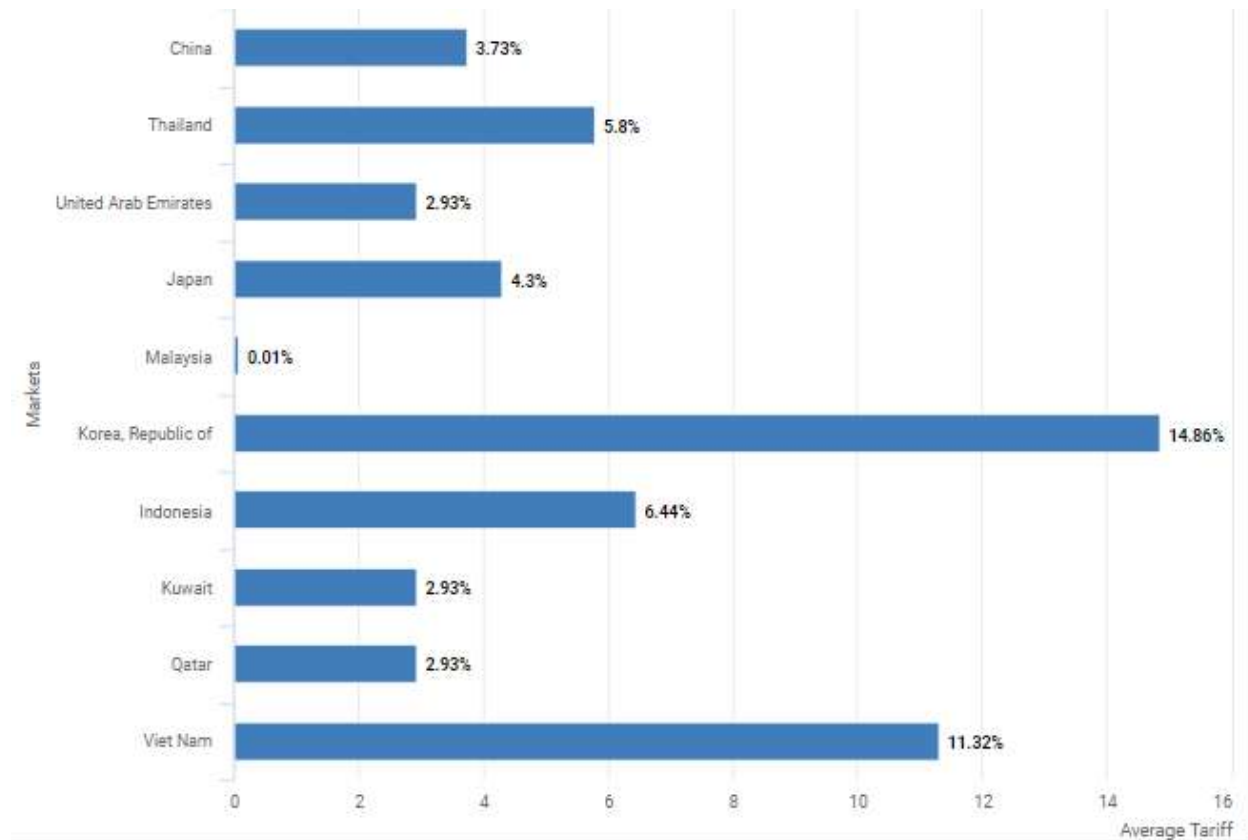
Among Crustaceans, Shrimps & Prawns (HS-030617) has the highest exported value and the top 3 importers of this category are UAE, China, & Japan with per unit price of US\$ 6,550, 4,711, & 6,448 respectively. Although the price for Japan is quite high than China but Pakistan's exports of shrimps and prawns to China are high. While UAE and Japan are importing on almost the same price.

Other categories amongst crustaceans are HS-030614 for frozen crabs & HS-030624 for live, fresh, chilled, salted. Although the exported value for both categories is very low but the overall price for frozen crabs is low as compared to live & fresh crabs. Even though studies have discovered that there are nearly 10 species of crabs inhabiting in the coastal areas of Sindh and coastal lines of Balochistan but still the exports are very low (Khaskheli, 2020).

Figure 11 shows the applied tariff on imports from Pakistan among top 10 competitors including China, Thailand, UAE, Japan, Malaysia, Republic of Korea, Indonesia, Kuwait, Qatar, & Vietnam. Republic of Korea has applied the highest tariff rate followed by Vietnam, Indonesia, and Thailand, whereas other countries like China, UAE, Japan, Kuwait, Qatar, and Malaysia's applied tariff is less than 5%.



**Figure 11 Applied Tariff and MFN on imports from Pakistan**



*Source: ITC, Trade Map*

## **Chapter 7. Issues impacting growth of fisheries in Pakistan**

Despite of having good production and available international market for Pakistani fish, the growth of this sector in terms of exports is static and is not growing as it has potential. There are multiple factors responsible for this stagnant growth. Below mentioned are the processing and supply chain issues which are impacting the exports of fisheries in Pakistan.

- There is a challenge meeting hygiene standards as the surroundings of the factory are not well kept. Therefore, the approval for HACCP which is a standard requirement by importing destinations is not forthcoming.
- Even though high quality of fish is present in the sea, but traditional ways of preservation and poor storage capacity is responsible for reduction in its export value.



- Noncompliance with sanitary measures is another important problem. Exporters and processors cannot benefit from exports until and unless they fulfill the health and safety concerns of importing countries.
- Only few exporters/processors have modern machineries available at their processing units. Most of the processors are using either traditional methods or are highly labour intensive.

### **7.1 Policy Recommendations**

- Trainings on aquaculture, value added processing, and quality control.
- Upgrading of hygienic controls in the fishing value chain.
- Restriction on fishing to control exhaustion of fish stocks.
- Chilling units need revision.



## References

- Ahmed, A. (2006, September 29). Retrieved from Dawn:  
<https://www.dawn.com/news/212533/fish-consumption-in-pakistan-lowest-in-the-world>
- Ahmed, N. (2017). *Fish consumption in Pakistan lowest in the world*. Food Journal.
- Aslam, M. U., Nadeem, N., Baig, I. A., & Ahmed, U. I. (2020). Economic Analysis of Fish Farming in Punjab, Pakistan. *Review of Economics and Development Studies*.
- FAO. (2020). *The State of Fisheries and World Aquaculture*. Food and Agriculture Organization of Pakistan.
- Islamabad Post*. (2021, June 01). Retrieved from <https://islamabadpost.com.pk/pfd-completes-process-of-artificial-breeding-of-pangasius-fish-in-pakistan/>
- Khan, A. A. (2020). Employers' Federation of Pakistan.
- Khaskheli, J. (2020, November 07). *The News*. Retrieved from <https://www.thenews.com.pk/print/740061-habitat-loss-over-catch-threaten-mud-crab-population-in-coastal-sindh>
- Survey, P. E. (2020-21). *Agriculture*. Ministry of Finance.



### Annexure I

Year	FISH PRODUCTION (000 Tonnes)					
		Punjab*	Sindh	KPK**	Balochistan	Pakistan
2000	Inland	61.8	113.6	1.0	-	176.4
	Marine	-	308.7	-	129.7	438.4
2001	Inland	62.0	115.5	1.1	-	178.6
	Marine	-	315.7	-	135.3	451.0
2002	Inland	65.0	117.0	1.3	-	183.3
	Marine	-	318.0	-	136.5	454.5
2003	Inland	61.4	102.3	2.0	-	165.7
	Marine	-	273.7	-	126.8	400.5
2004	Inland	63.0	105.0	2.5	-	170.5
	Marine	-	275.0	-	128.0	403.0
2005	Inland	65.0	107.0	2.6	-	174.6
	Marine	-	276.0	-	130.0	406.0
2006	Inland	68.0	109.0	2.9	-	179.9
	Marine	-	285.0	-	140.0	425.0
2007	Inland	85.0	135.0	12.0	18.0	250.0
	Marine	-	250.0	-	140.0	390.0
2008	Inland	85.0	120.0	3.0	-	208.0
	Marine	-	339.0	-	138.0	477.0
2009	Inland	85.5	125.0	4.0	-	214.5
	Marine	-	340.0	-	140.0	480.0
2010	Inland	86.2	128	5.0	-	219.2
	Marine	-	342	-	143.0	485.0
2011	Inland	88.4	131.0	6.0	-	225.4
	Marine	-	343.0	-	144.0	487.0
2012	Inland	90.0	136.0	9.0	-	235.0
	Marine	-	345.0	-	145.0	490.0
2012-13	Inland	91.0	137.0	10.0	-	238.0
	Marine	-	345.5	-	145.5	491.0
2013-14	Inland	93.0	138.0	11.0	-	242.0
	Marine	-	346.0	-	147.0	493.0
2014-15	Inland	95.0	141.0	13.0	-	249.0
	Marine	-	349.0	-	149.0	498.0
2015-16	Inland	110.0	149.0	18.0	-	277.0
	Marine	-	355.0	-	156.0	511.0
2016-17	Inland	111.0	150.0	21.0	-	282.0
	Marine	-	358.0	-	157.0	515.0
2017-18 (R )	Inland	112.0	152.0	23.0	-	287.0
	Marine	-	360.0	-	160.0	520.0





2018-19	Inland	111.0	149.0	22.0	-	282.0
	Marine	-	358.0	-	159	517

Source = Marine Fisheries Department, Karachi \* = Includes Mangla Dam.

\*\* = Includes Gilgit-Baltistan Area. E=Estimated , R = Repeated

## Annexure II

Year		FISHING CRAFTS					
			Punjab	Sindh	KPK	Balochistan	Pakistan
<b>2010</b>	INLAND	Sail boats	6450	2760	-	-	9210
		Row boats	490	1612	201	-	2303
		Mech.-cum-Sail boats	575	-	90	-	665
	MARINE	Sail boats	-	6404	-	40	6444
		Trawlers	-	3010	-	-	3010
		Gill netters	-	2670	-	1645	4315
		Mech. Sail boats	-	4560	-	4655	9215
<b>2011</b>	INLAND	Sail boats	6486	2810	-	-	9296
		Row boats	502	1705	223	-	2430
		Mech.-cum-Sail boats	587	-	98	-	685
	MARINE	Sail boats	-	6502	-	48	6550
		Trawlers	-	3026	-	-	3026
		Gill netters	-	1710	-	1698	3408
		Mech. Sail boats	-	4632	-	4690	9322
<b>2012</b>	INLAND	Sail boats	6492	2840	-	-	9332
		Row boats	513	1730	230	-	2473
		Mech.-cum-Sail boats	595	-	95	-	690
	MARINE	Sail boats	-	6540	-	55	6595
		Trawlers	-	3035	-	-	3035
		Gill netters	-	1730	-	1702	3432
		Mech. Sail boats	-	4644	-	4705	9349
<b>2012-13</b>	INLAND	Soil boats	6,502	2,849	-	-	9,351
		Row boats	519	1,739	235	-	2,493
		Mech.cum-Sail	598	-	96	-	694
	MARINE	Soil boats	-	6,549	-	57	6,606
		Trawler	-	3,037	-	-	3,037
		Gilnetter	-	1,737	-	1,712	3,449
		Mech.cum-Sail Boats	-	4,649	-	4,708	9,357
<b>2013-14</b>	INLAND	Soil boats	6,612	2936	-	-	9548
		Row boats	524	1784	238	-	2546
		Mech.cum-Sail	602	-	98	-	700
	MARINE	Soil boats	-	6580	-	62	6642

# Fisheries: Potential of Pakistan



		Trawler	-	3058	-		3058
		Gilnetter	-	1796	-	1,726	3522
		Mech.cum-Sail Boats	-	4689	-	4,752	9441
<b>2014-15</b>	<b>INLAND</b>	Soil boats	6,633	2,970	-	-	9,603
		Row boats	536	1,796	245	-	2,577
		Mech.cum-Sail	612	-	102	-	714
	<b>MARINE</b>	Soil boats	-	6,589	-	65	6,654
		Trawler	-	3,102	-	-	3,102
		Gilnetter	-	1,801	-	1,745	3,546
		Mech.cum-Sail Boats	-	4,695	-	4,782	9,477
<b>2015-16</b>	<b>INLAND</b>	Soil boats	6,695	2,999	-	-	9,694
		Row boats	556	1,804	256	-	2,616
		Mech.cum-Sail	644	-	113	-	757
	<b>MARINE</b>	Soil boats	-	6,596	-	69	6,665
		Trawler	-	3,126	-	-	3,126
		Gilnetter	-	1,812	-	1,756	3,568
		Mech.cum-Sail Boats	-	4,705	-	4,798	9,503
<b>2016-17</b>	<b>INLAND</b>	Soil boats	6,702	3,010	-	-	9,712
		Row boats	559	1,815	261	-	2,635
		Mech.cum-Sail	649	-	119	-	768
	<b>MARINE</b>	Soil boats	-	6,599	-	78	6,677
		Trawler	-	3,130	-	-	3,130
		Gilnetter	-	1,822	-	1,786	3,608
		Mech.cum-Sail Boats	-	4,716	-	4,812	9,528
<b>2017-18</b>	<b>INLAND</b>	Soil boats	6,714	3,020	-	-	9,734
		Row boats	562	1,824	267	-	2,653
		Mech.cum-Sail	653	-	125	-	778
	<b>MARINE</b>	Soil boats	-	6,605	-	82	6,687
		Trawler	-	3,142	-	-	3,142
		Gilnetter	-	1,828	-	1,789	3,617
		Mech.cum-Sail Boats	-	4,721	-	4,823	9,544
<b>2018-19 (P)</b>	<b>Inland</b>	Sail boats	6,719	3036	-	-	9755
		Row boats	569	1853	273	-	2695
		Mech-Cum-Sail	659	0	129	-	788
	<b>Marine</b>	Sail boats	-	6615	-	86	6701
		Trawler	-	3148	-	0	3148
		Gillnetter	-	1896	-	1795	3691
		Mech-Cum-Sail Boats	-	4736	-	4846	9582

Source :- Marine Fisheries Department, Karachi. E= Estimated