

AKUA KÜLTÜR

AQUA 20 CULTURE 26

Türkiye

1. Uluslararası Su Ürünleri Yetiştiriciliği Fuarı
11. Su Ürünleri Yetiştiriciliği Çalıştayı

Turkish Salmon: The Pathway to Global Markets

Tayfun DENİZER

Politek Su Ürünleri A.Ş. ve Group Companies

Chairman of the Board

politek polifish

karSom

AZUR
SU ÜRÜNLERİ

AKUA
DENİZER



**TÜRK SOMONUNDA
KÜRESEL PAZARLARA
AÇILAN YOL**

**GLOBAL
EXPORTS**

**GLOBAL
EXPORTS**

**PREMIUM
QUALITY**

WORLD POPULATION PROJECTIONS ACCORDING TO UN DATA

CURRENT (2024)



8 BILLION

WORLD POPULATION

2030 PROJECTION



**8,5
BILLION**

WORLD POPULATION

2050 PROJECTION



**9,7
BILLION**

WORLD POPULATION

Source: United Nations (UN) Population Projections.

WARS OF THE FUTURE

FOOD AND RESOURCE WARS



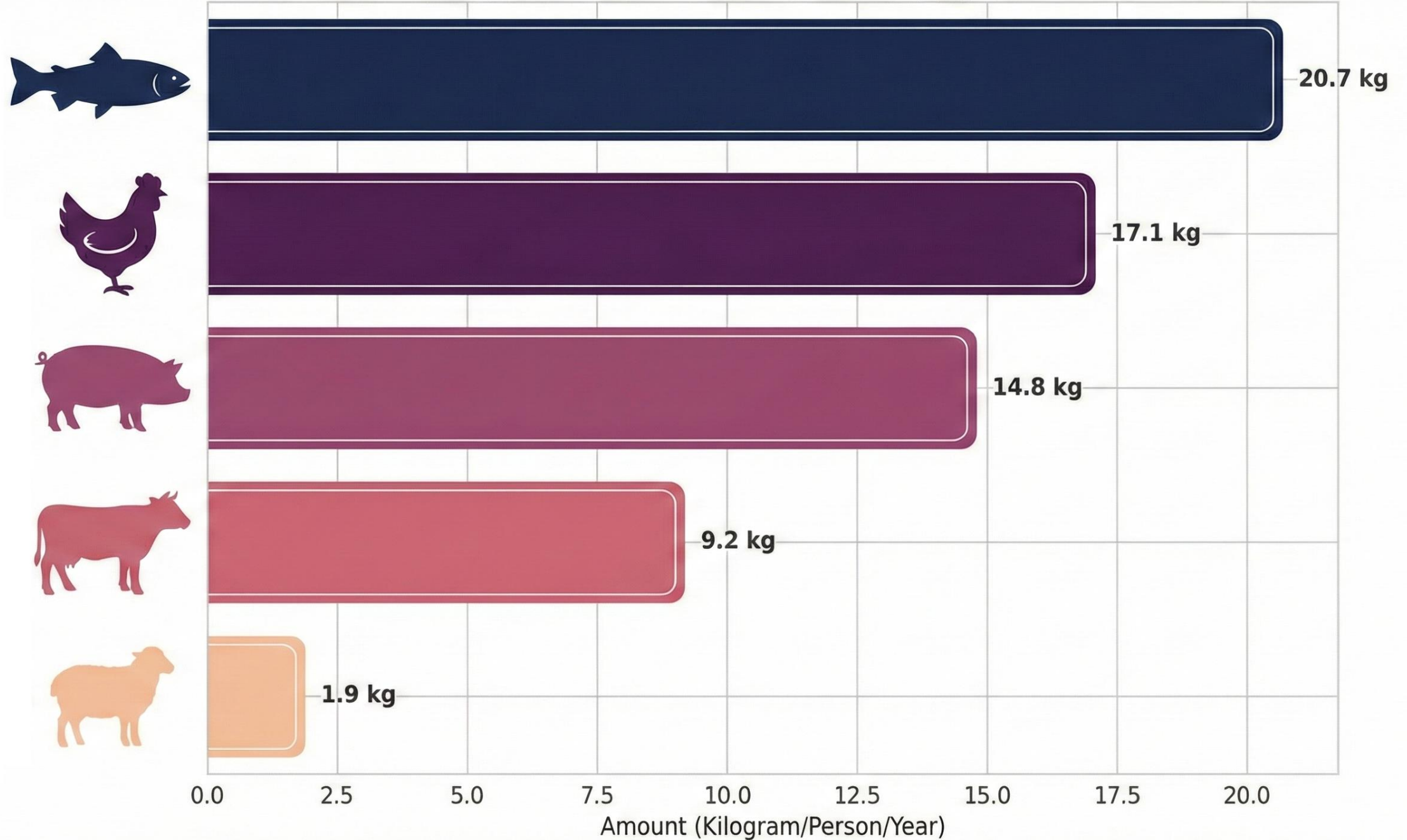
-  Water and Food Crisis
-  Struggle for Resources

ENERGY AND CLIMATE WARS

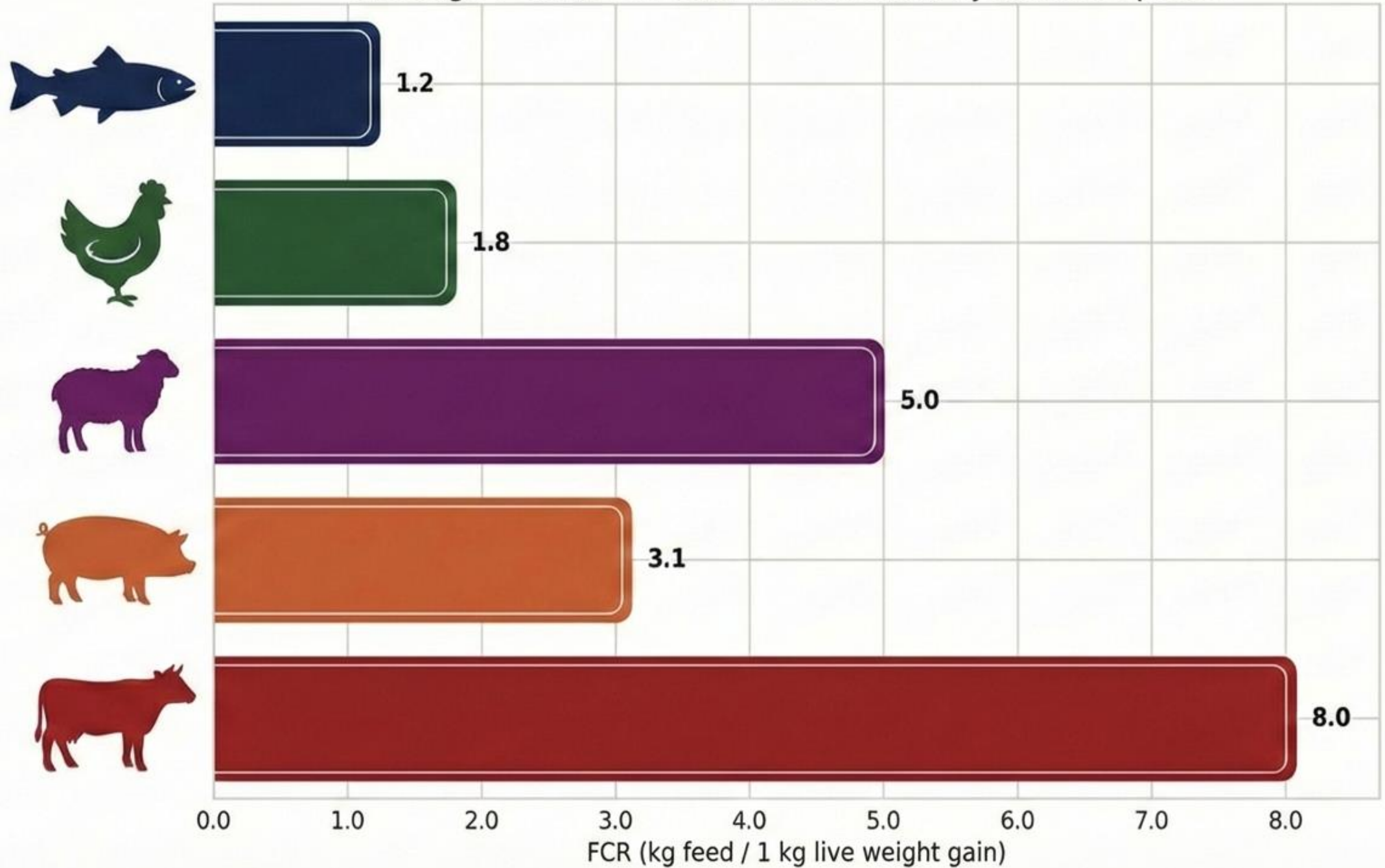


-  Energy Competition
-  Climate Crisis and Disasters

Global Per Capita Annual Consumption/Supply (FAO Data ~2022)



Average FCR (Feed Conversion Ratio) by Animal Species



THE GLOBAL SEAFOOD SECTOR

The global seafood sector broke a historic record in 2022. Aquaculture production surpassed capture fisheries production with a rate of 51%. This is the strongest argument proving that aquaculture products, such as Turkish Salmon, are the food of the future.

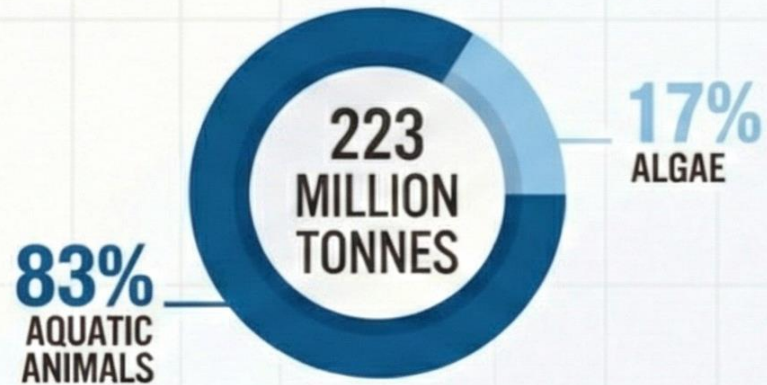
GLOBAL SEAFOOD PRODUCTION

185 Million Tons IN 2022 Aquaculture 94 million tons, Capture fisheries 91 million tons
Economic value 452 billion USD.

In the FAO research projected for 2023, it is expected that aquaculture volumes will increase, resulting in a total production of 188.9 million tons, consisting of 90.4 million tons from capture fisheries and 98.5 million tons from aquaculture.

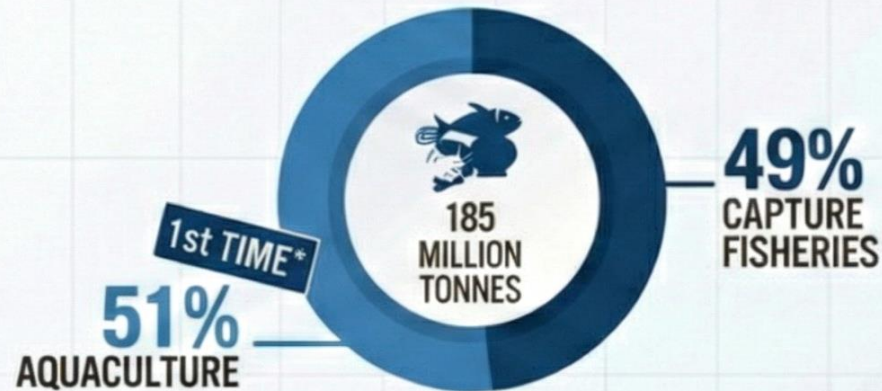
WORLD FISHERIES AND AQUACULTURE PRODUCTION

WORLD AQUACULTURE PRODUCTION (INCLUDING SEaweeds AND ALGAE)



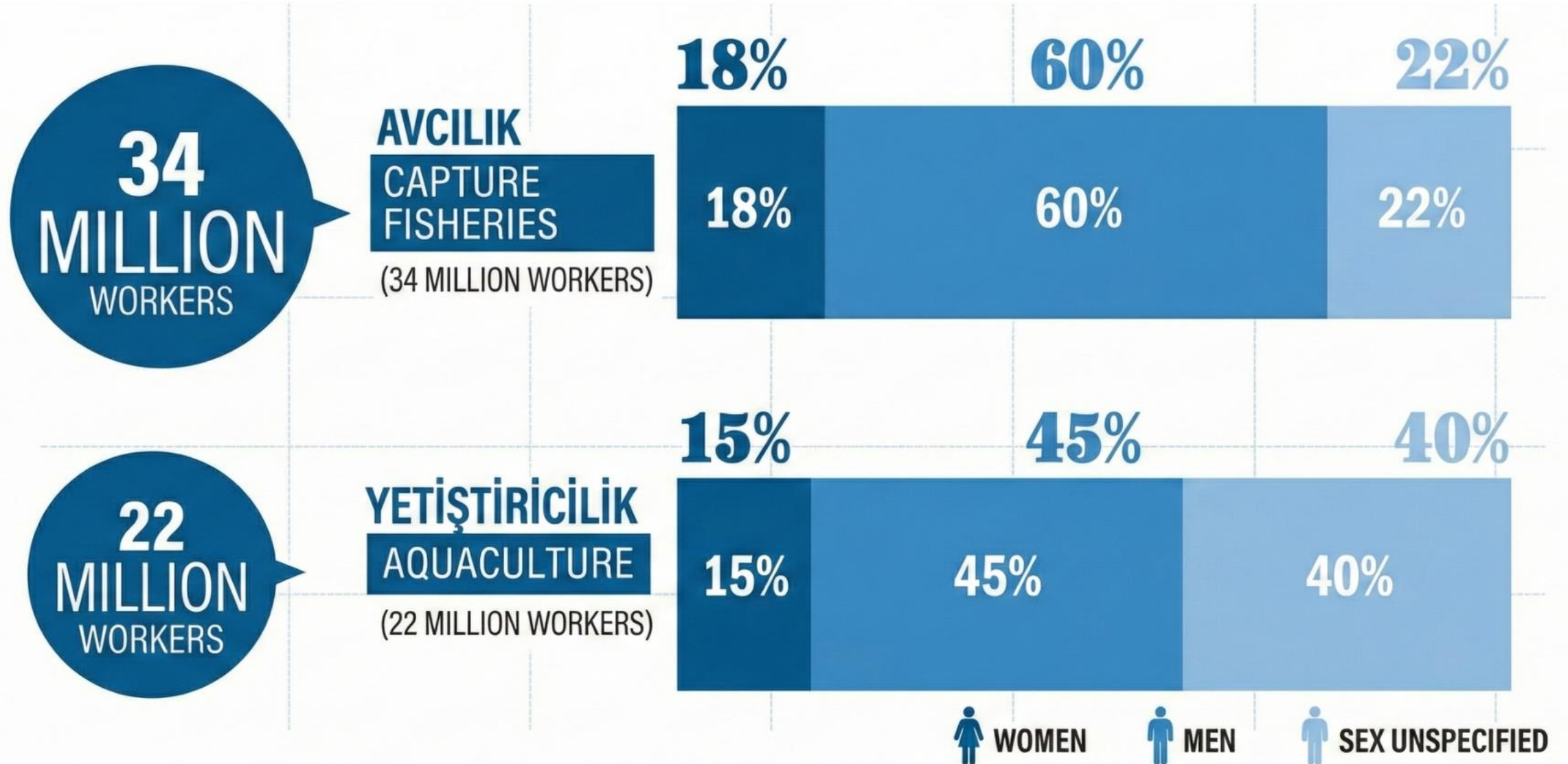
WORLD AQUATIC ANIMAL PRODUCTION

WORLD AQUACULTURE PRODUCTION (EXCLUDING SEaweeds AND ALGAE)



* Farmed aquatic animals for the first time ever exceeded captured aquatic animals by volume.

FISHERS AND FISH FARMERS IN THE PRIMARY SECTOR

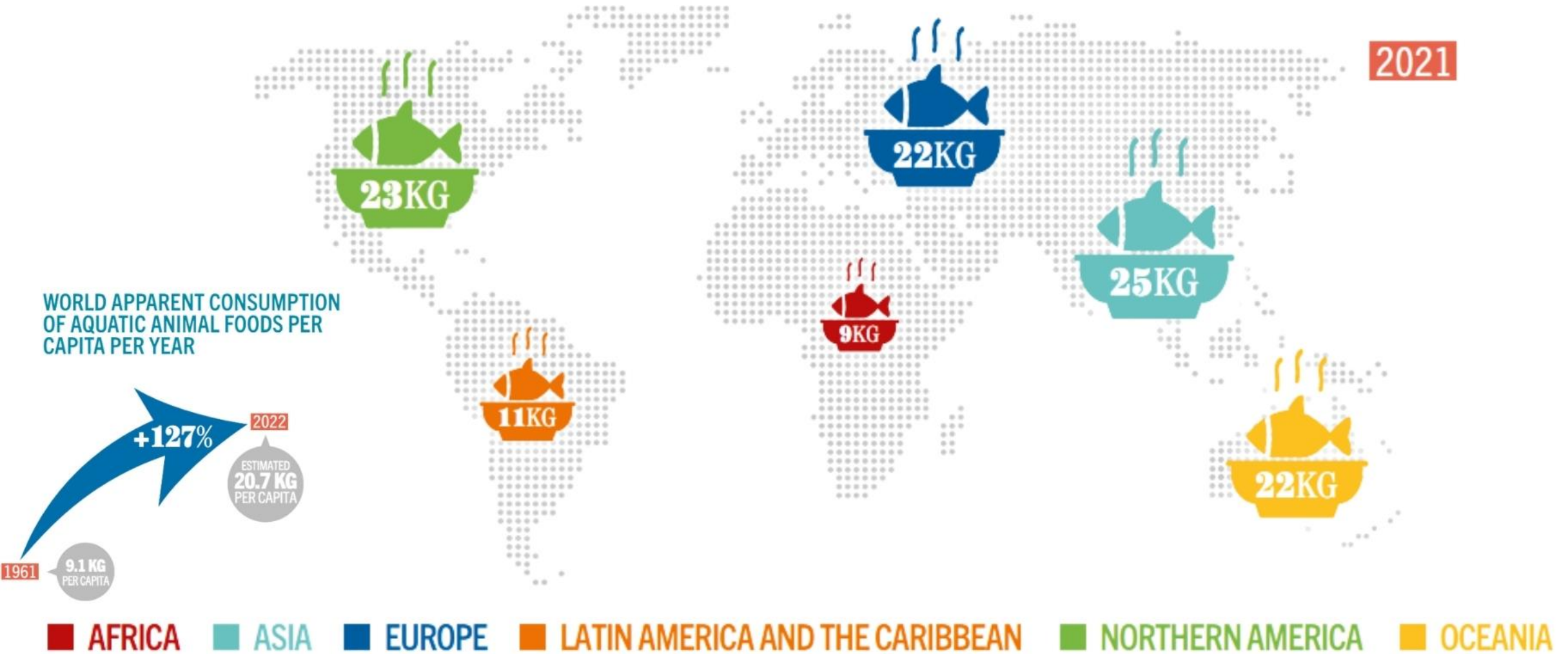


Kaynak: FAO, Duke University & WorldFish. 2023. Illuminating Hidden Harvests.

TOP EXPORTERS AND IMPORTERS OF AQUATIC ANIMAL PRODUCTS (USD BILLION)



APPARENT CONSUMPTION OF AQUATIC ANIMAL FOODS PER CAPITA BY REGION



PER CAPITA SEAFOOD CONSUMPTION BY COUNTRY 2022

GLOBAL AVERAGE

20,7 kg

COUNTRY	PER CAPITA CONSUMPTION (KG)
SOUTH KOREA	58,4
PORTUGAL	57,7
NORWAY	51,3
JAPAN	46,8
CHINA	42,1
SPAIN	40,5
FRANCE	33,3
ITALY	31,2
DENMARK	22,5

COUNTRY	PER CAPITA CONSUMPTION (KG)
USA	22
CANADA	46,8
RUSSIA	21,8
ENGLAND	19,8
CHILE	15,8
MEXICO	14,2
GERMANY	13,7
SAUDI ARABIA	11,6
BRAZIL	10,5
TÜRKİYE	7,2

WHY SALMON

Salmon attracts consumer interest with its appetizing taste, appearance, texture, and color. Another feature that makes salmon suitable for many different occasions is that it can be served in many ways, including raw, grilled, cooked, and smoked. It appeals to people of all ages as it is equally attractive to the youth while meeting the health needs of the elderly. Salmon is nutritious, rich in micronutrients, minerals, marine omega-3 fatty acids, high-quality protein, and various vitamins, and forms an important part of a varied and healthy diet. The FAO highlights: "Fish is a food of excellent nutritional value, providing high-quality protein and a wide variety of vitamins and minerals, including vitamins A and D, phosphorus, magnesium, selenium, and iodine." It is rich in long-chain omega-3s, EPA and DHA, which reduce the risk of cardiovascular diseases. Data also show that EPA and DHA reduce the risk of numerous other health issues. Given global obesity rates, governments and food and health advisory bodies worldwide are encouraging people of all ages to increase their seafood consumption, with a particular focus on consuming oily fish like salmon. The U.S. Department of Health and Human Services and the U.S. Department of Agriculture recommend consuming at least 237 grams of seafood per week for Americans in general. The UK National Health Service, the Norwegian Directorate of Health, and many other national health organizations recommend eating fish at least twice a week.

2023 BY COUNTRY

PRODUCTION

SALMONID PRODUCTION

NORWAY

ATLANTIC- 1.540.000
RAINBOW - 90.000

1.630.000

RUSSIA

RAINBOW - 130.000
ATLANTIC- 13.000
COHO- 13.000

156.000

CHILE

ATLANTIC- 769.000
COHO - 276.000
RAINBOW 44.000

1.089.000

CANADA

ATLANTIC- 100.000

100.000

TÜRKİYE

INLAND WATERS- 155.000
MARINE WATERS- 66.000

221.000

**FAROE
ISLANDS**

ATLANTIC- 98.000

98.000

IRAN

INLAND WATERS- 215.000

215.000

AUSTRALIA

ATLANTIC- 75.000

75.000

**UNITED
KINGDOM**

ATLANTIC- 150.000
RAINBOW - 12.500

172.500

PERU

RAINBOW - 40.000

40.000

2023 BY COUNTRY

PRODUCTION

ATLANTIC SALMON

NORWAY

1.540.000 tons

Maintains a leading market position, acting as the primary benchmark for technology and pricing.

CANADA

100.000 tons

The market leader across North America.

CHILE

769.000 tons

Ranked second globally; holds a dominant market share in both the United States and Japan

FAROE ISLANDS

98.000 tons

Specializes in high-quality natural production, positioned within the premium market segment.

UNITED KINGDOM

150.000 tons

Distinguished by its strong presence in the premium product segment.

AUSTRALIA

75.000 tons

Actively supplies to and maintains a commercial presence in the Asian market.

RESOURCES

https://www.fao.org/fishery/statistics-query/en/global_production/global_production_quantity

<https://www.dfo-mpo.gc.ca/stats/aqua/aqua-prod-eng.htm>

2023 BY COUNTRY

PRODUCTION

RAINBOW TROUT

<i>TÜRKİYE</i>	<div>221.000 tons</div> <div>A market leader, with a production volume of 155,000 tons in inland waters and 66,000 tons in marine environments.</div>	<i>NORWAY</i>	<div>90.000 tons</div> <div>Cultivated in marine environments as Fjord Trout; positioned in the premium segment regarding both quality and pricing.</div>
<i>IRAN</i>	<div>215.000 tons</div> <div>Exclusively produced in freshwater for domestic consumption, with limited export potential.</div>	<i>CHILE</i>	<div>44.000 tons</div> <div>Production volumes, which previously reached levels of 200,000 tons, have declined due to a strategic shift toward Atlantic salmon farming.</div>
<i>RUSSIA</i>	<div>130.000 tons</div> <div>Production is concentrated in the Karelia and Ossetia regions, with ongoing strategic efforts to scale up output capacity.</div>	<i>PERU</i>	<div>40.000 tons</div> <div>Production is primarily carried out in high-altitude lakes.</div>

Kaynakça
FAO (Food and Agriculture Organization) Fishery and Aquaculture Statistics.
FEAP (Federation of European Aquaculture Producers) Annual Report 2023.
TÜİK (Türkiye İstatistik Kurumu) 2023 Su Ürünleri Verileri

Data sourced from FAO (2023)

2023 REGIONAL BREAKDOWN

NATURAL

NATURAL STOCK SALMON

NORTH PACIFIC

90% SHARE
ALASKA-RUSSIA-CANADA-JAPAN

NORTH ATLANTIC

10% SHARE
NORWAY-SCOTLAND-IRELAND-CANADA

SPECIES	ANNUAL AVERAGE (TONS)
Pink Salmon	600.000-700.000
Sockeye Salmon	150.000-200.000
Chum-Coho	200.000-250.000
TOTAL	1.000.000-1.100.000

- WILD SALMON SPECIES
- Pink Salmon (Oncorhynchus gorbuscha)
- Sockeye (Oncorhynchus nerka)
- Chum (Oncorhynchus keta)
- Coho (Oncorhynchus kisutch)
- Chinook (Oncorhynchus tshawytscha)
- Atlantik (Salmo salar)

Kaynak:FAO -The State of World Fisheries and Aquaculture (SOFIA)
FAO GLOBEFISH

AQUACULTURE PRODUCTION VOLUMES BY YEAR ACCORDING TO TURKSTAT DATA

Tablo 11. Türlerine göre su ürünleri yetiştiricilik üretim miktarı (ton)

Türler	2020	2021	2022	2023	2024
Levrek	137.419	148.907	155.151	156.602	160.802
Alabalık (İçsu)	116.053	127.905	135.732	145.649	156.431
Çipura	99.730	109.749	133.476	152.469	154.011
Alabalık (Deniz)	9.411	18.182	31.509	45.454	66.055
Midye	4.168	4.037	4.585	5.469	8.738
Granyöz (Sarıağız)	3.375	7.428	5.913	4.771	6.149
Orkinos	2.327	4.338	4.952	3.879	3.674
Diğer	873	865	368	512	427
Toplam	373.356	421.411	471.686	514.805	556.287

Kaynak: TÜİK, 2025a

SEAFOOD PER CAPITA CONSUMPTION IN TÜRKİYE

Tablo 15. Su ürünleri tüketim miktarları

Yıllar	2020	2021	2022	2023	2024
Tüketim (ton)	559.932	554.291	620.229	614.449	622.264
Kişi Başına Tüketim (kg)	6,7	6,5	7,3	7,2	7,7

Kaynak: TÜİK, 2025a

GLOBAL SALMON FARMING RISKS

Global salmon farming has currently reached its limits in terms of 'Biological Capacity' and 'Environmental Sustainability'; traditional production capacities in major producing nations, particularly Norway and Chile, are nearly exhausted. These countries are now shifting their focus from seeking 'more space' toward the pursuit of 'better technology'.

Sea Lice (Sea Lice): It is the industry's primary threat. In Norway, approximately 20% of total production costs are allocated solely to combating this parasite. It significantly stunts fish growth and leads to increased mortality rates.

Norway stands as the world's largest producer; however, the state has frozen capacity through the implementation of the 'Traffic Light System'. The Norwegian coastline is categorized into 13 distinct production zones. *

● **GREEN LIGHT:** If sea lice prevalence is low, regional producers may increase their capacity by 6% (subject to multi-million dollar licensing fees paid to the state). * ●

YELLOW LIGHT: Capacity expansion is prohibited; existing production levels are maintained. *

● **RED LIGHT:** High sea lice rates trigger a mandatory 6% reduction in production capacity by the state. Currently, many regions in Norway are designated as 'Yellow' or 'Red' zones, indicating that physical and biological coastal capacities have been reached. Consequently, investments are being redirected toward off-shore and land-based (closed-containment) systems.

Having experienced significant environmental crises due to past rapid and unregulated growth, Chile has now implemented more restrictive measures. * **NEW LICENSE BAN:** The issuance of new salmon farming licenses has been suspended in specific regions of southern Chile (Patagonia). * **ANTIBIOTIC CHALLENGE:** To control diseases, Chile has been compelled to utilize significantly higher levels of antibiotics compared to Norway. * **CAPACITY STATUS:** Chile has largely occupied all suitable bays along its coastline; the focus has shifted from opening new areas toward enhancing efficiency within existing operational sites.

Diseases (ISA and VHS): The Infectious Salmon Anemia (ISA) virus nearly decimated the Chilean sector between 2007 and 2009. Biological risks escalate exponentially as production density increases.

Climate Change and Water Warming: The optimal water temperature for salmon cultivation ranges between 8-14°C. Rising water temperatures induce stress in fish, leading to a cessation of feeding and a decline in dissolved oxygen levels.

Algal Blooms: The proliferation of toxic algae in warming waters leads to mass fish mortality events, as evidenced by the crisis in Chile in 2016.

WHAT DO GLOBAL SALMON FARMING RISKS MEAN FOR TÜRKİYE?

- ✓ The saturation of competitors' capacities presents a historic opportunity for Türkiye.
- ✓ As the global population continues to rise, Norway and Chile are no longer able to increase their production at previous growth rates; this creates a supply gap that emerging producers, such as Türkiye, are well-positioned to fill.
- ✓ Norwegian and Japanese firms have begun investing in new and untapped territories like Türkiye, as they have reached capacity limits in their home countries.
- ✓ Technology giants that are unable to grow on their own coasts are more willing to sell their equipment to Türkiye, and while global giants are hitting biological limits, Türkiye is only at the beginning of its potential.

WHY TURKISH SALMON?

- Global seafood consumption has exceeded 20 kg per capita, and aquaculture production has surpassed capture fisheries.
- In markets with high per capita consumption (22 kg) such as Russia, Turkish Salmon has evolved beyond being just a strong and sustainable alternative to Norwegian salmon into a main player.
- There is high consumption potential in the domestic market, where fish consumption currently hovers around 7 kg per capita.
- Turkish Salmon exports are experiencing a 'Golden Age,' driven by logistical advantages and the opportunity in Russia.



WHAT IS A TURKISH SALMON

Turkish Salmon is a species of Rainbow Trout (*Oncorhynchus mykiss*). It is a special product that is transported to sea cages in the Black Sea after reaching a certain size (usually 300-500 g) in fresh water. Here, it is adapted to salt water and raised until it reaches a weight of 3 kg or more, resulting in pink flesh and a taste approaching that of ocean salmon.



HISTORY OF TURKISH SALMON

- Türkiye has been a trout producer for many years. To increase added value, trials for raising trout in the sea began in the late 1990s and early 2000s.
- In the years 2017-2018, the sector successfully tested the strategy of transitioning from "portion-sized fish" to "large fish" production.
- In 2019, through the joint efforts of the Ministry of Agriculture and Forestry and exporter associations, this product grown in the Black Sea was officially named "Turkish Salmon," and a brand identity was created. This move enabled the product to be positioned as a "Salmon Trout" capable of competing with Norwegian Salmon (Atlantic Salmon).

EXPORT

RUSSIA
JAPAN
CANADA
FRANCE
VIETNAM
THAILAND
BELARUS
GEORGIA
USA
CHINA



TURKISH SALMON 8- YEAR EXPORT DATA

TROUT EXPORTS

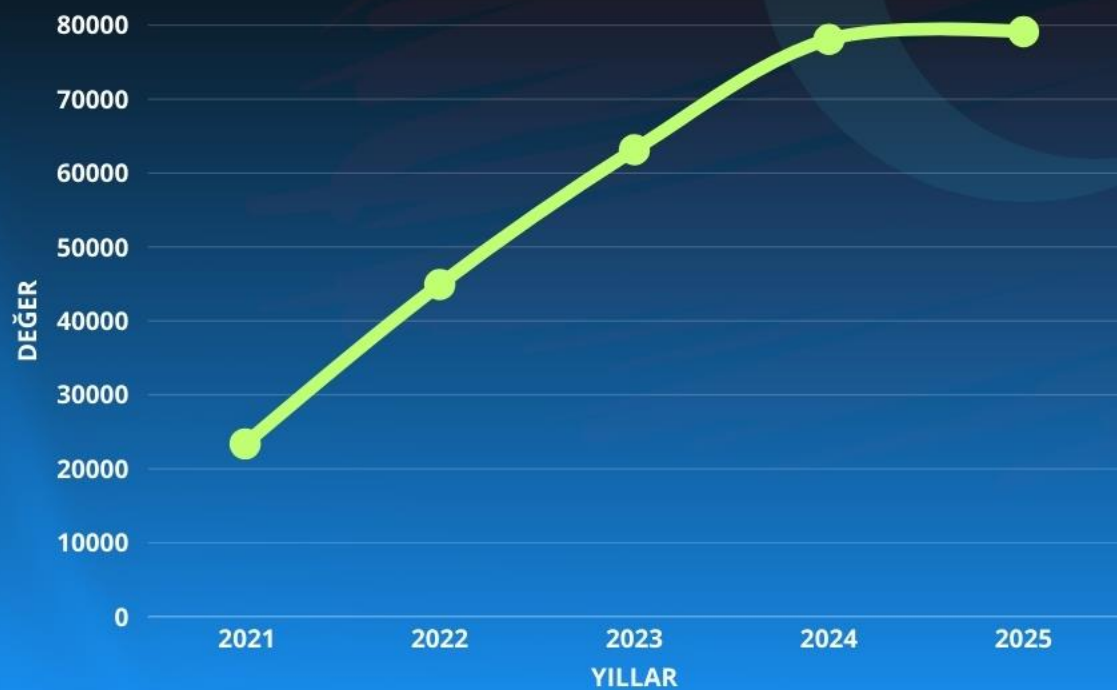
YEAR 2024: 20,765 TONS -
117 MILLION USD

YEAR 2025: 18,930 TONS -
121 MILLION USD

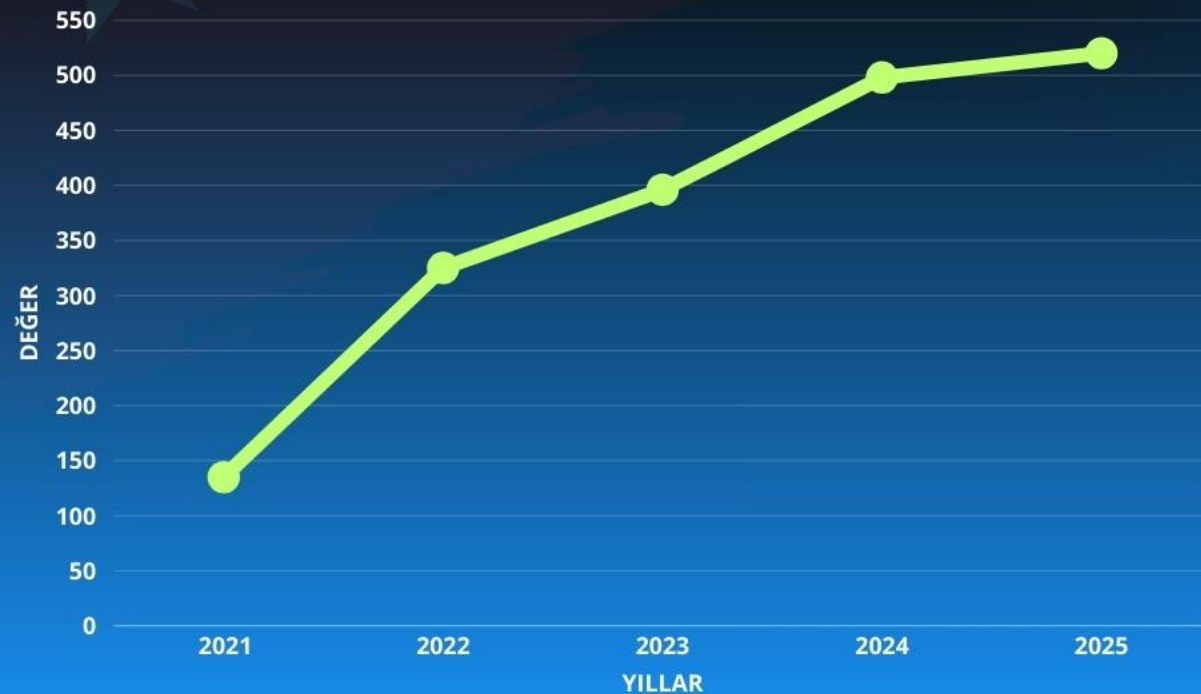
YEAR	QUANTITY	VALUE	DESCRIPTION
2018	4.800 TONS	28 MİO USD	a significant start with trial productions
2019	4.870 TONS	29 MİO USD	branding year
2020	12.400 TONS	57 MİO USD	acceleration at the start of the pandemic
2021	23.375 TONS	136 MİO USD	breakout year
2022	44.932 TONS	325 MİO USD	impact of the russian market momentum
2023	63.158 TONS	396 MİO USD	record year
2024	74.832 TONS	458 MİO USD	market stabilization
2025	79.112 TONS	520 MİO USD	a more controlled and efficient year
TOTAL	307.479 TONS	2 MİLYAR USD	tim and dkib (eastern black sea exporters association)

Turkish Salmon Exports: 5-year Quantity and Value Chart

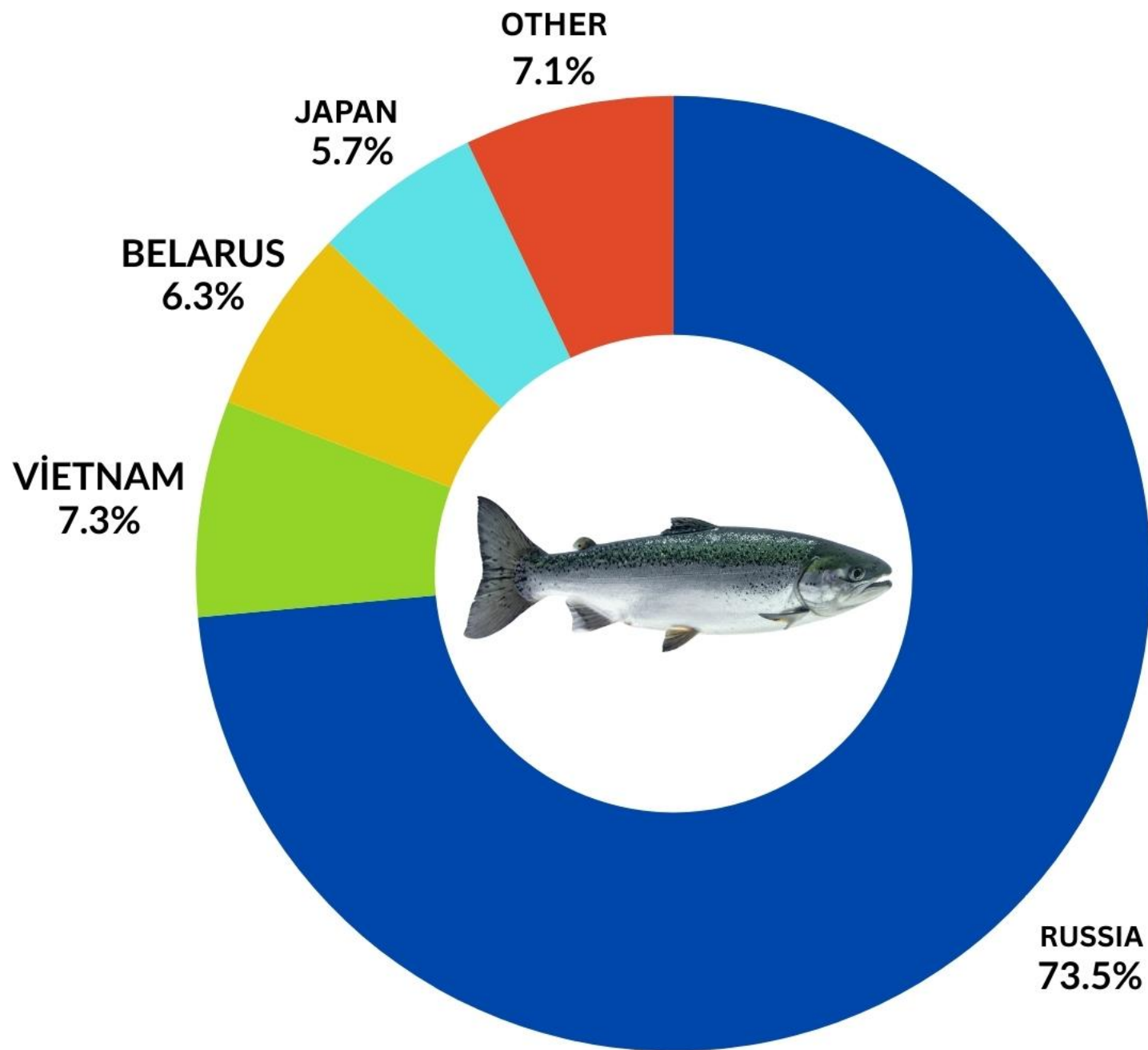
5-Year Quantity Chart



5-Year Value Chart



MARKET ANALYSIS



RUSSIA MARKET

CHILE
FROZEN SALMON
60,000 TONS

TÜRKİYE
FRESH-FROZEN
45,000 TONS

CHINA
PROCESSED PRODUCT
55,000 TONS

The total annual market size for salmon and trout in russia is approximately 250,000 tons. Half of this demand is met by domestic production, while the other half is covered by imports. the import volume is between 100,000 and 115,000 tons.

In 2023, russia's total salmon and trout imports increased by 22% in terms of quantity compared to the previous year. The biggest driver of this increase is turkish salmon.

Future expectation (projection) russia's total salmon/trout imports are expected to approach 120,000 tons due to insufficient domestic production. Although russia is trying to increase domestic salmon production (in the murmansk region), it is unable to reach its targets due to embargoes on feed and fry supply. This situation shows that imports from türkiye are mandatory and permanent.

POPULATION :146 million

70% density closest logistical regions to
türkiye moscow, st. petersburg, krasnodar

**per capita consumption -
22 kg target 28 kg**

Above the world average and 3 times the average of
türkiye

Türkiye has filled the gap left by norway in the fresh and frozen market compared to previous years. türkiye's logistical superiority is high in the fresh market.

As of 2025, turkish salmon exports have exceeded 520 million dollars, and 70% of this is directed towards the russian market.

Turkish salmon share
looking at the increasing trends in the russian market in recent years, frozen trout/salmon imports have increased by 40%, while fresh/chilled imports have shown an 80% increase.

Due to high inflation, Russian consumers have turned towards turkish salmon (rainbow trout), which is a price/performance product, instead of the more expensive atlantic salmon.

chile exports approximately
40,000 - 45,000 tons to russia,
mostly atlantic salmon and coho
supply of large fish (6kg+) only
able to ship frozen products

JAPAN MARKET

POPULATION :123 million

30% rate over 65 years old

Per Capita Consumption - 46kg

TOTAL WORLD SEAFOOD
IMPORTS
2.2 MILLION TONS

TURKIYE EXPORT VALUE
115 MILLION USD

PREDOMINANTLY

TUNA
TROUT
SNAILS

Türkiye İhracatçılar Meclisi (TİM) ve Ege Su Ürünleri
ve Hayvansal Mamuller İhracatçıları Birliği
(ESUHMBİ)

Most consumed fish species

- **Salmon:** especially imported from chile and norway, salmon is the most preferred fish both in sushi and grilled. it is a favorite among the younger generation.
- **Tuna:** maintains its value due to traditional sushi/sashimi culture.
- **Yellowtail (buri):** strong in local production.
- **Shrimp and squid:** frequently used in ready-to-eat meals.

Ministry of Agriculture, Forestry and Fisheries (MAFF) - Japan Fisheries Agency

Japanese consumers (especially the youth) are becoming increasingly conscious of "sustainable seafood" (msc/asc certified).

PURCHASING TRENDS

"KIRIMI" (SLICED FISH): Consumers are increasingly avoiding the purchase of whole fish. Deboned, sliced, and vacuum-packed products have become the market standard.

READY-TO-EAT (RTE): Driven by the "Bento" (meal box) culture, the cooked product sections (deli) in supermarkets are experiencing faster growth than the raw fish sections.

Japanese consumers' perception of seafood has shifted from "traditional" to "modern/practical"

Due to the depreciation of the yen and inflation, consumers are more price-sensitive than in the past. demand for affordable frozen products is increasing.

Kaynaklar: Japonya İçişleri ve Haberleşme Bakanlığı (MIC), Japonya Ulusal Nüfus ve Sosyal Güvenlik Araştırmaları Enstitüsü (IPSS Medium-Variant Projections).

Japan's largest suppliers are as follows:

- **China:** leader in processed products (especially eel and processed fillets).
- **Chile:** dominates the salmon and trout market.
- **usa:** surimi (minced fish), salmon caviar, and alaska pollock.
- **Russia:** crab and frozen fish.
- **Norway:** especially mackerel and atlantic salmon.
- **Vietnam:** shrimp and processed products.

The color and texture of turkish salmon (large-sized trout) raised in the black sea have been found highly suitable for japanese cooked fish dishes (grilled, pan-fried) other than "sashimi" and "sushi"

NORWEGIAN ECONOMY

POPULATION :5,5 million

SEAFOOD

EXPORT

REVENUE 17

BILLION USD70%

SALMON

norwegian salmon is exported to approximately 150 countries.
the largest buyer is the european union.

- european union (55-60%): poland (as a processing hub), france, denmark.
- asia (15-20%): china, japan, south korea. more than 44,000 jobs (direct and indirect)
- north america (10-15%): us market (striving to gain market share from chile).

the country's largest export
after oil and natural gas

norwegian model: low
population, high
production. 95% exports.

the country's largest export product after oil and
natural gas

more than 44,000 jobs (direct and indirect)

PER CAPITA
CONSUMPTION
51,3 kg

when the sale of not only fish but
also feed production, technology,
vaccines, logistics, and equipment is
included, the total economic size of
the salmon cluster in norway
exceeds 20 billion dollars.

Kaynak:
Norwegian Seafood Council (Norges sjømatråd) Annual Export Reports.
<https://www.fao.org/in-action/globefish/country-briefs/en>

CHILEAN ECONOMY

POPULATION
19.6 MILLION

PER CAPITA CONSUMPTION
- 15 KG

the country that does not consume what it produces... 90% of production is exported.

**SEAFOOD
EXPORT
REVENUE 9
BILLION USD**

**the country's largest export after copper
mining second in the world**

MAIN MARKETS

- USA
- JAPAN-(frozen, salmon and Coho)
- BRAZIL

more than 70,000 jobs

DISTANT MARKETS

- EUROPE
- RUSSIA

**SALMON
EXPORT REVENUE
6.6 BILLION USD**

FUTURE PROJECTION: TURKISH SALMON SWOT ANALYSIS (2025-2030)



SWOT

TURKISH SALMON

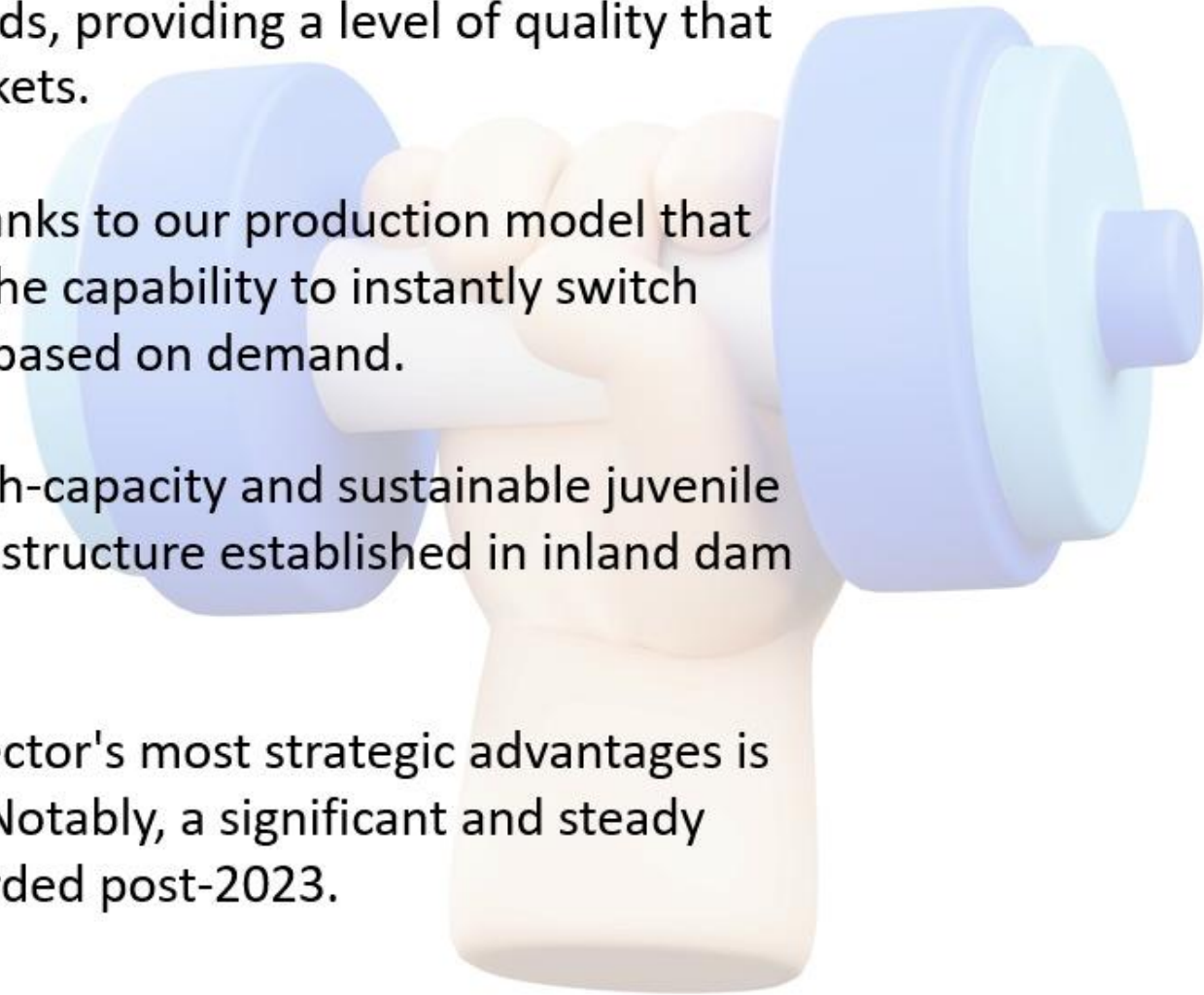
Strengths

Internationally Competitive Infrastructure: Turkey's current cage systems and modern processing facilities meet global standards, providing a level of quality that ensures a competitive edge in international markets.

Operational Agility and Flexible Production: Thanks to our production model that rapidly adapts to market dynamics, we possess the capability to instantly switch between supplying "fresh" or "frozen" products based on demand.

Strong Juvenile Fish Integration: We possess high-capacity and sustainable juvenile fish production power, supported by robust infrastructure established in inland dam lakes.

Rising Domestic Market Potential: One of the sector's most strategic advantages is the growth potential in domestic consumption. Notably, a significant and steady acceleration in domestic demand has been recorded post-2023.



Weaknesses

Global Brand Positioning: The "Turkish Salmon" brand has not yet achieved the same level of market dominance and brand strength as "Norwegian Salmon" in the global arena. The continued consumer perception of the product as "Large Trout" rather than "Salmon" limits its added value potential.

Production Planning and Supply Balance: Occasional lack of planning in stocking processes and the uncontrolled introduction of juvenile fish create oversupply, leading to market price instability and reduced profitability for producers.

Quality Standardization: Fluctuations in maintaining consistent quality standards for products offered to both domestic and international markets can negatively impact brand trust.

Financial Barriers and Tax Burden: High customs duty rates applied in target new markets, particularly on processed and value-added (further processing) products, hinder competitiveness.



Opportunities

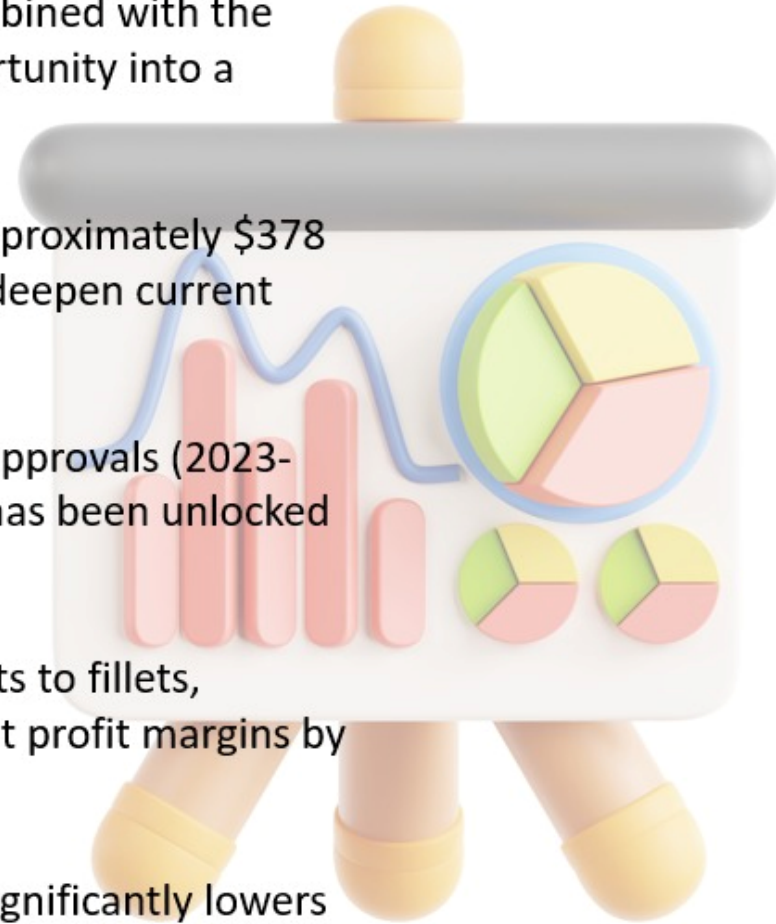
Lasting Dominance in the Russian Market: The market void created by sanctions, combined with the taste and freshness advantages of Turkish Salmon, has transformed a temporary opportunity into a "permanent and loyal market share."

Market Deepening and Growth: With the Russian market accounting for over 70% (approximately \$378 million) of the \$520 million in exports in 2025, there is significant potential to further deepen current volumes.

Strategic Entry into the Asian Market: Following the completion of necessary export approvals (2023-2024) for China, the world's largest seafood importer, a massive new revenue stream has been unlocked on a global scale.

Value-Added Product Transformation: The strategic shift from bulk (whole) fish exports to fillets, smoked, and "Ready-to-Eat" products is set to meet rising demand in Europe and boost profit margins by 30-40%.

Logistics and Green Deal Advantage: Rapid overland access to the European market significantly lowers our carbon footprint compared to Chile and Norway. This positions Türkiye as a "Preferred Green Supplier" aligned with the European Green Deal.




Threats

Global Warming and Black Sea Water Warming (Most Critical Threat): The warming of the water shortens the harvest period (the time the fish spends in the sea) and hinders growth. This forces early harvesting during the summer months, causing the fish to be sold before reaching the desired weight (3-4 kg).

Market Dependence (Single Market Risk): The fact that more than 70% of the export volume is focused on a single market (Russia) makes the company vulnerable to geopolitical and economic fluctuations. Changes in embargo situations or a contraction in the local market can pose a serious risk to the revenue stream.

Raw Material Prices and Exchange Rate Risk: The reliance on imports for fish feed and raw materials, which are the main inputs of production, makes the cost structure sensitive to exchange rates. Cost inflation created by exchange rate increases, combined with pressure on export revenues, carries the risk of eroding profit margins.

TURKISH SALMON SWOT SUMMARY (2025-2030)



➤ The Turkish salmon industry aims to maintain its leadership in the Russian market while diversifying risk by expanding into Asian markets and transitioning to offshore aquaculture technologies to combat the threat of global warming. Becoming one of the top three players in the global salmon market is vital to achieving the \$1 billion export target.

➤ In a healthy export model, a single market's share should ideally not exceed the 20-25% range; however, for Turkish salmon, this figure currently stands at 73%. This concentration necessitates rigorous market monitoring and a sharp strategic focus. To maintain current leadership, it is essential to meticulously manage product quality and customer preferences, alongside mitigating political risks.

➤ Necessary export permits have been obtained from China, the world's largest buyer. The core strategy is to reduce Russia's share to below 50% and achieve a balanced export distribution across Asia, Europe, China, and Japan.

➤ Increasing domestic fish consumption will be one of the industry's most strategic moves, matching the importance of foreign trade. Achieving this goal requires the government, producers, associations, and all relevant institutions to act in a unified, collective mobilization.

DOMESTIC MARKET OUTLOOK

The primary reasons for low per-capita seafood consumption in Turkey and the specific situation regarding Turkish Salmon are as follows:

A. Consumer Perception and the "Color" Issue

- Turkish consumers are accustomed to "white" fleshed fish (Sea Bass, Sea Bream, Anchovy). The flesh of Turkish Salmon is pink/red because it is fed with diets containing astaxanthin, a natural antioxidant. However, there is a common urban legend among the public that this color is a "dye" or that the fish is artificial/GMO. This misconception alienates a significant segment of potential consumers.

B. "Anchovy Culture" and Seasonality

- For the Turkish public, fish is synonymous with Anchovy. In winter, when anchovy is abundant and cheap, consumers do not turn to other species. When the Turkish Salmon harvest overlaps with the Anchovy season, it becomes difficult to compete in the domestic market. Anchovy alone accounts for approximately 40-50% of total seafood consumption in Turkey by volume.

C. Price Instability

- When export channels are open, fish is not supplied to the domestic market, causing prices to rise. Conversely, when the Russian market closes or a harvest glut occurs, fish is flooded into the domestic market and prices crash. This price volatility prevents consumers and retailers from establishing a "standard shelf price" for the product.

D. Cold Chain Logistics

- Access to fresh fish is limited outside of coastal regions, particularly in Central and Eastern Anatolia. Transporting fresh Turkish Salmon to areas east of Ankara involves high logistics costs. Furthermore, the traditional fishmonger culture is underdeveloped in inland provinces, with access primarily restricted to major retail chains.

GREATEST OPPORTUNITIES

A. Red Meat Inflation (Substitution Effect):

- Red meat prices (minced/cubed) in Turkey reached all-time highs during the 2023-2024 period, consistently tracking within the 700-1000 TL/kg bracket.
- Turkish Salmon (fillet or whole) retails at approximately half to one-third the price of red meat, establishing itself as the most competitive high-protein substitute for households.
- The turnover of seafood departments in the retail sector is showing growth in direct correlation with the inflationary pressure on red meat prices.

B. The Discount Store (Retail Chain) Revolution:

- Retail chains facilitate the nationwide distribution of Turkish Salmon—particularly in frozen fillet and fresh whole formats—reaching even the most remote districts across all 81 provinces. Through this extensive retail penetration, salmon has transitioned from a "luxury dining" specialty into a "household staple."

C. Young Population and Health Trends:

- Turkey's youth demographic and white-collar professionals are highly attentive to Omega-3, sports nutrition, and wellness trends. This target audience prefers Turkish Salmon due to its odorless profile and convenient preparation (boneless fillets), moving away from traditional species like anchovy and horse mackerel, which are often associated with a strong odor and labor-intensive cleaning.

D. HORECA (Hotels, Cafes, and Restaurants) Sector:

- Turkey is a premier global tourism destination, hosting over 50 million visitors annually. Resorts in the Antalya and Aegean regions are increasingly pivoting toward domestic Turkish Salmon for their open buffets, replacing high-cost imported Norwegian salmon and red meat. This transition is driving a substantial surge in domestic consumption volume.

Domastic Market OPPORTUNITIES

The biggest barrier for Turkish Salmon in the domestic market is 'Consumer Perception' (the dye myth), while the greatest opportunity is 'Red Meat Prices'. The Turkish public has begun discovering Turkish Salmon as an affordable and practical alternative to expensive red meat. With a proper communication strategy, domestic consumption could become as valuable as exports.

Norway: Small population, massive production; 95% export-dependent. Turkey: Large population, growing production. Turkey's advantage is a robust domestic market capable of absorbing supply if export channels are disrupted..

For the future of Turkish Salmon: "The domestic market is an insurance policy, but the primary target must be global exports, following the Norwegian model.

TÜRKİYE

EXPORT OPPORTUNITIES

Turkey's primary export advantages are "Geography" and "Conjuncture."

- **A. Geopolitical Opportunity in the Russian Market:**

- As a non-sanctioning nation with the closest logistical proximity, Turkey has emerged as the dominant player in the Russian market. It is no coincidence that over 70% of exports have consequently shifted to this region.

- **Green Logistics and Freight Advantage (Geographical Opportunity):**

- Chile is required to ship fresh fish to European and Russian markets via expensive air freight, or frozen fish by sea (40–50 days). Norway, meanwhile, relies on air freight for the Asian market.
- Turkey can deliver fresh fish to the European and Russian markets within 3–4 days via road transport.
- The Green Deal: Having a significantly lower carbon footprint compared to air cargo will become a "preferred choice" and a competitive advantage in the EU market in the future.

- **C. Opening of the Chinese Market (Market Diversification):**

- Following extensive diplomatic and technical negotiations, export authorization for seafood to China has been secured. As the world's largest seafood importer, China presents massive potential for hedging against Russian market risks.

- **D. Processing Costs and Flexibility**

- Labor costs and modern facility infrastructure in Turkey are more competitive compared to Europe. High-speed production can be tailored to customer specifications, including fillets, smoked products, and steak cuts.

TÜRKİYE

CHALLENGES IN EXPORT

- **A. Single-Market Concentration (Commercial Risk):**
 - 70% of exports are concentrated solely in the Russian market. In the event of a Russian ruble depreciation or a political crisis, the sector could be significantly impacted. Alternative markets (EU, Japan) are not yet large enough to match Russia's volume. However, the domestic market acts as an insurance policy.
- **B. Climate Change and Water Temperature (Biological Risk):**
 - The Black Sea is among the most affected regions by global warming, with summer water temperatures rising to 24–25°C.
 - This situation forces producers into an "Early Harvest," necessitating the sale of fish in May and June.
- **C. Customs Tariff Barriers**
 - As stated, while the EU imports raw materials (whole fish) from Turkey duty-free, it applies a ~14% tariff on value-added products such as smoked or filleted salmon.
 - This situation forces Turkey to remain a "Contract Manufacturer" (raw material supplier) and hinders the export of branded products.
- **D. External Dependency on Feed Raw Materials (Cost Risk)**
 - Fish meal and fish oil, the primary components of fish feed, are imported in foreign currency.
 - When exchange rates rise, production costs increase. If export prices do not rise at the same rate, the producer's profit margin erodes.
 - Moreover, within a 24-month operating cycle, short payment terms for feed significantly inflate financing expenses.

EXPORT TARIFF RATES

GTİP	GTİP AÇIKLAMASI		AB Ülkeleri		Rusya Federasyonu	Belarus	Japonya	Vietnam	ÇHC	Ukrayna	İngiltere	Singapur	Güney Kore	Avustralya	Kanada	ABD	Suudi Arabistan	BAE	Tayland	Tayvan
			1,2 kg <	1,2 kg >																
0302.11.20.00.00	TAZE SOĞUTULMUŞ TÜRK SOMONU	CIF BEDEL (%'si)	4,4	0	3	3	3,5	10	10	0	0***	0	20	0	0	0	0	0	0	15
0303.14.20.00.00	DONDURULMUŞ TÜRK SOMONU		4,4	0	3	3	3,5	10	12	5	0***	0	7	0	0	0	5	0	0	15
0304.42.10.00.00	TAZE SOĞUTULMUŞ FİLETO		4,4*		4	4	3,5	15	7	0	0***	0	0	0	0	0	5	0	5	20
0304.82.10.00.00	DONDURULMUŞ FİLETO		4,4**		4	4	3,5	15	7	5	0***	0	0	0	0	0	5	0	5	15
0305.43.00.00.11	İŞLENMİŞ, TÜTÜSÜLENMİŞ MARİNE		4,4		3	3	10	20	14	5	0***	0	0	0	0	0	5	0	5	15

* 0304.42.10.00.00 GTİP'li "Oncorhynchus mykiss türünden adedinin ağırlığı 400 gr.dan fazla olanlar" için vergi oranı sıfır iken, 0304.42.90.10 GTİP'li "Oncorhynchus mykiss türlerinden" için %4,4 Damping vergisi vardır

** 0304.82.10.00.00 GTİP'li "Oncorhynchus mykiss türünden adedinin ağırlığı 400 gr.dan fazla olanlar" için vergi oranı sıfır iken, 0304.82.90.10 GTİP'li "Oncorhynchus mykiss türlerinden" için %4,4 Damping vergisi vardır

*** 0301919011, 0302118011, 0303149011, 0304429010, 0304829010, 0305430011 GTİP'li ürünler için %1,5-%9,5 aralığında anti damping vergisi uygulanmaktadır

FINANCIAL CHALLENGES

Managing the financing of a sector with a 20–24 month operating cycle is extremely difficult.

Challenges in accessing credit (Inclusion of exporters within the scope of FX loan growth caps.)

Insufficient subsidy limits

Exchange rate pressure on export competitiveness

Alternative credit sources (long-term and low-cost foreign-sourced loans)

Alternative collateral structures (collateralization of cages, licenses, fish stocks, and licensed warehouse certificates (elüs))

Mismatch between feed purchase maturities and the operating cycle

Adjustments to credit allocation scoring based on the operating cycle

Lack of implementation of contract production models

Insufficient financial resources for investment projects

Thank You

Tayfun DENİZER

Politek Su Ürünleri A.Ş. ve Group Companies

Chairman of the Board

politek ^{pf} **polifish**

karSom

AZUR
SU ÜRÜNLERİ

AKUA
DENİZER