



Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Required Report - public distribution

Date: October 1, 1998

GAIN Report #RS8058

Russian Federation

Annual Seafood Report

1998

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Report Highlights:

Officially Russian seafood production declined by 7.0 percent between 1996 and 1997, to an estimated 4.1 million MT. Post estimates that in 1998, the Russian seafood catch will decline further because of current financial difficulties in the fishing industry, including unavailability of credit, rapid deterioration of fishing equipment, and diminishing biological stocks of seafood in Russian territories. Short-term growth in the fish and seafood products market is doubtful, as the recent devaluation of the Ruble has lowered the Russian consumer's purchasing power.

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Executive Summary

In comparison to 1996, official Russian statistics indicate that seafood production declined by 7.0 percent in 1997, from an estimated 4.4 million MT to 4.1 million MT. Post, however, believes that the annual output of seafood products in Russia was also 4.4 million MT in 1997. It is worth noting that a significant amount of smuggling to offshore markets leads to massive undercounting of Russian seafood production. Official statistics do not account for the fact that a significant amount of the Russian seafood catch is smuggled into nearby markets, where they are sold for higher prices, and where profitability is more certain. Furthermore, post estimates that in 1998, the Russian seafood catch will decline to 4.2 million MT because of current financial difficulties in the fishing industry, including unavailability of credit, rapid depreciation of fishing equipment, and diminishing biological stocks of seafood in Russian territories. Average per capita fish consumption has decreased from 24 kg in the mid-1980s to 10 kg per year today. Due to Russia's economic difficulties, Russian fishermen sell about two-thirds of their catch to foreign processing factories. Growth in the fish and seafood market is unlikely, as the recent devaluation of the ruble has lowered consumer's purchasing power. Fish fillets, crabs and crabmeat, surimi (fish paste), caviar, canned salmon and other fish delicacies are some of the best prospects in the Russian fish import market.

Production

According to official Russian Statistics, the total commercial catch of fish and other seafood products in 1997 was 4.1 million MT. The amount of fish smuggled out of Russia is significant. For example, 1996 official statistics indicate that Russia produced only 12 thousand tons of crayfish, but Japanese import statistics indicate that Japan imported around 55 thousand tons of crayfish from Russia during that year. Recognition of massive corruption in the fishing industry was recently acknowledged when the new Deputy Minister of Agriculture was quoted in the newspaper "Agricultural life" as saying that the governmental committee on fisheries is very criminal, and that the new government needs to seek an honest person to reform it. Experts within the fishing industry say that seafood landings in 1997 were about 4.7 million MT. In general, the fishing situation for companies in Russia is much worse than it was in 1997. For example, one fishing company that is involved in all aspects of the fishing industry (catching, processing, and distribution) indicated the following reductions in fish landings between 1997 and 1998:

Table 1. Comparison of fish landing for a Representative Russian fishing company (1997-1998):

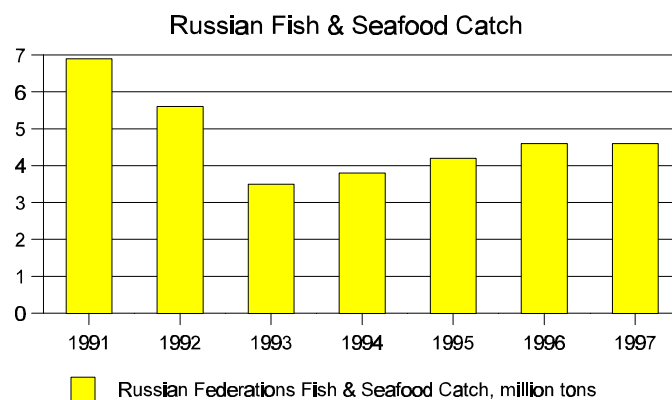
| | 1997 | 1998 (January - August) |
|-----------------------------|---------|-------------------------|
| Cod (theragra chalcogramma) | 5,203MT | 5141MT |
| Shrimp | 51.6MT | 30.2MT |
| Herring | 1,966MT | 193MT |

However, this company has improved its efficiency by purchasing new vessels and modernizing refrigeration and processing equipment. Therefore, despite lower production numbers they are currently increasing diversity of high value products, and volume of frozen and canned fish products. They indicated that they are seeking foreign cooperation for further development of catching, processing, and distribution.

Taking all factors into account (smuggling, industry estimates, and reported trade patterns), post estimates that the real seafood harvest in Russia is the average between the official government's and the industry's estimate, or 4.4 million MT — the same as it was in 1996. However, because of a combination of rapidly increasing cost (and therefore declining profitability); the collapse of the Russian economy; the unavailability of credit; reduced biological stocks of seafood; equipment depreciation; the declining number of fishing fleets; and to-date trade patterns, total output this year (1998) is expected to decline by 4.5 percent to 4.2 million MT.

Over the last 10 years, seafood production has declined drastically for the following reasons:

C The average costs of production per unit of seafood produced in Russia is higher than the average per unit value of seafood products in the marketplace. For example, in 1996 the average cost of production per unit of seafood was 104.4 percent of the average unit value of seafood in marketplace. In 1997, this ratio had risen to 105.1 percent, according to governmental statistics. This fact is driving more and more Russian companies out of the business, and leading to a significant amount of smuggling of seafood products from Russian waters.



C The collapse of the centrally controlled economy of the former Soviet Union, which provided state support to the fishing industry.

C Russian fishing fleets have declined by an estimated one-third since 1995.

C Diminishing access to traditional fishing grounds.

According to official statistics, the annual fish and seafood catch in Russia decreased from 6.9 million tons in 1991 to 4.1 million tons in 1997. This represents a 41 percent decline in seafood production over the last six years. Russian fish production was 3.2 million tons during the period from January to August 1998. This indicates a 128 thousand ton decline as compared to the same period of last year. Although catches of valuable species like salmon, cod, Alaska pollack, crab, octopus, urchin and other seafood delicacies were not reduced.

Inland fish

Sturgeon production is threatened because of over harvesting, which is estimated to be 5-10 times higher than is legally permitted. In addition, Russian oil companies are seeking permission to conduct oil exploration in the Northern part of the Caspian sea. If permitted, sturgeon production may disappear within two-to-three years, according to Olga Krevondasova, of the State Committee for Natural Resources (a branch of the State Duma). Recently, Russia has implemented regulations to control exploitation of sturgeon and caviar by fisherman (see

policy section).

Russia, the United States, Sweden, and Japan artificially reproduce sturgeons. All fish from the Azov sea (near the Black Sea) are reproduced artificially. Russia still has 11 reproduction plants that are in good shape. Some 56 million finger lings were produced in 1997. (In better times the minimum number was 150 million.) Russia hopes to develop sturgeon production in water reservoirs, as sturgeon are migrating throughout the Caspian sea. Yamal region - **chir-shekur** is a trout found only in Yamal lakes and similar to trout from the Great Lakes region of the United States. Some 50--70 percent of this unique variety of fish is sold as an inexpensive, low quality item in Russia. To maintain high quality this fish must be stored at minus 35-40 degrees centigrade for 2 hours. Scientists of the region say that only 25 percent of the available biological resources of the region are being utilized by fishermen. Dry fish are cooked in fish fat without salt producing so called 'Yurok'. The skin can be used for shoes, bags and artwork.

Imports

The percentage of seafood imports decreased from 0.7 percent of all imports in 1996 to 0.6 in 1997. In 1997, the total amount of fish imports rose 32 percent above the total amount of imports recorded in 1996. Despite significant increases in imports in recent years, dramatic changes in Russia's economic situation during August-September 1998 will likely result in decreased seafood imports this year because of lower consumer spending power and more competitive local products. Post expects the amount of imports to decline by about 32 percent in 1998. Economic changes will encourage more exports of Russian fish and seafood this year. Rising production costs and lower consumer purchasing power are expected to further push down imports in 1999. In the near future, post expects to see continual declines in both seafood production and consumption.

Exports

In 1997, the percentage of Russian seafood exports increased from 0.3 percent of all exports in 1996 to 0.4 percent. According to the experts, about two thirds of Russia's seafood catch is sold abroad. There are several compelling reasons for Russian fishermen to market their products outside of Russia:

- C Financial difficulties within the Russian economy, such as the unavailability of credit, as well as low consumer purchasing power. (One major seafood company reported that it will have to sell its catch to Japanese companies at a loss of 30 percent loss because of Russia's recent currency devaluation.)
- C Rising production costs mean that it is unprofitable for Russian seafood companies to market their products to Russian consumers who currently prefer to buy low cost items.
- C Russian port facilities are inefficient and it is comparatively more expensive for Russian vessels to utilize them than foreign seaports. (For example, it is estimated that ship unloading costs in the Murmansk region (far north eastern Russia) are 2.5 times higher than in nearby Norway.
- C Over-fishing in Russian territories has depleted available stocks causing fishermen to seek seafood catch further and further out. Until recently Russian vessels were not obliged to report catches outside of

Russian waters. However, the Russia recently implemented a "Decree on the Measures of control of the external operations of seafood products out of the territory of the Russian Federation".

C This new regulation obliges fishermen to report all seafood catches by Russian vessels (see policy section).

Processing

The major exporters of fish products to Russia are Norway, Denmark, Holland, Peru, Argentina, Chile, Iceland, Canada, United States and France. Many fish products made from raw materials bought from Russian fishermen were often re-sold to Russia as more expensive delicacies. The more effective Western fish processing technology makes such commerce profitable for foreign firms. The industry of several Scandinavian cities is based on Russian raw fish materials. The same production at analogous Russian processing firms would cost 10-15 percent more.

In spite of the deficit of fish products in the internal market, Russian fishermen sell about two-thirds of their catch to foreign processing factories. According to official government data, the Russian fishing industry caught around 4.2 million tons of fish and seafood in 1995. After primary processing, the volume decreased to 2.5 million tons. Less than a million tons reached the Russian market.

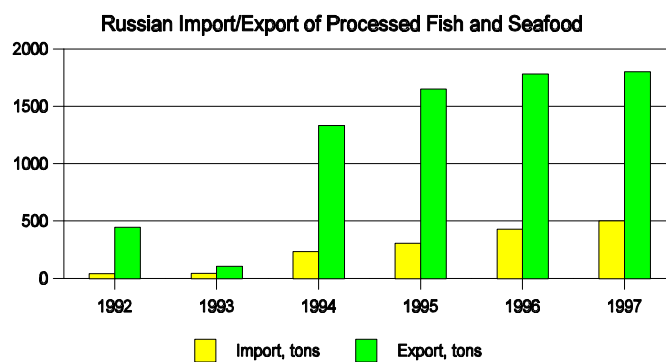
Government support for the fish processing industry

In 1997, Russia implemented policies aimed at supporting its inland fish processing industries. State Duma representative, Krevondasova justified such support during a recent interview with fish industry representatives by stating that because of the high costs involved in purchasing domestic raw fish materials, the state needs to support its own fish processing industry by seeking ways to lower transportation and energy costs.

To make it profitable for domestic fish traders to ship inexpensive varieties of fish to inland processing facilities, Russia reduced prices for refrigerated railroad shipments by 50% in 1997.

Marketing

Frozen Fish — Frozen fish are the most popular item exported to Russia. The frozen fish market is characterized by three main factors: 1) it is over-saturated with companies; 2) there is intense competition in the marketplace, driving down profits; and 3) wholesale prices continue to fall. Small fishing companies are being forced out of business, as large companies are operating with low profit margins. In order to compete, companies are diversifying their product mix, selling at low prices, and the large companies are horizontally integrating to withstand the impact of profit losses in the fish industry. The niche market for fish delicacies has yet to stabilize. Salmon and trout traders hope that



health concerns will prompt more purchases of their products. Frozen fish is being rivaled by semi-prepared fish products. According to some experts, production of semi-prepared fish products will increase. Previously, imported fish was successful in competing with frozen fish because of higher quality of products. However, the current economic situation has reversed this trend. Conventional wisdom in the fish trade says that once the costs of imported products reach a level which is two times the cost of domestic products, consumers will change their preferences in favor of domestic purchases.

The quality of Russian processing is improving, as Russia has major fish processing facilities throughout the country (including Moscow, areas to the south of Moscow (Vozonezh), and the Urals). They are capable of producing high quality delicacies such as crab sticks, one of the most popular items with Russian consumers. Production of fresh, chilled, and smoked fish has decreased; while production of salted, "balick", and semi-prepared products has increased by 10--20 percent since 1995.

Danish and Finish processing companies were the first to introduce crab sticks to the Russian market place. Several Korean fish processing companies have recently entered the market. Surimi is also popularly traded by Korean companies and small European companies.

Table 2: Major indexes of the Russian fishery industry, 1995-97

| Index | Unit | 1995 | 1996 | 1997 |
|---|---------|------|------|------|
| Total commercial catch of fish and other sea products | 1000 MT | 4240 | 4440 | 4107 |
| Production of processed fish products, incl. canned | 1000 MT | 2560 | 2600 | 2700 |
| Foreign trade, total (group 03) | \$mln | 465 | 503 | 584 |
| including: | | | | |
| exports | \$mln | 212 | 205 | 282 |
| imports | \$mln | 253 | 298 | 302 |

Source: Russian State Statistical Committee

According to the information from the Department of Fisheries at the country's Ministry of Agriculture and Food, Russia netted and processed more than 2.5 million tonnes of fish in the first half of this year, roughly the same amount as was netted during the first six months of the previous year. However, the ministry of agriculture recently reported that fish production slipped by 128 thousand tons during the period from January to August. Reportedly, there has been no reduction in the production of valuable species like salmon, cod, pollack, crab, octopus, urchin, and sea delicacies.

Table 3. Production and catch of fish and products in

Russia, 1995-97, in MT

| Product | 1995 | 1996 | 1997 |
|--|------------------|------------------|------------------|
| Fish and other fish products: | | | |
| Total catch | 3942027 | 4,137,169 | 4,106,825 |
| including: | | | |
| catch in internal | 219149 | 226,337 | 197,486 |
| basins including in | | | |
| fresh basins | 150,138 | 158,440 | 145107 |
| catch in Russian economic zones | 2,961,671 | 3,235,597 | 3253578 |
| catch is 200 mile zones os foreign countries | 552257 | 551,370 | 558,002 |
| catch in open ocean areas outside of 200-mile zones | 90301 | 92,575 | 63,617 |
| Catch by fish varieties: | | | |
| Herring | 194,286 | 260,217 | 360,200 |
| Sardine | 24,425 | 32,895 | 16,058 |
| Sprat | 64,703 | 87,384 | 112,464 |
| Saury | 25096 | 10,399 | 3786 |
| Mackerel | 61,029 | 50,828 | 70,441 |
| Sea perch | 34,665 | 31,964 | 26,119 |
| Tagmackerel | 105039 | 90126 | n/a |
| Plaice | 54458 | 57062 | 61979 |
| Sturgeon, total | 2961 | 1,754 | 1857 |
| Coregonus, total | 7826 | 9982 | 9,815 |
| Salmon, total | 116888 | 112849 | 160,935 |
| Cod fish, total | 2699666 | 2,921,547 | 2,759,292 |

| | | | |
|--|------------------|------------------|------------------|
| including: cod ((theragra) | 356,675 | 419,520 | 423,640 |
| chalcogramma (lat.) | 2178160 | 2312837 | 2,115,385 |
| merlin | 61791 | N\ | 37120 |
| Total sea products and crayfish | 109105 | 142137 | 128152 |
| including crayfishes and molluscs | 97776 | 137638 | 123784 |
| including crabs | 39252 | 64497 | 47684 |
| shrimp | 6,667 | 12,811 | 3,157 |
| molluscs | N.D. | 60,330 | 73,920 |
| Commodity food products | | | |
| canned products | 1811139 | 2,229,639 | 2,429,198 |
| Commodity food products | | | |
| un-canned products | 1,657,239 | 2,072,140 | 2,251,346 |
| Fish frozen | 1,416,127 | 1,555,022 | 1,625,835 |
| Fillet frozen | 70,851 | 132,569 | 168,716 |
| Salt herrings | 28,543 | 23,735 | 22,704 |
| Smocked fish | 57,495 | 409 | 34,943 |
| Fish dries and dry-cure | 9498 | 9,850 | 9,354 |
| Spicy and marinade products | 1881 | 198 | 1766 |
| Culinary products | 5,965 | 4,457 | 3842 |
| Fast frozen fish products | 127 | 189 | 207 |
| Balyk products | 1830 | 1,350 | 1,025 |

| | | | |
|---------------------------------|----------------|----------------|----------------|
| Food ground fish meat | 52,064 | 78,869 | 56,741 |
| Caviar, total | 46,362 | 53,284 | 51,198 |
| sturgeon | 106 | 99 | 114 |
| salmon | 3,266 | 752 | 2,823 |
| Herring of all types | | | |
| processing | 122,325 | 171,476 | 229,246 |
| Non food products | 139,009 | 314,061 | 243,519 |
| Fish and sea animals fat | 8,224 | 6,381 | 3,283 |
| Fish meal | N\ d | 194,486 | 171,811 |
| technical use | 6,913 | 3,704 | 2666 |

Source: Russian State Statistical Committee

Consumption

According to the research done by the “Komkon” research service, the average per capita consumption of fish products in Russia today is 8.7 - 10.3 kilograms a year. In today’s economic environment, the old Russian adage that “the best kind of fish is sausage” is apropos. Given the choice, most Russians will choose to buy meat over fish. Addressing this issue during a conference of fish professionals and governmental representatives, the former minister of Fisheries stated that current consumption patterns of fish in Russia are too low to be considered healthy. Therefore, he urged the industry and the government to band together in an effort to increase consumer awareness of the health benefits of fish consumption. In 1998, post expects to see a further decline in per capita consumption of fish. The recent devaluation of the ruble has negatively impacted consumer buying power, as well as the willingness of traders to supply the domestic market.

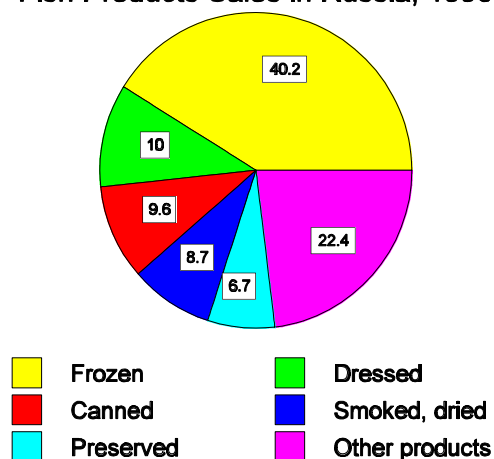
During the soviet period, there were large government subsidies in the fishing industry which resulted in frozen fish prices at least 3 times lower than prices for frozen meat. Although most Russian customers prefer to purchase frozen fish, the volume of frozen fish sales is about 40 percent of total fish products sales in Russia. Despite the low purchasing power of the average consumer, many participants in the market believed in the prospects, or “perspectivny”, of the Russian middle class and even call a group of expensive fish products as “perspectivniy” (prospective). On the other hand, the recent devaluation of the ruble has eroded consumer confidence and put a damper on such bright perspectives in the near future. Transport, storage, and invoicing costs are high, therefore the best prospects for the import market are the more expensive items.

Fish fillet: The fish offering the best prospects include Norwegian salmon, salmon, halibut, shark, perch and pike (smoked or partially prepared and packaged).

Canned fish products: These products have a noticeable seasonal demand related to the summer dacha-picnic period. In addition, industry experts have noted changes in consumer preferences, all in the direction of more expensive canned fish.

Seafood products: The most popular are crab sticks of natural products vacuum packed, calamari (squid), shrimp, fish eggs or caviar, caviar butter, and shrimp butter.

Fish Products Sales in Russia, 1996



Trade

Table 4. Russian fish exports and imports, 1996 - 1997

| Commodities | 1996 | | | | 1997 | | | |
|--|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| | Exports | | Imports | | Exports | | Imports | |
| | 1000M T | \$1,00 0 | 1000M T | \$1,00 0 | 1000M T | \$1,00 0 | 1000M T | \$1,00 0 |
| (03) Fish, crayfishes, molluscs, other sea non-vertebrates | - | 205100 | - | 297500 | - | 281500 | - | 301800 |
| (03.02) Fish fresh or chilled | 17739 | 9911 | 5499 | 5147 | 9455 | 5991 | 2851 | 3871 |
| (03.03) Fish, frozen, (except fillet) | 89300 | 123134 | 320641 | 212878 | 186680 | 174407 | 441822 | 220657 |
| (03.03.10) Salmon Pacific | 14384 | 48755 | 3446 | 5645 | 23768 | 35880 | 3844 | 4132 |
| (03.03.32) plaice | 8774 | 5328 | 3125 | 2121 | 12963 | 7256 | 965 | 483 |
| (03.03.50) herrings | 20451 | 13359 | 146243 | 79622 | 52899 | 27055 | 214365 | 88452 |
| (03.03.74) mackerel | 756 | 812 | 81701 | 65796 | 1354 | 1407 | 93807 | 54063 |
| (03.03.79) other fish | 21076 | 14221 | 58600 | 38268 | 60214 | 34268 | 78461 | 39699 |
| (03.04) fish fillet including stuffed | 3272 | 7647 | 33690 | 36939 | 13017 | 15803 | 51785 | 46025 |
| (03.05) Fish, dry, salted, smoked; fish food meal | 3423 | 7418 | 37469 | 28870 | 3995 | 5471 | 22429 | 16285 |

| | | | | | | | | |
|-------------------------------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------|--------------|
| (03.06) crayfishes | 5529 | 45849 | 6186 | 11756 | 8726 | 63635 | 10995 | 12370 |
| (03.07) Molluscs | 4139 | 11071 | 816 | 1642 | 4956 | 16119 | 1361 | 2235 |

Source: Russian State Customs Committee

Stocks

Frozen Fish

Frozen fish market is characterized by three main factors: 1) it is packed; 2) there is intense competition; and 3) prices are continuing to decline. Small companies are being forced out of the market, as large operations are trading at low prices. To survive, companies need to increase their product mix, decrease prices, and horizontally integrate into other businesses. Suppliers of fish delicacies hope that developments in the market will stabilize, as this niche market is threatened by the impact of the ruble devaluation on the Russian middle class. Salmon and trout traders hope that their business will grow as people begin to consider the health benefits of eating fish products, prompting them to include fish into their diets. Frozen fish are competitive with semi-prepared fish products. Some experts think that production of semi-prepared fish products will increase. In the past, imported frozen fish products were competitive with domestic fish because of their higher quality. However, the impact of the recent devaluation will almost certainly reduce demand for imported fish products. In general, experts say that once the price of imported product is two times higher than the price of domestic production, consumers will shift their preference towards domestic fish. Furthermore, the quality of Russian fish is improving. This is especially true for all of delicacies, including crab sticks which are popular among Russian consumers.

Surimi is traded mostly by Korean companies "LG" and "Daewoo", as well as by small European companies. Danish and Finnish companies introduced crab sticks to Russian consumers. Koreans have entered the market and are trading at very low prices.

Policy

In August 1998, the Government of Russia officially published several new decrees relating to the seafood industry. They are summarized below:

I. "Decree on the Measures of control of the external operations with seafood products out of the territory of the Russian Federation". The decree states that all sturgeon and sturgeon products (caviar) exported from Russia must be licensed by the Ministry of Agriculture. Russia is still seeking mechanisms to enforce this regulation, but anyone seeking to export or import sturgeon or caviar must present a permit from the Ministry of Agriculture, as well as a license to do so.

II. In order to prevent uncontrolled exports of fish products to foreign countries, Russia introduced measures (for the 3 year-period trial period) to expertly evaluate volumes, values, and prices of exported seafood products. This regulation is in line with the Russian government Decree N 1267, dated December 26, 1995 "On introduction of the single system of expert evaluation of volumes, values and price of exported products".

III. " On the Federal purpose program "The World Ocean", N 919, issued August 10, 1998. This regulation contains several subprograms. It states that the Ministry of Agriculture will be responsible for the "Utilization of the biological resources of Russian Waters"; the State Committee for the Environment protection will be responsible for the "Exploration and utilization of the Arctic" and "Creation of the single system of information about situation in the Arctic". The goal of this program is to develop more reliable statistics regarding supplies of fish in the ocean.

IV. "On measures of fulfilment of recommendations of the 10th conference of the States, signed the Convention on international trade by species of wild fauna and flora, which are under the threat of disappearance , March 3, 1973, relating sturgeon". This regulation was modified in August, and introduced quotas for sturgeon exports from the Volga delta and sold in the region of Astrakhan. Furthermore, the 2nd paragraph of this decree will come into force in November 1998. It introduces quotas on all exports of sturgeon and its byproducts, protecting Russian waters from over harvesting by fishermen.

Developments towards new policies

Fishermen, in the northern areas of the Far East, are seeking to close the Sea of Okhotsk to foreign fishing ships, and have made demands on the Russian Ministry of Agriculture and Food. Reportedly, representatives of fishing companies have already drafted an appeal to the authorities that it will be approved at the Congress of Russian fishery workers set for the first half of 1999.

Summary:

- C Total production is declining because of smaller fleet size, aging of fishing equipment, higher costs of production, abandonment of fishing boats from the fishing industry, stricter governmental controls to protect biological wildlife.
- C Total supply of fish to the marketplace is declining because of lack of credit in the domestic marketplace, reduced consumer buying power.
- C Although relatively a small amount of the domestic catch reaches Russian markets. Russia's fish processing sector is becoming more

competitive and able to produce a better product. Russia in general is moving in the direction of making its internal support structure more attractive for domestic producers to market, i.e in the future more of Russia's domestic product will go into local markets.

C

In the short run, the U.S. industry will face tough competition because of the competitive advantage that nearby suppliers enjoy. However, more Russian companies are seeking joint-venture opportunities with U.S. companies because they find it difficult to obtain credit elsewhere. Therefore, in the long run U.S. companies could compete in the marketplace. The best prospects for the marketplace are salmon, halibut, shark, perch and pike (smoked or partially prepared and packaged); Canned fish products (consumer preferences, all in the direction of more expensive canned fish); Seafood products, including crab sticks of natural products vacuum packed, calamari (squid), shrimp, fish eggs or caviar, caviar butter, and shrimp butter.

Salmon, Whole/Eviscerated: PSD & Export Matrix

| | | | | | | |
|-----------------------------|--------------------------------------|----------------|---------------|----------------|------------|----------------|
| PSD Table | | | | | | |
| Country: | Russian Federation | | | | | |
| Commodity: | Salmon, Whole/Eviscerated | | | | | |
| | | 1997 | | 1998 | | 1999 |
| | Old | New | Old | New | Old | New |
| Market Year Begin | | 01/1997 | | 01/1998 | | 01/1999 |
| Beginning Stocks | 10000 | 10000 | 10000 | 10000 | 0 | 11000 |
| Total Production | 180000 | 180000 | 160000 | 190,000 | 0 | 170000 |
| Intra-EC Imports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Imports | 4000 | 4000 | 5000 | 3000 | 0 | 3000 |
| TOTAL Imports | 4000 | 4000 | 5000 | 3000 | 0 | 3000 |
| TOTAL SUPPLY | 194000 | 194000 | 175000 | 203000 | 0 | 184000 |
| Intra-EC Exports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Exports | 50000 | 50000 | 48000 | 55000 | 0 | 50000 |
| TOTAL Exports | 50000 | 50000 | 48000 | 55000 | 0 | 50000 |
| Domestic Consumption | 122000 | 122000 | 110000 | 127000 | 0 | 115500 |
| Other Use/Loss | 12000 | 12000 | 9000 | 10000 | 0 | 9500 |
| TOTAL Utilization | 134000 | 134000 | 119000 | 137000 | 0 | 125000 |
| Ending Stocks | 10000 | 10000 | 8000 | 11000 | 0 | 9000 |
| TOTAL DISTRIBUTION | 194000 | 194000 | 175000 | 203000 | 0 | 184000 |

| | | | |
|----------------------------|--------------|---------------|--------------|
| Export Trade Matrix | | | |
| Country: | | Units: | |
| Commodity: | | | |
| Time period: | CY | | |
| Exports for | 1997 | | 1998 |
| U.S. | 1200 | U.S. | 1300 |
| Others | | Others | |
| Japan | 32000 | | 34000 |
| China | 11250 | | 13500 |
| Korea | 2500 | | 4000 |
| | | | |
| | | | |
| Total for Others | 45750 | | 51500 |
| Others not listed | 3100 | | 2200 |
| Grand Total | 50000 | | 55000 |

Roe and Urchin: PSD& Export Matrix

| | | | | | | |
|-----------------------------|--------------------------------------|----------------|------------|----------------|------------|----------------|
| PSD Table | | | | | | |
| Country: | Russian Federation | | | | | |
| Commodity: | Fish,Urchin Roe/Caviar,Livers | | | | | |
| | | 1997 | | 1998 | | 1999 |
| | Old | New | Old | New | Old | New |
| Market Year Begin | | 01/1997 | | 01/1998 | | 01/1999 |
| Beginning Stocks | 0 | 11200 | 0 | 11000 | 0 | 11500 |
| Total Production | 0 | 52000 | 0 | 55000 | 0 | 52000 |
| Intra-EC Imports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Imports | 0 | 500 | 0 | 400 | 0 | 400 |
| TOTAL Imports | 0 | 500 | 0 | 400 | 0 | 400 |
| TOTAL SUPPLY | 0 | 63700 | 0 | 66400 | 0 | 63900 |
| Intra-EC Exports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Exports | 0 | 10000 | 0 | 12000 | 0 | 11000 |
| TOTAL Exports | 0 | 10000 | 0 | 12000 | 0 | 11000 |
| Domestic Consumption | 0 | 28700 | 0 | 28900 | 0 | 27400 |
| Other Use/Loss | 0 | 14000 | 0 | 14000 | 0 | 14000 |
| TOTAL Utilization | 0 | 42700 | 0 | 42900 | 0 | 41400 |
| Ending Stocks | 0 | 11000 | 0 | 11500 | 0 | 11500 |
| TOTAL DISTRIBUTION | 0 | 63700 | 0 | 66400 | 0 | 63900 |

| | | | |
|----------------------------|--------------|---------------|--------------|
| Export Trade Matrix | | | |
| Country: | | Units: | |
| Commodity: | | | |
| Time period: | CY | | |
| Exports for | 1997 | | 1998 |
| U.S. | 50 | U.S. | 100 |
| Others | | Others | |
| Japan | 9000 | | 10500 |
| Korea | 700 | | 930 |
| Switzerland | 100 | | 130 |
| China | 30 | | 45 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Total for Others | 9830 | | 11605 |
| Others not listed | 120 | | 295 |
| Grand Total | 10000 | | 12000 |

Groundfish, Whole/Eviscerated: PSD& Export Matrix

| | | | | | | |
|-----------------------------|--------------------------------------|----------------|---------------|----------------|------------|----------------|
| PSD Table | | | | | | |
| Country: | Russian Federation | | | | | |
| Commodity: | Groundfish, Whole/Eviscerated | | | | | |
| | | 1997 | | 1998 | | 1999 |
| | Old | New | Old | New | Old | New |
| Market Year Begin | | 01/1997 | | 01/1998 | | 01/1999 |
| Beginning Stocks | 450000 | 480000 | 480000 | 460000 | 0 | 410000 |
| Total Production | 290000 | 270000 | 280000 | 275000 | 0 | 2800000 |
| | 0 | 0 | 0 | 0 | | |
| Intra-EC Imports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Imports | 100000 | 100000 | 100000 | 70000 | 0 | 60000 |
| TOTAL Imports | 100000 | 100000 | 100000 | 70000 | 0 | 60000 |
| TOTAL SUPPLY | 345000 | 328000 | 338000 | 328000 | 0 | 3270000 |
| | 0 | 0 | 0 | 0 | | |
| Intra-EC Exports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Exports | 970000 | 970000 | 980000 | 110000 | 0 | 1000000 |
| | | | | 0 | | |
| TOTAL Exports | 970000 | 970000 | 980000 | 110000 | 0 | 1000000 |
| | | | | 0 | | |
| Domestic Consumption | 186000 | 171000 | 176000 | 163000 | 0 | 1630000 |
| | 0 | 0 | 0 | 0 | | |
| Other Use/Loss | 140000 | 140000 | 140000 | 140000 | 0 | 140000 |
| TOTAL Utilization | 200000 | 185000 | 190000 | | 0 | 1770000 |
| | 0 | 0 | 0 | 177000 | | |
| | | | | 0 | | |
| Ending Stocks | 480000 | 460000 | 500000 | 410000 | 0 | 500000 |
| TOTAL DISTRIBUTION | 345000 | 328000 | 338000 | 328000 | 0 | 3270000 |
| | 0 | 0 | 0 | 0 | | |

| | | | |
|----------------------------|-----------------|---------------|-----------------|
| Export Trade Matrix | | | |
| Country: | | Units: | MT |
| Commodity: | | | |
| Time period: | CY | | |
| Exports for | 1997 | | 1998 |
| U.S. | 25300 | U.S. | 26000 |
| Others | | Others | |
| Japan | 645000 | | 710000 |
| China | 200000 | | 240000 |
| Korea | 55000 | | 45000 |
| | | | |
| Total for Others | 27705800 | | 31431000 |
| Others not listed | 44700 | | 79000 |
| Grand Total | 970000 | | 1100000 |

Crabs and Crabmeat: PSD& Export Matrix

| | | | | | | |
|-------------------------------|-------------------------------|----------------|--------------|----------------|------------|----------------|
| PSD Table | | | | | | |
| Country: | Russian Federation | | | | | |
| Commodity: | Crab and Crabmeat | | | | | |
| | | 1997 | | 1998 | | 1999 |
| | Old | New | Old | New | Old | New |
| Market Year Begin | | 01/1997 | | 01/1998 | | 01/1999 |
| Beginning Stocks | 3000 | 2200 | 2200 | 2050 | 0 | 2000 |
| Total Production | 52000 | 48000 | 50000 | 49000 | 0 | 50000 |
| Intra-EC Imports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Imports | 800 | 750 | 800 | 700 | 0 | 700 |
| TOTAL Imports | 800 | 750 | 800 | 700 | 0 | 700 |
| TOTAL SUPPLY | 55800 | 50950 | 53000 | 51750 | 0 | 52700 |
| Intra-EC Exports | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Exports | 24400 | 24000 | 24800 | 25000 | 0 | 26500 |
| TOTAL Exports | 24400 | 24000 | 24800 | 25000 | 0 | 26500 |
| Domestic Consumption | 27000 | 22900 | 24000 | 22750 | 0 | 22200 |
| Other Use/Loss | 2200 | 2000 | 2100 | 2000 | 0 | 2000 |
| TOTAL Utilization | 29200 | 24900 | 26100 | 24750 | 0 | 24200 |
| Ending Stocks | 2200 | 2050 | 2100 | 2000 | 0 | 2000 |
| TOTAL DISTRIBUTION | 55800 | 50950 | 53000 | 51750 | 0 | 52700 |

| | | | |
|----------------------------|--------------|---------------|--------------|
| Export Trade Matrix | | | |
| Country: | | Units: | |
| Commodity: | | | |
| Time period: | CY | | |
| Exports for | 1997 | | 1998 |
| U.S. | 900 | U.S. | 1000 |
| Others | | Others | |
| Japan | 21000 | | 21800 |
| Korea | 1900 | | 2000 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Total for Others | 22900 | | 23800 |
| Others not listed | 200 | | 200 |
| Grand Total | 24000 | | 25000 |