The Russian aquaculture sector currently is responsible for approximately four percent of Russia’s total fish production. While production in CY 2016 was more than 172,100 MT, an 11 percent jump over CY 2015, industry specialists believe that development of the sector still lags behind its potential. Russia’s share of world aquaculture production is estimated at only 0.2 percent. The government continues to push for further development of the sector, however, lack of government support and investment, outdated equipment and production technologies, as well as a deficit in feed and brooding stock, are major constraints to further development of the sector.
General Information:

Executive Summary

The Russian aquaculture sector currently is responsible for approximately four percent of Russia’s total fish production. While production in CY 2016 was more than 172,100 MT, an 11 percent jump over CY 2015, industry specialists believe that development of the sector still lags behind its potential. Russia’s share of world aquaculture production is estimated at only 0.2 percent. The government continues to push for further development of the sector, however, lack of government support and investment, outdated equipment and production technologies, as well as a deficit in feed and brooding stock, are major constraints to further development of the sector.

Structure of Aquaculture in Russia

During the “Aquaculture 2017” Conference researcher from the All-Russian Scientific and Research Institute of Fish Breeding Irrigation, Yuriy L’vov, presented a study on the structure of aquaculture in Russia. Freshwater aquaculture accounts for almost 85 percent of the industry, whereas mariculture accounts for 15 percent. The predominate fish species raised in Russian freshwater aquaculture are: carp, sturgeon and salmon. Carp species dominate and account for 77 percent share of the total production in fresh water aquaculture. Seventy-five percent of mariculture production consists of salmon species, followed by molluscs (12 percent) and aquatic plants (nine percent). Fish producers and traders report a stable increase in production of salmon species driven by current consumer demand. Locally produced salmon became more popular among consumers following Russia’s restrictions on imports of salmon from Norway, the major supplier of salmon to Russia.

Chart 1. Russia: Structure of Fresh Water Aquaculture, 2016
In addition to 172,100 MT that is produced in aquaculture, experts estimate that 100,000 MT of fish are harvested annually from freshwater basins (rivers, ponds and lakes) throughout Russia. However, this represents less than half of normal freshwater fish consumption recommended by the Russian Ministry of Health. Russia needs to produce 320,000 MT of freshwater fish annually.
to reach the recommended levels. Currently annual consumption levels are at 1.7 kg per capita.

Production

Russia has vast water resources that are suitable for aquaculture development. However, only a small part of these resources are currently utilized. Russia’s water resources include: more than 20 million hectares of lakes, approximately five million hectares of water storage, nearly half a million hectares of offshore sea strips, more than one million hectares of agricultural ponds, and almost 150,000 hectares of fisheries waters. Significant water reservoirs are located in the Siberian, North-Western and Ural Federal Districts (FD). In addition, the total area of offshore strips in the Barents, White, Azov, Black, Caspian and Far Eastern seas is estimated at 38 million hectares. Currently fish farms occupy only about 110,000 hectares of fisheries ponds, and 25,000 hectares of offshore strips for production of aquatic organisms.

The Federal Fisheries Agency (FFA) reports that starting from CY2016, 146 investment projects for a total investment of 66.6 billion rubles are under implementation in aquaculture. According to the FFA, there are 3,500 fish farms managing 3,800 fishing sites with a total area of 400,000 hectares in Russia. Typically, these are small farms with an annual production capacity of 500 MT of fish. In an effort to stimulate further development of the sector, in 2016 FFA allocated an additional 700 water sites for industrial fish farms with a total area of 39,500 hectares. Expansion of the area for fish breeding will result in an increased demand for brooding stock and feeds.

During the International Conference “Aquaculture 2017” that took place in Moscow in February, 2017, Alexander Nevredinov, Head of the Eurasian Aquaculture Alliance (EAA), a member of the working group of the Eurasian Economic Commission (EEC), presented objectives and priorities of the organization. Initially, EAA was organized to support government initiatives to develop the aquaculture sector and currently it unites about 50 different fisheries companies, organizations, and associations, including representatives from the Public Council of the FFA.

The objectives of the EAA include:

1) Develop national technical guidelines on aquaculture, including certification, standardization, products and technologies;
2) Provide consulting, legal and scientific support to aquaculture farmers in the EAEU;
3) Provide financial support for promotion of innovative projects;
4) Ensure integration with foreign partners;
5) Plan and monitor distribution of aquaculture products;
6) Participate in the development of regulation of financial support; and
7) Develop a new system of direct supply from producers to consumers, with the help of IT.

In his presentation, Mr. Nevredinov provided data on aquaculture production in the countries of the Eurasian Economic Union (EAEU). Russian aquaculture production accounts for more than 70 percent of total EAEU production. Russian production is followed by production in the Armenian Republic and the Republic of Belarus. Aquaculture production in the Kyrgyz Republic and in Kazakhstan production is insignificant.
**Republic of Armenia**: Aquaculture production of aquaculture has increased 31 percent in the last two years and estimated at 15,100 MT for 2016;

**Republic of Belarus**: Aquaculture production in the Republic of Belarus is insignificant. During the period from 2013 to 2015 aquaculture production dropped 4,600 MT, to 9,600 MT;

**Republic of Kazakhstan**: Aquaculture production is estimated at 0,729 MT;

**Kyrgyz Republic**: Between 2013 and 2015 aquaculture production increased 2.6 times, to 1,200 MT; and

**Russian Federation**: Aquaculture production from 2013 to 2015 was estimated at 153,000 to 160,000 MT. In 2016, production increased by 11 percent, to 172,100 MT. The State Program “On the Development of the Fisheries Sector until 2020” set an objective for aquaculture production to reach 315,000 MT by 2020. Reaching this goal would require the current production level to double over the remaining three years.

The three leading Russian regions for aquaculture production in 2016 were: the Southern Federal District – with a total production of 63,500 MT of fish, followed by the North-Western FD – with a total production of 37,000 MT and the Central FD – with a total production of 24,000 MT. Aquaculture production in the Ural and Siberia Federal Districts, considered by the FFA as the regions with the greatest potential, is currently estimated at only 7,500 MT and 5,600 MT, respectively.
Chart 5. Russia: Aquaculture Production by Province in 2016, in 1,000 MT

Source: Federal Fisheries Agency

Improvements Needed for the Development of the Aquaculture Industry

According to the Federal Fisheries Agency, there are a number of regulations in aquaculture that are required for further development of the sector. The Head of the Office of Aquaculture at the FFA, Victor Asharin, announced during the International Conference “Fish 2017,” three programs FFA has initiated: 1) normative regulation; 2) measures of financial support; and 3) science and research support.

- Regulatory Developments

Mr. Asharin stated that the greatest achievement in regulatory measures for the sector was the approval of a regulation which permits responsible leasers of fish-breeding plots to extend lease contracts without competition. FFA believes this measure will stimulate long-term planning and attract investment into the sector.

Asharin also reported that discussions of the rules pertaining to protection of forestry areas around water basins have been ongoing but the lack of resolution has impacted construction of infrastructure for processing. Reportedly the Ministry of Agriculture and the Ministry of Natural Resources are currently developing a regulation to provide for the use of water basins located in forested areas and land intended for use in agriculture to set up fish-breeding farms for aquaculture producers.

In addition, the Federal Veterinary and Phytosanitary Service (VPSS) is developing requirements for aquaculture products and plans for GOR approval in the near future.

Russia is making continued efforts in developing regulatory norms for the aquaculture industry.
Currently the development of the Russian aquaculture industry is outlined in the following basic documents:


3. State program “Development of Fisheries Sector” (approved by the Government regulation # 314 dated April 15, 2014;


- Financial Support

Recently the government allocated 372.5 million rubles to compensate interest rate payments on 2017 projects for the development of aquaculture and sturgeon farming. However, industry sources report that this mechanism has not worked well since the banks are not willing to provide long term credit to aquaculture producers. According to conference participants, direct subsidy support for feed or brood stock would be more effective for producers. Currently the Ministry of Agriculture and the FFA are working to improve the financial support mechanism to better meet the needs of producers.

Industry analysts estimate that the initial capital needed for the sector is 1.5 billion, versus the 400 million ruble allocation made by the “Development of Fisheries Sector” program of the GOR. These sources report that the profitability of the average aquaculture farm was between 20 and 25 percent in 2013. However in 2014, with the ruble devaluation and the introduction of the Russian counter-sanction food embargo, average profitability dropped to between five percent and seven percent. Additionally, for the sector to grow, more investment is needed for feed, electricity, and brooding stock. Please refer to FAS Gain Report for more information on industry concerns about sustainable development of the aquaculture sector.

According to Grigoriy Shalyapin, the Head of the State Cooperative Association, Rosrybkhooz, most Russian provinces face a deficit in brooding stock. Mr. Shalyapin reported that currently there are 20 brooding stock production facilities in Russia and that more than 90 percent of these
facilities are concentrated in the Moscow area and the southern provinces of Russia. There is only one facility operating in the territory of Altay, and only one facility in the Far Eastern territories. In both of these regions there is high potential for aquaculture production due to the availability of water basins and the proximity to the sea. (See more on brooding stork, below.) In addition, Shalyapin noted that the rules for obtaining “status” as a breeding facility need to be simplified. Such breeding facilities receive additional support from both the federal and the regional governments. Shalyapin stated that starting in 2012, aquaculture producers stopped receiving financial support from the State Program “On Development of Agricultural Sector.” For example, the State Program “Development of Fisheries Sector” does not envision direct or short-term subsidies for feed purchase, which would be most efficient for producers. Industry sources believe that since 2012 the loss in state financial support to aquaculture industry is estimated at seven billion rubles.

- **Science and Research**
  Another challenge for the sector is the isolation of science and research. Reportedly, in 2017 scientific research institutions will receive better financing for aquaculture programs and government officials are calling for improved interaction between research institutions and business.

- **Improved Access to Inputs – Especially Brooding Stocks and Feed**

Different sources estimate that almost 95 percent of brooding stock is currently imported, since local brooding stock is more expensive than imports and not generally a quality product.

Different sources estimate production of aquaculture feed in Russia in 2016 at about 100,000 MT, while currently the demand for feed is between 200,000 - 250,000 MT. Demand for feeds for valuable fish species such as sturgeon and trout, is estimated at 50,000 MT. Russia does not produce feeds for these species. Currently, ninety percent of the feeds are imported. According to the objectives stated in the State Program “On Development of the Fisheries Sector,” demand for feed will increase to between 400,000 MT and 450,000 MT by 2020.

Since both aquaculture feed and brooding stock materials are not under the Russian Government counter-sanctions embargo imposed in August 2014, U.S producers of brooding stock and aquaculture feed could potentially supply product to the Russian market.

On August 20, 2014, the Government of Russia issued a decree amending the list of banned agricultural products from the United States, Canada, European Union, Australia, and Norway, to exclude certain agricultural items, including Atlantic salmon fry and trout fry. This measure was aimed to ensure that there is available capacity for commercial fish farming. Domestic production of smolt is currently able to meet only five percent of the existing needs of Russian commercial fisheries. The full text of the Resolution is available at RS1455 Amended List of Banned US Agricultural Products.

On June 25, 2015 the Government then issued decree No. 625 of June 25, 2015, amending the list of agricultural products to exclude an additional type of fry trout, as well as young oysters and mussels (spat) from the ban. http://fasintranetapps-