



Ministry of Foreign Affairs

Poultry meat and egg production sector analysis in Serbia

Commissioned by the Netherlands Enterprise Agency

*>> Sustainable. Agricultural. Innovative.
International.*



Government of the Netherlands

The Embassy of the Netherlands in the Republic of Serbia

“Poultry meat and egg production and processing sector analysis in Serbia”

Author: prof. Dejan Krnjaić Vet-Agri Consulting Beograd

Palmira Toljatija 4 Novi Beograd 11070 Serbia

Table of Contents

1. Executive summary	3
2. General introduction	5
2.1 Overview of the whole supply chain	5
2.2 Inputs – breeding and hatchery, feed	6
2.3 Production and sale	8
3. Serbia’s Poultry Sector	10
3.1 Sector overview (market structure, sector organization (individual and collective) and main stakeholders)	10
3.2 Structure of poultry meat production and egg production	11
3.3 Total number of registered/approved chicken farms in Serbia	13
3.4 Number of facilities for poultry slaughtering, cutting and processing of meat	14
3.5 Total annual production of poultry meat and eggs in Serbia	16
3.6 Total number of chickens held on farms in Serbia	19
3.7 Total number of chicken farms producing organic table eggs and poultry meat in Serbia	21
3.8 Total annual consumption of poultry meat and table eggs in Serbia	21
3.9 Average livestock density (poultry per ha) in Serbia	22
3.10 Poultry representation (market organizations) in Serbia	23
3.11 International trade - exports and imports and FTAs	23
3.12 Government policies with an impact on the poultry sector	32
3.12.1 EU pre-accession assistance for rural development (IPARD)	32
3.12.2 The National Rural Development Programmes (NRDP)	35
3.13.3 Harmonization of national legislation with EU legislation	36
4. SWOT (Strength, Weakness, Opportunity, Threat) analysis of the sector	39
5. Potential business opportunities for Dutch poultry businesses (<i>business and investment cases</i>)	41
6. Conclusion: possible ways forward	42

1. Executive summary

Poultry meat and egg production and processing sector analysis in Serbia was conducted upon a request of The Embassy of the Netherlands in the Republic of Serbia and written by Serbian consultant prof. Dejan Krnjaic.

This sector analysis provides background information and an overview of the sector in Serbia, an analysis of the current situation, including an analysis of the legal framework, as well as an outline of the potential opportunities for Dutch businesses in Serbia. It addresses layer production, broiler production, and egg production.

Poultry production has a long tradition in Serbia and has always been an important livestock sector, as well as the most represented branch of animal husbandry on agricultural holdings. In the Republic of Serbia, two poultry production systems coexist: traditional backyard production and commercial poultry, which has recently become increasingly dominant. Even today, half of all agricultural holdings raise laying hens and broilers, mostly for their own consumption.

According to the 2012 Census of Agriculture, poultry production was the most industrialised branch of agriculture, with 55.69 percent of poultry raised on only 539 large farms with 5,000 or more heads, or 0.13 percent of total agricultural holdings.

Because a portion of poultry production occurs on small backyard farms, calculating the exact number of poultry in the Republic of Serbia is difficult, however, it is estimated that around 70 million broilers and 9 million laying hens are raised annually.

In 2020, 115 thousand tonnes of poultry meat and 1.71 billion table eggs were produced in the Republic of Serbia. In this regard, per capita poultry meat consumption was 17.6 kilogrammes, while per capita egg consumption was 12.6 kilogrammes, or 252 eggs. The average yearly consumption of eggs per capita in Serbia is high, and the average consumption of poultry meat is rising significantly.

With very small exports and imports, the Republic of Serbia's poultry production is mostly focused at the domestic market. Poultry production in Serbia is nearly self-sufficient, and further development without expanding into new international markets would result in an oversupply of poultry meat and table eggs in the country.

The high price of beef, as well as potential shortages and high prices of pork as a result of the African swine fever epidemic, could lead to an increase in chicken consumption in Serbia. Domestic egg production might rise as a result of higher egg processing volumes and the substitution of current imports of some fresh or dried egg products. After the signing of the Open Balkan Initiative in 2021, products can now be sold in Albania, in addition to the CEFTA signatories of Montenegro, North Macedonia, and Bosnia and Herzegovina.

The European Commission's Directorate General (DG) for Health and Food Safety conducted a remote assessment in Serbia from June 23 to July 2, 2021. The assessment focused on the regulatory and control systems in place that govern the production of poultry and/or poultry products for export to the European Union. After resolving the observed non-compliances, Serbia is quite likely to receive export approval for chicken meat and class B eggs to the EU in 2022 or 2023.

The poultry meat and egg production and processing sectors in Serbia must strengthen their level of concentration, specialisation, vertical integration, and efficiency. To achieve this, it is necessary to improve technology, reduce production costs, and improve marketing efficiency.

There is presently no appropriate sector organisation in Serbia that includes the majority of producers. It is necessary to build a strong professional branch organisation that will play an important role not only in private-public discourse but also in informing producers about the newest technology and trends in poultry meat and egg production and processing.

2. General introduction

2.1 Overview of the whole supply chain

The Republic of Serbia has quite favourable conditions for poultry production. In previous years, poultry production accounted for about 12 % of the total value of livestock production in Serbia, and 4-5 % of total agricultural production (the Statistical Office of the Republic of Serbia - SORS, 2021).

In addition to the dominance of the rural population, there is also the availability of natural resources, primarily land resources of almost 0.7 ha of agricultural land per capita. This natural resource has not been rationally used and the average size of an agricultural household in the Republic of Serbia is just 5.44 ha, indicating a very unfavourable ownership structure that has a negative impact on agricultural output and competitiveness.

The country is a major exporter of field crops, one of the 10 top exporters of corn in the world, and soybean is also exported in large quantities.

Furthermore, the experienced personnel and scientific potential that had previously enabled the development of specialised intensive poultry production can still be relied upon. The production of poultry has drastically decreased over the past three decades, despite the industry's importance.

Several factors have contributed to this decline, including (Rodić et al., 2010):

- significant shrinkage of the national market, which began with the disintegration of the Federal Republic of Yugoslavia in the early 1990s;
- decreased demand for animal products due to the lowering of living standards;
- non-compliance with EU standards, which has limiting effects on exports to EU markets;
- it was mainly unsuccessful privatisation that led to the bankruptcy and collapse of many state-owned farms, which until the beginning of the privatisation process used to be the biggest and most developed in the entire sector;
- low international competitiveness due to high production costs, technical antiquation of processing capacities, and a very limited range of final poultry products;
- in general, there is a lack of vertical integration and poor interactions between producers and processors; and
- insufficient or no institutional support for poultry production.

The demographic drop in Serbia must be emphasised. The Republic of Serbia's population fell from 7.5 to 6.9 million people between 2001 and 2021.

When it comes to the structure of Serbia's poultry population by species, chickens account for 94%, whereas other species are less common, accounting for around or below 1%: turkeys 1.27%, ducks 1.03%, geese 0.46%, and others 0.61%.

The poultry sector in Serbia is divided into three categories of production:

1. traditional, extensive backyard/household poultry production,
2. semi-intensive or intensive, small to medium scale, market-oriented, commercial poultry production, and
3. intensive, large-scale, industrial poultry production.

For decades, backyard and small-scale production in Serbia accounted for half of poultry meat production and two-thirds of egg production. As a result of industrialization and vertical integration of poultry production during the previous decade, the situation has changed.

Thousands of poultry farmers in Serbia raise small flocks of laying hens and broilers, ranging from a few to several dozen or hundreds. They primarily produce eggs and poultry meat for their own consumption, but they also sell surpluses on the market, generally outside of legal channels, by exploiting consumer perceptions of their traditional production methods.

In 2017, the Regulation on small quantities of primary products used to supply consumers, areas for performing these activities, and deviations related to small entities in the business of food of animal origin was adopted and published (Official Gazette of the Republic of Serbia 111/2017). The regulation specifies the small quantities of primary products intended for consumers and the opportunity for small food business operators to deviate from food safety rules.

If the facility is registered, small producers can sell 500 eggs per week or 10,000 eggs per year. The sale is allowed on its own and neighbouring municipalities' territory, by direct sale on the farm, through the domestic table, local market, local sale by home delivery ("door to door"), local retail or at a local event.

If the facility is approved, small producers can sell 100 broilers or 20 geese, ducks or turkeys per week or 5,000 or 1,000 per year, respectively. The sale is allowed on its own and neighbouring municipalities' territory, by direct sale on the farm, through the domestic table, local market and local retail.

There are also a large number of small-to-medium-sized, specialised, intense or semi-intensive producers. Although they mostly produce for local markets, some of these producers are linked to market access integrators. On average, such farms raise 10,000–15,000 broilers and 1,000–5,000 layers, with productivity and economic outcomes depending on a range of factors like the scope of production, partnerships with integrators, intensity level, and sales channel employed.

Large-scale (industrial) systems, on the other hand, now account for the majority of poultry meat and eggs produced in the Republic of Serbia.

2.2 Inputs – breeding and hatchery, feed

There are no grandfather flocks in Serbia, and all parent flocks are imported from the EU. In February 2022, there were 55 approved parent flock farms in the register of the Ministry of Agriculture, Forestry, and Water Management's Veterinary Directorate.

According to the data from the Business Association of Poultry Producers of Serbia, there were 386,800 heavy breed parents in exploitation and 278,100 in raising on September 1, 2021. The number of light-breed parents in Serbia is estimated to be around 50,000.

In addition, Serbia imports a huge quantity of fertilised eggs and day-old chicks. 14 million fertilised eggs (mostly from Bosnia and Herzegovina and Bulgaria) and 5.7 million day-old chicks (primarily from Croatia and Hungary) were imported in 2021. Imported fertilised eggs and day-old chicks contribute to more than a quarter of Serbia's total broiler and laying hen production.

In Serbia, around 100 hatcheries have been approved, with 30 of them hatching the bulk of day-old chicks. In 2021, 8.66 million light breed chicks and 66.42 million heavy breed chicks were hatched in Serbia, according to the Statistical Office of the Republic of Serbia.

In Serbia, Ross 308 is the most popular heavy breed for broiler production, accounting for over 95% of the total. COBB 500 is also raised. Of the light breeds, those with brown egg shells prevail, with Lohman Brown and Isa Brown being the most common.

Feed prices have a major impact on overall poultry production costs, accounting, for example, for more than 70% of total expenses in egg production. According to the Law on genetically modified organisms ("Official Gazette of RS", No. 41/2009), Serbia has zero tolerance for the production and trade of genetically modified organisms (GMO), which prohibits the use of GMO soybean and maize in food and feed.

Because non-GMO soybean is roughly 30% more expensive than GMO soybean, feed and production costs are at least 10% higher than those with GMO soybean. However, in the Republic of Serbia, GMO-free chicken meat and eggs have not been sufficiently promoted as a competitive advantage over foreign competitors on the market.

There is an urgent need in Serbia, maybe more than anywhere else in the world, to find a less expensive source of protein in poultry nutrition, such as canola meal and other oilseed meals, peas and beans, brewer's spent grains, insect meal, or single-cell protein. It is important to note that, in recent years, customers have preferred meat produced on soy-free feeds, as well as slow-growing/heritage broiler chickens, above conventionally bred broiler chickens.

Following the adoption of Commission Regulation (EU) 2021/1372 on August 17, 2021, and the amendment of Annex IV to Regulation (EC) No 999/2001 of the European Parliament and of the Council, insect-derived proteins are allowed for use in pig or poultry feed, together with pet food (e.g. dogs, cats, birds or reptiles) and fur animals (e.g. mink). The Republic of Serbia is working on legislation on animal feed that would allow alternative protein sources (such as insects) to be used, and it is expected to be passed by the Assembly by the end of 2022.

Large poultry companies with modern, intensive, commercial farms have closed integrated systems for both raw material and feed production. According to the Statistical Office of the Republic of Serbia, only around 30% of livestock in Serbia are fed with industrially manufactured feed.

Serbia produces roughly 2,100,000 tonnes of animal feed and 83,000 tonnes of premixes per year. Larger feed manufacturers operate through distribution centres or their retailers. In addition to their primary activity, these companies produce and trade cereals, oilseeds, fertilizers, components for animal feed, pharmaceuticals, pesticides, etc.

Numerous supplements (minerals, vitamins, amino acids) and additives are required in feed production (probiotic, prebiotic, acidifier, enzymes, emulsifier, toxin binder, antioxidant, herbal growth promoters...). The Republic of Serbia is completely dependent on the import of supplements and additives.

The largest producers of feed are:

- GEBI DOO from Čantavir (<https://www.gebi.rs>),
- Hrana Produkt from Sremska Mitrovica (<https://hranaprodukt.com>),
- Patent Co Company from Mišićevo (<http://www.patent-co.com>),
- De Heus from Šabac (<https://www.deheus.rs>),
- ProAgrar from Jagodina (<http://www.proagrarplus.rs>),

- Bečajka from Bečaj (<http://www.erakovic.rs>),
- 100% from Belgrade (<https://www.stoposto.rs>), and
- UBM FEED from Šid (<https://www.ubm.hu/sr/proizvodnja-stocne-hrane/>).

Feed producers have lately emerged in Serbia as market integrators, managing broiler production and sales. As a result, medium-sized farmers are included in the integrated production system.

2.3 Production and sale

According to the Farm Structure Survey (FSS) statistics from 2018, there were 564,541 agricultural holdings, with the great majority (99.7%) being family-owned. In all regions, the number of agricultural holdings is falling, while the average size has grown from 5.4 ha (the Census of Agriculture in 2012) to 6.2 ha (FSS in 2018).

In the Republic of Serbia, according to the Farm Structure Survey conducted in 2018, roughly 340,000 or 59.7% of all agricultural holdings are involved in poultry farming, with 23.2 million heads kept (SORS, 2019). In comparison to the Census of Agriculture in 2012, the number of holdings has decreased by 17.8%, while the number of poultry has decreased by 13.2%.

However, there has been a positive trend in Serbia of increasing the number of poultry for several years (Table No. 1 and Table No. 2).

Table No. 1 – The chain indices of agricultural production 2017/2019 - previous year = 100

	Livestock breeding				
	All	Cattle breeding	Pig breeding	Sheep breeding	Poultry breeding
2017	101.5	100.3	100.7	107.4	102.1
2018	101.3	99.4	98.6	103,3	106.5
2019	100.9	101.2	102.5	95.2	103.8

Source: Statistical Office of the Republic of Serbia

Table No. 2 - The annual balance of livestock in the Republic of Serbia [Thousand heads]

	2015	2016	2017	2018	2019	2020	2021
Cattle	916	893	899	878	898	886	860
Pigs	3284	3021	2911	2782	2903	2983	2868
Sheep	1789	1665	1704	1712	1642	1685	1695
Poultry	17450	16242	16338	16232	15780	15249	15348

Source: Statistical Office of the Republic of Serbia

According to the data on the annual balance of livestock in the Republic of Serbia as of December 1st, 2021, and relative to the data as of December 1st, 2020, the total number of poultry increased by 0.7%. Compared to the ten-year average (2011-2020), the total number of poultry decreased by 9.5% (SORS, 2022). Poultry farming is the most prominent in Region Šumadija and Zapadna Srbija (42.25%) and in Region Vojvodina (36.56%).

After certain fluctuations in previous years, the annual production has stabilised at roughly 115 thousand tonnes of poultry meat and 1.7 billion eggs. Tables 3-6 contain information on livestock production, meat production, the number of slaughtered chickens, the number of laying hens, the average hen laying capacity, and the number of laid eggs in the Republic of Serbia.

Table No. 3 – Livestock production – an increase of livestock in the Republic of Serbia [Thousand tonnes]

	2015	2016	2017	2018	2019	2020
Increase of cattle	155	152	153	152	155	153
Increase of pigs	415	434	437	431	441	445
Increase of sheep	65	58	63	64	63	64
Increase of poultry	116	117	129	143	156	161

Source: Statistical Office of the Republic of Serbia

Table No. 4 - Meat production in the Republic of Serbia [Thousand tonnes]

	2015	2016	2017	2018	2019	2020
Beef	77	77	71	76	71	75
Pork	278	301	307	303	298	299
Mutton	30	34	30	32	34	31
Poultry	86	88	95	106	114	115

Source: Statistical Office of the Republic of Serbia

Table No. 5 - Number of slaughter chicken in the Republic of Serbia [Thousand heads]

	2015	2016	2017	2018	2019	2020
Chicken	39309	41466	50630	68409	72375	71543

Source: Statistical Office of the Republic of Serbia

Table No. 6 - Number of laying hens, average hen laying capacity and number of laid eggs in the Republic of Serbia in the period 2010-2020

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of laying hens (million)	9,41	9,10	10,43	9,68	11,49	10,22	9,13	8,85	8,89	8,86	8,51
Hen laying capacity (average of eggs per year)	181	193	172	181	165	202	203	199	201	200	201
Number of table eggs (billion)	1,71	1,76	1,79	1,75	1,89	2,06	1,85	1,76	1,78	1,77	1,71

Source: Statistical Office of the Republic of Serbia

3. Serbia's Poultry Sector

3.1 Sector overview (market structure, sector organization (individual and collective) and main stakeholders)

The Republic of Serbia has a long tradition and natural resources for self-sufficient but also export-oriented poultry production. Poultry production is the most prevalent branch of livestock production on the agricultural holdings in the Republic of Serbia. According to statistics, poultry is raised on about six out of ten agricultural holdings (the Farm structure survey – SORC, 2018).

At the same time, poultry production is agriculture's most industrialised branch in Serbia. According to the 2012 Census of Agriculture in Serbia, 55.69% of poultry was raised on just 539 large farms with 5,000 or more heads, accounting for 0.13% of all agricultural holdings. With 11.8% of the overall production value, poultry production is the third most valuable livestock sector.

As already mentioned, there are three different types of poultry production in Serbia:

1. traditional, extensive backyard/household poultry production;
2. semi-intensive or intensive, small to medium scale, market-oriented, commercial poultry production; and
3. intensive, large-scale, industrial poultry production.

During the transition, large industrial farms experienced various ownership changes. Many have failed, while others have successfully changed owners and are still in operation. In recent years, there has been a tendency toward growing integrated poultry production, particularly in broiler production.

Until ten years ago, small, medium, and backyard poultry production accounted for more than half of total poultry meat production and more than two-thirds of total egg production. The share of non-commercial output in overall production has decreased as commercial farm capacity has grown and tougher national rules in accordance with EU requirements have been implemented.

The retail sector in Serbia has been expanding since the 2000s, confirming the “retail revolution” trend (FAO, 2020). This sector has been characterised by the strengthening positions of the large regional/international players, who demand strict guarantees on quality and food safety at

competitive prices. In Serbia, the leading retail chains are Delhaize (Shop & Go, Maxi and Tempo) and Mercator S (Idea, Roda and Mercator). Other international retail chains currently operating in the Serbian market are Metro, Lidl, Super Vero and more. The leading domestic retail trade chains in Serbia are DTL, DIS, Aman, Univerexport and Gomex.

In the Republic of Serbia green markets are a very important venue for the direct marketing of agricultural products. Vegetables and fruits are traditionally sold at the green markets, so this direct marketing channel will likely remain important in the future (Zarić et al., 2016). Despite the fact that broiler and egg sales have declined significantly over the previous decade as a result of the retail boom and tighter national regulations, they still represent a significant portion of the total value of agricultural products sold on green markets, which was 13.3% in 2018 (Statistical Office of the Republic of Serbia, 2019).

3.2 Structure of poultry meat production and egg production

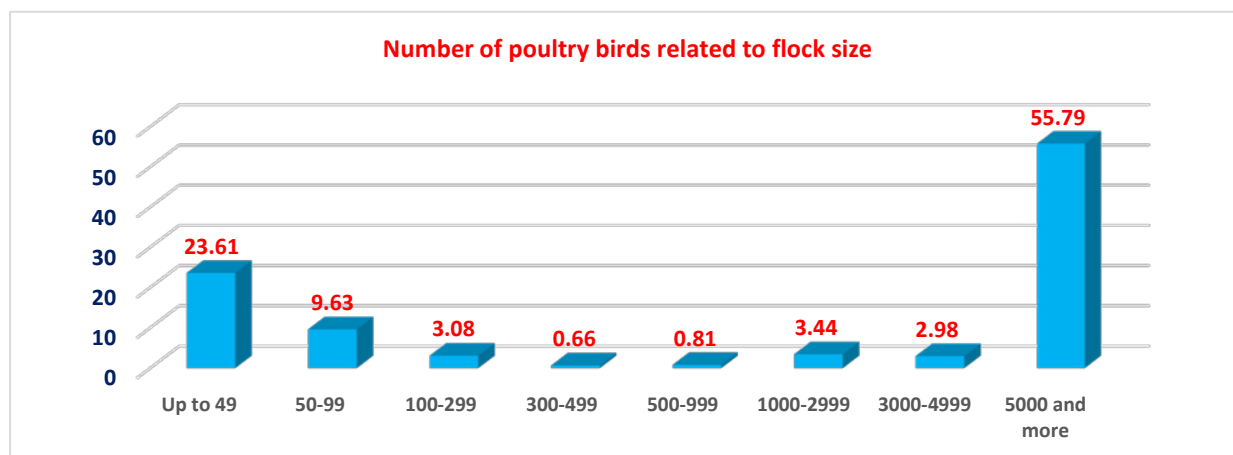
According to the Census of Agriculture in 2012, poultry production took place on 413,792 farms, or 65.5% of all agricultural holdings, while the Agricultural Survey conducted in 2018 estimated that approximately 340 thousand farms, or 59.7% of total agricultural holdings, were involved in poultry production.

Table No. 7 - The number of farms based on flock size and number of chickens

Flock size	Number of farms	Structure (%)	Number of poultry	Structure (%)
1-49	362.990	87,72	6.306.185	23,61
50-99	42.425	10,25	2.572.003	9,63
100-299	6.178	1,49	823.718	3,08
300-499	510	0,12	175.354	0,66
500-999	349	0,08	216.096	0,81
1.000-2.999	581	0,14	920.046	3,44
3.000-4.999	220	0,05	794.907	2,98
5.000 and more	539	0,13	14.902.911	55,79
Total	413.792	100,00	26.711.220	100,00

Source: Statistical Office of the Republic of Serbia, 2012

Chart No. 1 – Number of poultry birds related to flock size



Source: Statistical Office of the Republic of Serbia, 2012

A large number of small farms are characterized by the traditional way of production of several categories and types of poultry, as well as limited production capacities, with products primarily intended for their own households.

More rigorous regulations in Serbia have made it harder to sell poultry meat at green markets in recent years. Table eggs can be sold on green markets or locally, but only in limited weekly or annual quantities. In recent years, there has been tremendous turbulence in Serbia, particularly in poultry meat production, which has been followed by the decline of a significant number of small and medium-sized producers.

Several large commercial producers have succumbed to strong market competition, and the top ten producers currently produce about 60 million broilers on their farms or through integration, accounting for 85 percent of Serbia's total production.

The largest producers of broilers in Serbia are the following companies:

- Perutnina Ptuj-Topiko Bačka Topola (<https://www.perutnina.com/rs/sr/kontakt/>),
- Industrija mesa Matijević Žitište (<https://matijevic.rs/>),
- Vindija Lajkovac (<http://www.vindija.hr/O-nama/Poslovni-sustav-Vindija/Vindija-u-regiji/Srbija.html?Y2dcNDAsY2IcODI%3D>),
- Erkom ltd Topola (<https://erkom.ltd/>),
- Cmana Krnjevo (<http://www.cmana.rs/>),
- Bro Živa Bačka Topola (<https://pretraga.pkspartner.rs/sr/kompanija/a98df89b9919960f/pp-bro-ziva-doo-backa-topola>),
- Vranić Farm Kać (<https://www.vranicfarm.rs/>), and
- Agro Đole Jagodina (<https://www.mojakompanija.com/agro-ole-doo/>).

From at least 200 thousand to over a million broilers per cycle, each of these producers retains on their farms or organises production and sales as integrators.

At the beginning of 2019, in Serbia, a sectoral analysis of egg production was prepared for inclusion in IPARD financing and all farms with more than 5,000 laying hens were inspected. The table below shows the total number and structure of large commercial egg producers in Serbia.

Table No. 8 - Total number and structure of large commercial egg producers

Number of laying hens	Number of holdings/farms
5.000 – 10.000	89
10.000 – 25.000	30
25.000 – 50.000	17
50.000 – 100.000	7
100.000 – 150.000	4
150.000 – 200.000	4
200.000 and more	2
Total	153

Source: Veterinary Directorate, March 2019

Extensive egg production occurs on small or backyard holdings, primarily for self-consumption. In certain periods of the year, these households have a surplus of eggs, which are placed on the market in accordance with the Regulation on small quantities of primary products ("Official Gazette of the Republic of Serbia" No. 111/2017). These small producers can sell or deliver eggs directly to the final

consumer or local retail establishments in quantities of up to 500 eggs per week and 10,000 eggs annually. The selling area is their own municipality and the surrounding municipalities, and the selling chains might include a household, a local green market, a home-delivery ("door to door") sale, a local retail store, or local events (short food supply chains).

Producers with semi-intensive or intensive small-scale production raise chickens in agricultural holdings or farms approved by the Veterinary Directorate with a capacity of 350 to 5,000 hens. The overall number of these producers is around 800, with the majority of them being well-organized family holdings or farms that mostly sell eggs locally.

In the Republic of Serbia, there are around 150 large commercial farms that produce 1.5 billion eggs annually. The majority of the production is concentrated within 15-20 companies (Škorić, 2017).

The following companies are the major producers of table eggs in Serbia:

- Agro Đole Jagodina (<https://www.mojakompanija.com/agro-ole-doo/>),
- Vin Farm Bački Petrovac (<http://vinfarm.rs>),
- Evro Koka Mala Krsna (<https://www.evrokoka.com>),
- Mikros Union Beograd (<https://mikrosunion.rs>),
- Tenen Farm Čenej (<https://www.tenen.rs/>),
- Mistral Komerc Temerin (<https://www.facebook.com/Mistral-Komerc-DOO-252763461440933/>),
- Rebra Commerce Ašanja (<https://rebracommerce.com/>), and
- Animal Commerce Beograd (<https://animalcommerce.rs/>).

Each of the producers mentioned above keeps between 150 and 800 thousand laying hens.

There are two approved egg processing facilities in Serbia: "Takovo" in Indjija (<https://www.swisslion-takovo.com/en/contact/>) and "Melange" in Valjevo (<https://melange.rs/>). One of the facilities produces only for its own needs. In 2018, 225,000 kg of egg dried products and 15,000 kg of egg liquid products were produced, with around 30,000 kg of each being exported.

3.3 Total number of registered/approved chicken farms in Serbia

Rulebook on registration and approval of facilities for breeding, keeping and trade of animals ("Official Gazette of RS", No. 36/2017) specifies the types of facilities that must be registered or approved, the manner and procedure of registration and approval, and the content and manner of keeping the registers of facilities.

The registers are kept at the Veterinary Directorate, and as of February 2022, there were 1708 registered broiler facilities and 1081 approved facilities for rearing parents and laying hens. Of the total number of registered broiler and approved laying hen facilities/farms, 329 and 169, respectively, represent legal entities.

The registers themselves only refer to capacities, and data on new flocks are entered and stored in another database in the Veterinary Directorate that is related to *Salmonella* monitoring.

In Serbia, in February 2022, according to the data from the register of the Veterinary Directorate, there were 34 approved egg packing centres, of which 26 were legal entities.

3.4 Number of facilities for poultry slaughtering, cutting and processing of meat

At the beginning of March 2022, there were 101 poultry slaughtering, cutting and processing facilities in the Register of Approved Facilities for Slaughtering, Cutting and Processing of Meat in the Veterinary Directorate, as follows:

- 21 poultry slaughterhouses,
- 29 facilities for poultry slaughtering and cutting,
- 33 facilities for poultry slaughtering, cutting and processing,
- 6 facilities for poultry slaughtering and processing,
- 6 facilities for poultry cutting and processing,
- 4 facilities for poultry cutting,
- 2 facilities for poultry processing.

In the register of the Veterinary Directorate in March 2022, out of a total of 101 facilities for poultry slaughtering, cutting and processing of meat, 49 are in the status of legal entities and 52 are private entrepreneurs.

Table No 9 and Table No 10 show the number of approved slaughterhouses and meat cutting facilities, respectively, based on daily capacity.

Table No. 9 - The approved poultry slaughterhouses based on daily capacity

	Broilers
Up to 4.999 heads	69
From 5000 to 7.999	5
From 8.000 to 19.999	6
From 20.000 to 49.999	9
50.000 and more	0
Total	89

Source: Veterinary Directorate, March 2022

Table No. 10 - The approved poultry cutting facilities based on daily capacity

	Poultry cutting facilities
Up to 499 kg	9
From 500 to 999 kg	14
From 1.000 to 1.999 kg	11
From 2.000 to 2.999 kg	9
From 3.000 to 3.999 kg	6
From 4.000 to 4.999 kg	5
5.000 and more kg	18
Total	72

Source Veterinary Directorate, March 2022

In terms of daily capacities, the following slaughterhouses are the largest:

- Živinoprodukt Bujanovac (<http://www.zivinoprodukt.com/>),
- Perutnina Ptuj Bačka Topola (<https://www.perutnina.com/rs/sr/domov/>),
- Vindija Lajkovac (<http://www.vindija.hr/Naslovna.html>),
- Food Star Plus Beograd (<https://www.companywall.rs/firma/food-star-plus-doo-beograd/MMgGQPTR>),
- Premium Chicken Žitište (<https://www.companywall.rs/firma/premium-chicken-doo-zitiste/MMgRd4pY>),
- Matijević Novi Sad (<https://matijevic.rs/>),
- Superior Foods Sremska Mitrovica (<https://www.companywall.rs/firma/superior-foods-doo-sremska-mitrovica/MMpjHfcY>),
- Žitostok Velika Plana (<https://www.zitostok.rs/>), and
- Laki Komerc Jagodina (<https://laki-komerc-banatsko-novo-selo.ls.rs/rs/>).

In terms of daily capacities, the following cutting and processing facilities are the largest:

- Premium Chicken Žitište (<https://www.companywall.rs/firma/premium-chicken-doo-zitiste/MMgRd4pY>),
- Živinoprodukt Bujanovac (<http://www.zivinoprodukt.com/>),
- Superior Foods Sremska Mitrovica (<https://www.companywall.rs/firma/superior-foods-doo-sremska-mitrovica/MMpjHfcY>),
- Food Star Plus Beograd (<https://www.companywall.rs/firma/food-star-plus-doo-beograd/MMgGQPTR>),
- Žitostok Velika Plana (<https://www.zitostok.rs/>),
- Laki Komerc Jagodina (<https://laki-komerc-banatsko-novo-selo.ls.rs/rs/>), and
- Perutnina Ptuj Bačka Topola (<https://www.perutnina.com/rs/sr/domov/>).

At the beginning of 2022, on the List of approved establishments of the Directorate General of the European Commission for Health and Food Safety DG SANTE, there are six facilities from the Republic of Serbia for slaughtering and cutting poultry:

- Neoplanta DOO Novi Sad - Cutting Plant (CP) (<https://neoplanta.rs/>),
- Premium chicken DOO Žitiste - Cold Stores (CS), Cutting Plant (CP), Slaughterhouse (SH) (<https://www.companywall.rs/firma/premium-chicken-doo-zitiste/MMgRd4pY>),
- Superior Foods D.O.O. Šid – Cold Stores (CS), Cutting Plant (CP), Slaughterhouse (SH) ([https://local.infobel.rs/RS100136996-0222100276/superior foods d o o bacinci-bacinci.html](https://local.infobel.rs/RS100136996-0222100276/superior%20foods%20d%20o%20bacinci-bacinci.html)),
- SZTR Djurdjevic Pećinci - Cold Stores (CS), Cutting Plant (CP) (<https://www.im-djurdjevic.com/>),
- Vindija Doo Plandište - Cutting Plant (CP), Slaughterhouse (SH) (<http://www.vindija.hr/Naslovna.html>),
- Zlatiborac DOO Mačkat Čajetina - Cold Stores (CS), Cutting Plant (CP) (<https://zlatiborac.com/contact/>).

The Republic of Serbia has yet to be included in the EU's positive list of eligible countries to export poultry meat. Poultry meat produced in above mentioned establishments is solely for the manufacture of poultry meat products and intended for export to the EU.

In accordance with Commission Delegated Regulation (EU) 2020/692 of January 30, 2020, supplementing Regulation (EU) 2016/429 of the European Parliament and of the Council as regards rules for entry into the Union and the movement and handling after entry of consignments of certain animals, germinal products and products of animal origin, risk mitigating treatment D should be taken to eliminate Newcastle disease and Avian influenza risks linked with poultry meat.

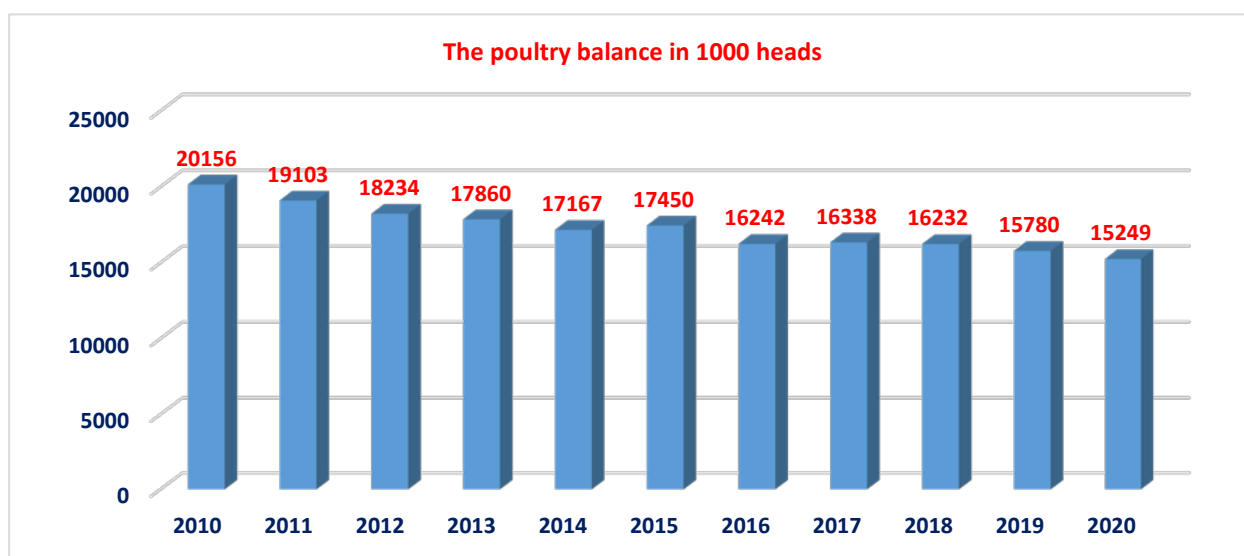
Risk mitigating treatment D for meat products requires a minimum temperature of 70 °C which must be reached throughout the meat and/or stomachs, bladders and intestines during the processing of meat products and treated stomachs, bladders and intestines, or for raw ham, a treatment consisting of natural fermentation and maturation of not less than nine months and resulting in the following characteristics:

- Aw value of not more than 0,93,
- pH value of not more than 6,0.

3.5 Total annual production of poultry meat and eggs in Serbia

Every year on December 1st, the Statistical Office of the Republic of Serbia calculates the livestock balance – the number of heads at the end of the year. The poultry balance in Serbia from 2010 to 2020 is shown in Chart No. 2.

Chart No. 2 - Poultry balance in Serbia, 2010-2020

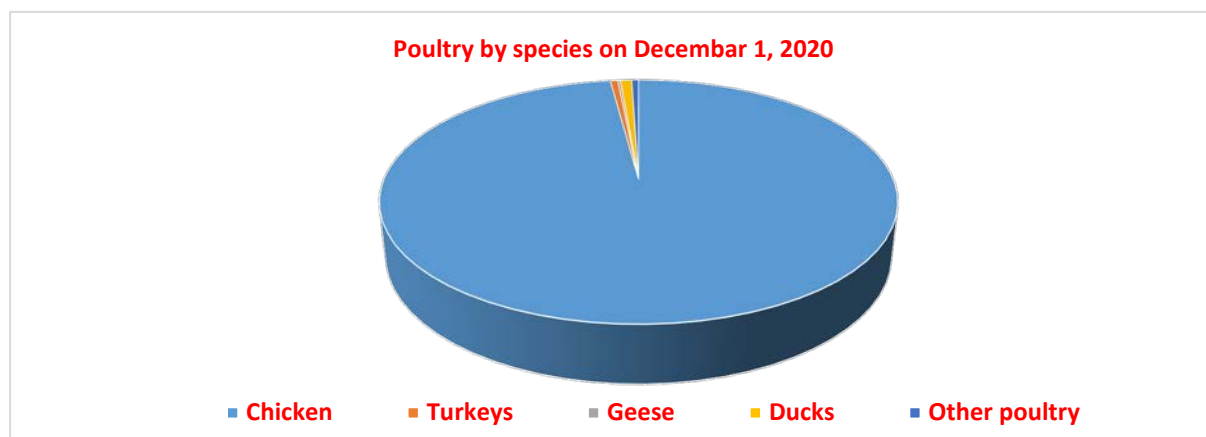


Source: Statistical Office of the Republic of Serbia

As aforementioned, in the Republic of Serbia, mostly chickens are raised, with significantly lesser turkeys, geese, and ducks. On December 1, 2020, Serbia's poultry population was estimated at 14.93 million chickens, 84 thousand turkeys, 31 thousand geese, 128 thousand ducks, and 78 thousand other poultry. In the Republic of Serbia, from 2010 to 2020, the number of turkeys decreased from 150 to 84 thousand, geese from 87 to 31 thousand, and ducks from 193 to 128 thousand.

Chart No. 3 shows, based on the livestock balance, the number of different poultry animal species in Serbia on December 1, 2020.

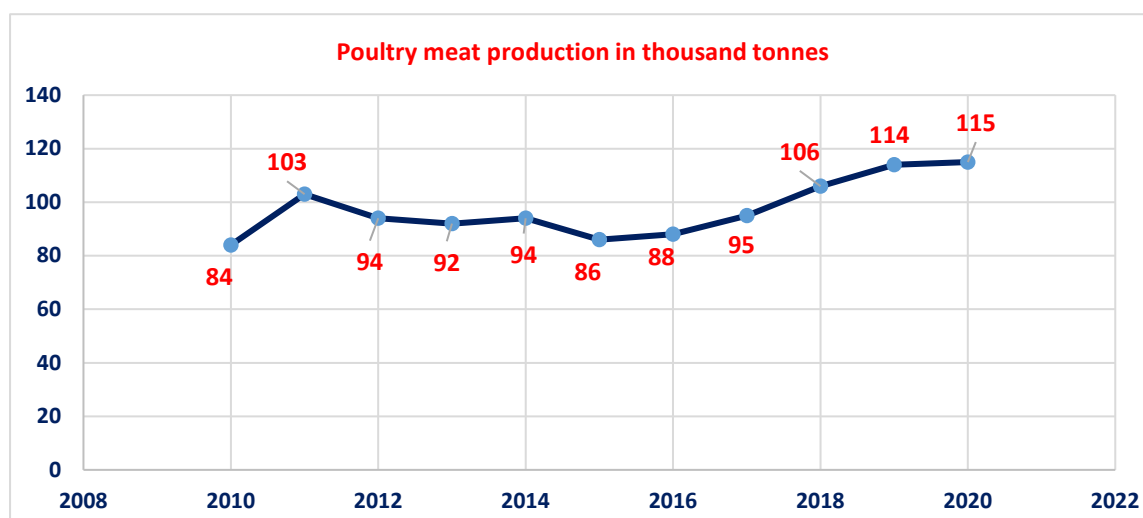
Chart No. 3 - The number of different poultry animal species in Serbia on December 1, 2020.



Source: Statistical Office of the Republic of Serbia

From 2010 to 2020, chicken production in the Republic of Serbia ranged from 86 to 115 thousand tonnes (Chart No 4). In 2020, poultry meat production reached nearly 115 thousand tonnes, an increase of 0.8 percent over the previous year and 17.6 percent above the five-year average.

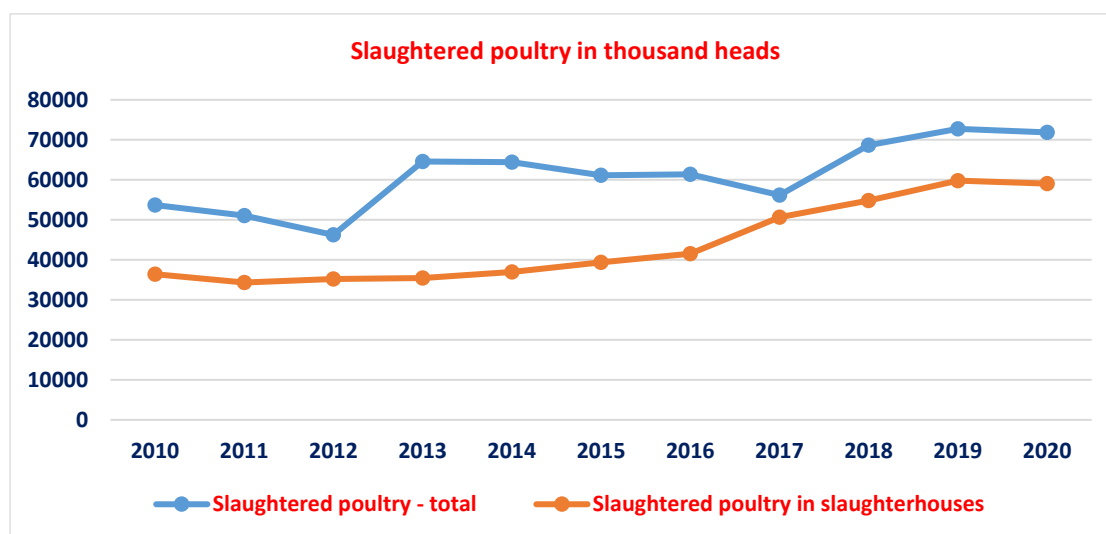
Chart No. 4 - Poultry meat production 2010 -2020



Source: Statistical Office of the Republic of Serbia

During the previous decade, the number of slaughtered poultry varied between 46 and 73 million, with the highest number slaughtered in 2019 (Chart No 5). That number was 1% lower in 2020 than in 2019, although it remained high in comparison to previous years. The number of broilers slaughtered in 2020 was 12 % greater than the five-year average.

Chart No. 5 - Slaughtered poultry 2010 -2020

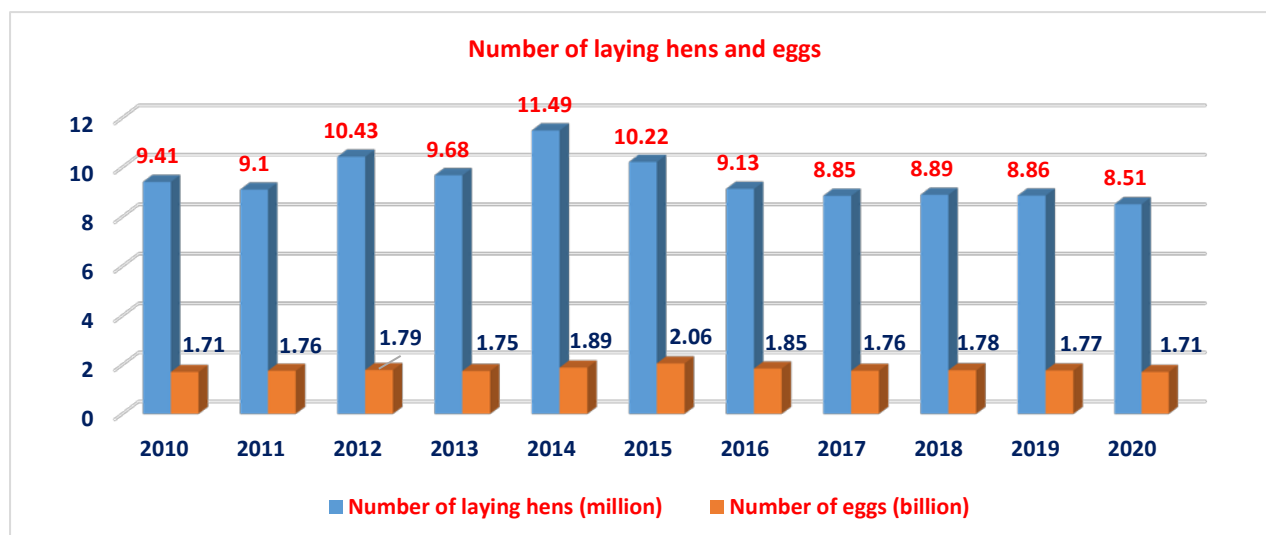


Source: Statistical Office of the Republic of Serbia

These figures show a significant shift in the sector and the growing dominance of integrated intensive commercial broiler production in Serbia. The number of poultry slaughtered outside of approved slaughterhouses is decreasing.

Between 2010 and 2020, the number of laying hens in Serbia ranged from 8.51 to 11.49 million, laying between 1.71 and 2.06 billion table eggs per year (Chart No. 6).

Chart No. 6 - Number of laying hens and table eggs 2010 -2020

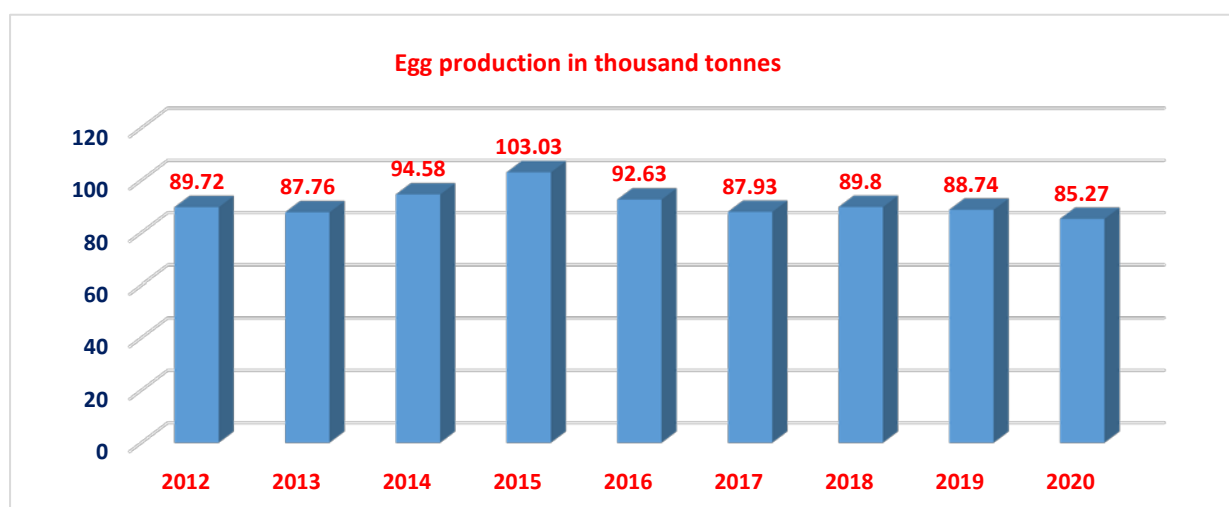


Source: Statistical Office of the Republic of Serbia

In recent times, the number of laying hens has been estimated to be between 8.5 and 9 million, with an annual yield of around 1.7 billion table eggs (SORS). Between 2015 and 2020, each laying hen laid an average of 199-203 eggs annually (FAOSTAT).

Egg production in the Republic of Serbia in the period 2012-2020, expressed in thousands of tonnes of egg equivalent, is shown in Chart No 7.

Chart No. 7 - Egg production in Serbia 2012 -2020 in thousand tonnes



Source: FAOSTAT

3.6 Total number of chickens held on farms in Serbia

In May 2018, the Regulation on establishing measures for early detection, diagnostics, spreading prevention, suppression, and eradication of the infections of poultry with certain serotypes of *Salmonella* spp. was adopted in the Republic of Serbia, which is in line with Regulation (EC) No. 2160/2003 of the European Parliament and the Council on the control of *Salmonella* and other specified food-borne zoonotic agents.

A new registry of poultry flocks has been created as a result of the adopted regulation, which provides improved traceability and more precise data for the commercial sector of poultry meat production and table eggs.

Upon the arrival of the new flock at the facility, the authorised veterinary station or veterinary service is required to enter the data in the register. The number of new flocks in the Republic of Serbia in 2020 is shown in Table 10.

Table No. 10 - The number of new flocks in 2020

District/ Region	Laying hens			Broilers			Turkey		
	Number of holdings	Number of flocks	Number of birds	Number of holdings	Number of flocks	Number of birds	Number of holdings	Number of flocks	Number of birds
Beograd	9	42	296388	21	157	2608558	0	0	0
Braničevski	3	11	61925	26	140	1337350	0	0	0
Jablanički	9	17	189800	0	0	0	0	0	0
Južno-Bački	21	38	960068	45	235	2335945	0	0	0

Južno-Banatski	7	10	142237	50	388	4881044	0	0	0
Kolubarski	20	43	532616	26	103	707890	1	1	3000
Mačvanski	0	0	0	1	2	13000	0	0	0
Moravički	1	1	8000	1	2	34000	0	0	0
Nišavski	7	11	23965	2	7	31630	0	0	0
Pirotski	6	8	24000	0	0	0	0	0	0
Podunavski	12	17	232702	9	105	1582275	0	0	0
Pomoravski	11	39	1009432	55	419	6116831	0	0	0
Rasinski	22	28	145080	108	485	5004069	1	1	4500
Raški	7	7	26350	31	149	1317555	0	0	0
Severno-Bački	2	4	92160	17	257	3788576	0	0	0
Severno-Banatski	1	2	2120	3	19	257020	2	6	21368
Srednje-Banatski	2	2	53000	83	1084	13728282			
Sremski	6	14	306391	23	116	1319800	1	6	39530
Šumadijski	9	17	111600	18	107	935600	1	4	22680
Toplički	0	0	0	1	3	17450	0	0	0
Zaječarski	2	2	4510	0	0	0	0	0	0
Zapadno-Bački	1	1	5000	17	105	1102045	0	0	0
Zlatiborski	5	8	19649	15	94	607200	0	0	0
Total	163	322	4246993	552	3977	47726120	6	18	91078

3.7 Total number of chicken farms producing organic table eggs and poultry meat in Serbia

Organic livestock production in the Republic of Serbia is regulated by the Law on Organic Production ("Official Gazette of RS", No. 30/10) and the Rulebook on control and certification in organic production and methods of organic production "Official Gazette of RS", No. 48/11).

Although over ten years have passed since the establishment of an efficient control and certification system, organic poultry production takes place on only a few farms, where, according to the Sector for Agricultural Policy of the Ministry of Agriculture, Forestry and Water Management, in the period 2012-2018, between 1140 and 6735 laying hens and broilers were kept. According to the data of the Sector for Agricultural Policy, during 2018, organic production took place on eleven farms, eight of which had certified production with a total number of 4,035 laying hens and 385,638 laid eggs.

Organic livestock production in Serbia is growing, and in 2019, compared to 2018, there was an increase in poultry of 165 %, which was a total of 17,880 heads in the certification system. In comparison to the EU, where organic production accounts for 6.2% of total laying hens in member countries, organic poultry production in the Republic of Serbia remains symbolic in comparison to conventional production. As Serbia has not yet been approved for the export of eggs to the EU, the whole quantity of organic production is sold on the domestic market.

Table No. 11 - Organic poultry production (2012-2019)

	2012	2013	2014	2015	2016	2017	2018	2019
Poultry heads	2034	1390	1140	1380	3158	4415	6735	17880

3.8 Total annual consumption of poultry meat and table eggs in Serbia

According to the Statistical Office of the Republic of Serbia, in the country, 73.9 kilograms of meat are produced per capita annually, including 43.3 kilograms of pork, 15.1 kilograms of poultry, 10.9 kilograms of beef, and 4.6 kilograms of sheep and goat meat.

In the Republic of Serbia, per capita, a total of 60 kilograms of meat and meat products were consumed in 2018 (SORS, 2019). In 2018, the average meat consumption per capita was 41 kilograms, consisting of 5.6 kilograms of beef, 16.4 kilograms of pork, 16.9 kilograms of chicken and other poultry meat, as well as 2.3 kilograms of meat from other domestic animals. The average per capita consumption of dry meat in 2018 was 5.4 kilograms and meat products 13.4 kilograms.

In 2020, 115,000 tonnes of poultry meat and 1.71 billion table eggs were produced in the Republic of Serbia.

Based on production, import, and export data, in 2020, in the Republic of Serbia the average poultry meat consumption per capita was 17.6 kilograms, and the average egg consumption was 12.6 kilograms or 252 eggs per capita. The annual per capita consumption of eggs and poultry meat, mainly chicken, is steadily rising.

3.9 Average livestock density (poultry per ha) in Serbia

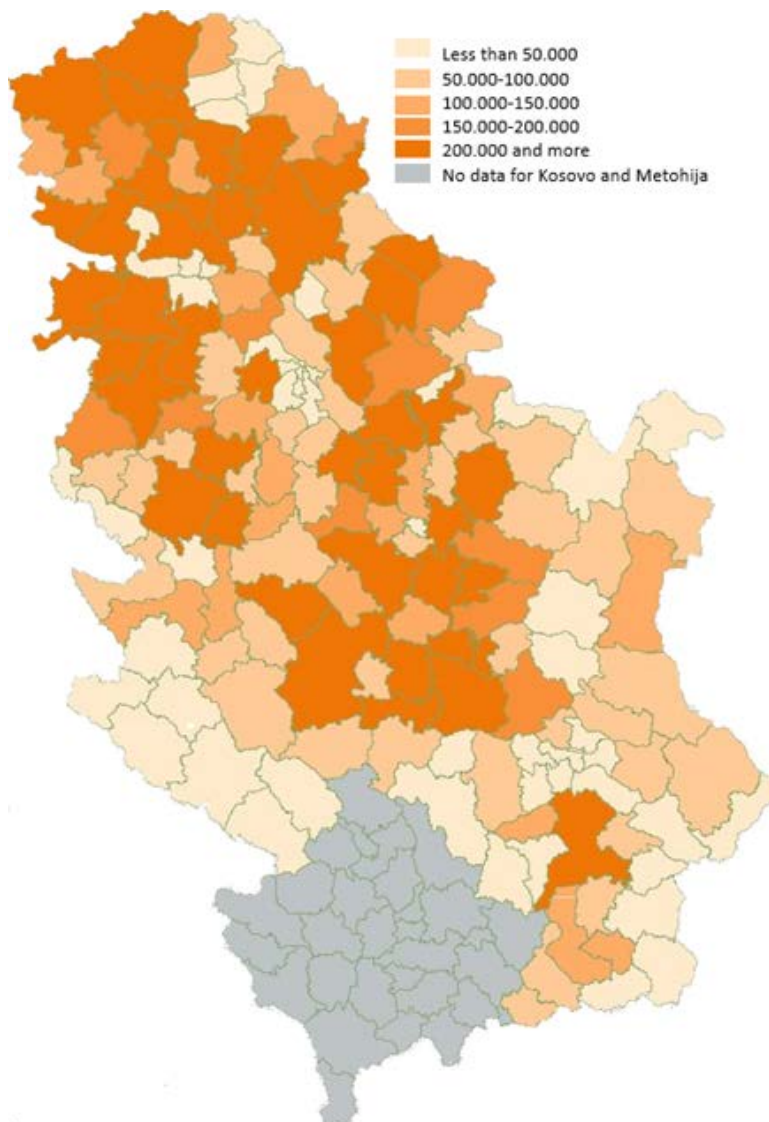
The total number of poultry is evenly distributed between the regions of Serbia - North and Serbia - South, however, there is a substantial disparity within the regions' administrative districts. In only six of the 25 administrative districts 53.3 percent of poultry is concentrated (the Census of Agriculture, 2012). The location of big processing facilities, particularly slaughterhouses, is related to the concentration of poultry.

The largest number of poultry is raised in the following districts: Srednje-Banatski, Pomoravski, Rasinski, Južno-Bački and Severno-Bački.

In the Republic of Serbia, the average density of poultry is around 11 heads per hectare of arable land, ranging from 2.6 per ha in Severno-Banatski district to 35 heads per ha in the Rasina district.

Poultry density in Serbia based to the Census of Agriculture 2012 is shown in Figure No. 1.

Figure No. 1 - Poultry density in Serbia (the Census of Agriculture, 2012)



3.10 Poultry representation (market organizations) in Serbia

The Business Association of Poultry Producers of Serbia was established on June 19, 1997, with headquarters in Belgrade, and was, for a long period, the country's sole branch association. Recently, the number of members has decreased to around 40, but it is still active in assisting and supporting domestic producers with issues like the right to a pre-emptive lease of state land, government incentives, animal welfare, *Salmonella* monitoring, etc.

The Chamber of Commerce and Industry of Serbia is a national association of all Serbian businesspeople, which serves the best interests of its members and the Serbian economy, owing to its tradition, experience, and knowledge. Within the Chamber of Commerce of Serbia, the work of the Group of Producers of Poultry Meat and Eggs began on February 1, 2017.

The Law on the Regulation of the Market for Agricultural Products was adopted and published in the middle of 2021. ("Official Gazette of RS", No. 67 of July 2, 2021). The law is in compliance with Regulation (EU) No 1308/2013 of the European Parliament and of the Council.

The new law in Serbia defines the conditions and rules that apply to agricultural producer organisations, associations of producer organisations, and interbranch organisations that are formally recognised by the Minister of Agriculture.

The given professional organisation should represent the entire sector's interests and provide services to it by monitoring and informing about current social and economic events. The association must establish direct and constant communication with the government and other authorities and organizations, promote and enhance the work of the sector, protect the interests and positions of members before the government, including drafting laws and bylaws, and provide relevant information about domestic and international markets. These include veterinary legislation, animal welfare, product quality and safety, social issues, and national and international trade.

3.11 International trade - exports and imports and FTAs

Since December 2006, the Republic of Serbia has been a signatory to the Central European Free Trade Agreement (CEFTA). Albania, Bosnia and Herzegovina, Northern Macedonia, Moldova, Montenegro, Serbia, and UNMIK/Kosovo are members of CEFTA, a regional free-trade agreement with a combined population of almost 20 million people.

The Stabilisation and Association Agreement (SAA) entered into force on September 1, 2013, granting the Republic of Serbia the status of an associated country with the European Union. Under the SAA with the EU and the Interim Agreement on Trade and Trade-Related Issues, Serbia has abolished tariffs on most items imported from the EU. Preferential customs regimes apply for products originating from Serbia and exported to the EU customs area. Before then, all applicable EU requirements for animal health and welfare, as well as food safety, must be fulfilled. Egg exports from Serbia to the EU market should be confirmed in 2022 (<https://www.agroberichtenbuitenland.nl/actueel/nieuws/2021/10/01/serbia-meat>).

The United States restored normal trade relations with Serbia in December 2003, providing improved access to the U.S. market for products made in Serbia. In 2005, the U.S. government designated Serbia as a beneficiary of the U.S. Generalized System of Preferences (GSP), providing duty-free access to the U.S. market in various eligible categories. The GSP programme expired at the end of 2020 and is pending renewal by the U.S. Congress.

Serbia has free-trade agreements with Turkey, the European Free Trade Association (Norway, Switzerland, Iceland, and Liechtenstein), and the Eurasian Economic Union (EAEU). In July 2021, the EAEU Free Trade Agreement entered into force, replacing previous bilateral agreements with Russia, Belarus, and Kazakhstan.

Serbia is also a beneficiary of Japan's Generalized System of Preferences, which provides preferential duties on importation to Japan.

China and Serbia currently have a free trade agreement in preparation, and its signing is expected by the end of 2022 at the latest.

Serbia, together with North Macedonia and Albania, is a member of the Open Balkan initiative. On July 29, 2021, the three member countries signed an agreement to open their national borders to each other's citizens and products on January 1, 2023, without restrictions.

During the previous period, in the foreign trade of the poultry sector, Serbia was a larger importer than an exporter. Imports were higher for meat and edible parts of poultry, fertilised eggs and egg products, and exports were higher for table eggs only.

In Serbia in 2020, 115 thousand tonnes of poultry meat were produced, 12.34 thousand tonnes were imported, and 5.77 thousand tonnes were exported. As a result, Serbia consumed a total of 121.57 thousand tonnes of poultry meat. Based on the given quantities, the self-sustainability of the Republic of Serbia in the production of poultry meat was calculated, and it was found to be 94.6 percent in 2020.

In 2020, 85.27 thousand tonnes of table eggs were produced in Serbia, 1.25 thousand tonnes were imported and about 3 thousand tonnes were exported. Based on the aforementioned values, the Republic of Serbia's self-sufficiency in egg production in 2020 was calculated to be 101.47 percent.

However, in 2020, 321.8 tonnes of dried yolks, 218.5 tonnes of fresh yolks, 83.3 tonnes of dried eggs and 811.3 tonnes of not in shell fresh eggs were imported to Serbia. In 2020, the export from Serbia was only 18 tonnes of dried yolks and 44.3 dried eggs. The imports exceeded exports resulting in a negative net export figure. In 2020, there was a trade deficit of egg products produced of approximately 3 thousand tonnes or 60 million fresh/table eggs.

The self-sustainability of egg production in Serbia in 2020 was calculated using the number of imported eggs through egg products, and it came out to 97.95 percent. Despite the fact that Serbia is a net exporter of table eggs, the amount of eggs imported in egg products exceeds the given number, resulting in a trade deficit in eggs.

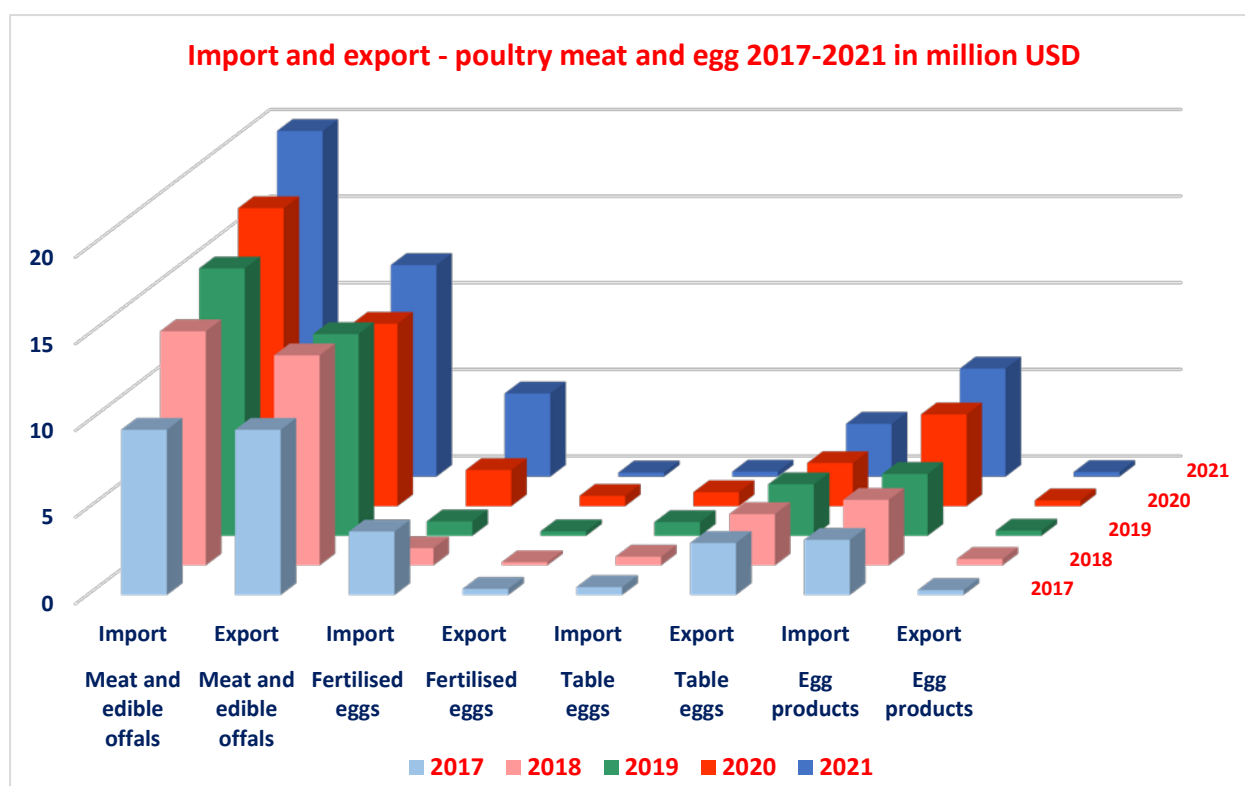
Imports and exports in the poultry sector in the Republic of Serbia from 2017 to 2021 in million USD are presented in Table No. 12 and Graphs No. 8 and No. 9.

Table No. 12 - Imports and exports in the poultry sector in the Republic of Serbia from 2017 to 2021 in million USD

		2017	2018	2019	2020	2021
Meat and edible offals	Import	9.53	13.51	15.43	17.2	19.95
Meat and edible offals	Export	9.53	12.12	11.64	10.53	12.21
Fertilised eggs	Import	3.66	0.99	0.83	2.09	4.8
Fertilised eggs	Export	0.35	0.18	0.26	0.6	0.24
Table eggs	Import	0.45	0.5	0.79	0.81	0.29
Table eggs	Export	3	2.96	2.97	2.49	3.05
Egg products	Import	3.18	3.78	3.57	5.3	6.24
Egg products	Export	0.28	0.37	0.3	0.34	0.27

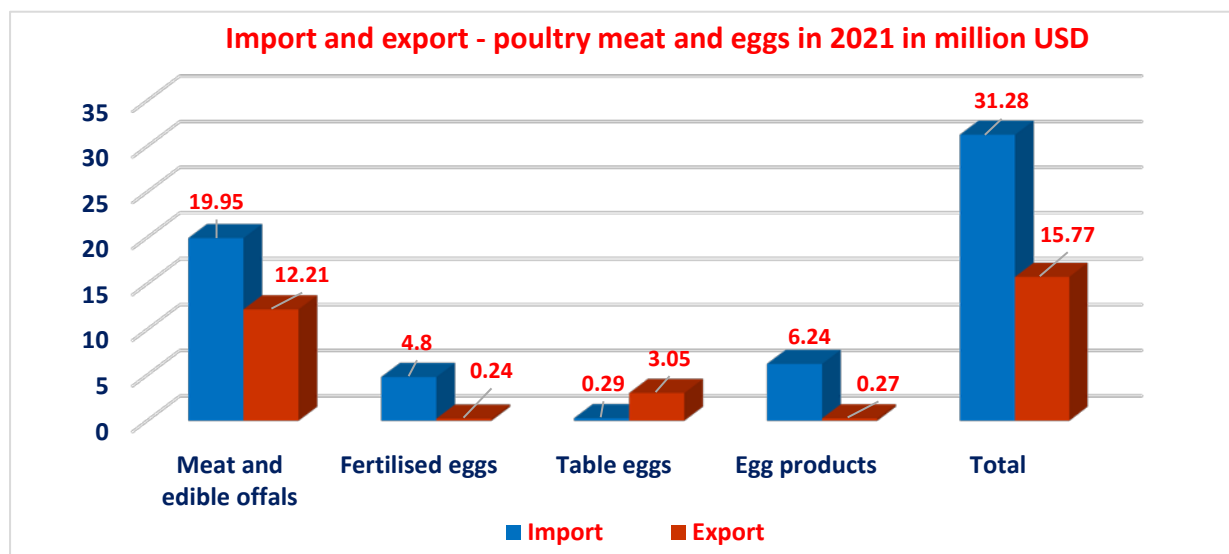
Source: UN Comtrade Database

Chart No. 8 - Imports and exports in the poultry sector in the Republic of Serbia from 2017 to 2021 in million USD



Source: UN Comtrade Database

Chart No. 9 - Imports and exports in the poultry sector in the Republic of Serbia in 2021 in million USD



Source: UN Comtrade Database

The imports and exports of poultry meat, fertilised and table eggs, and egg products, as well as the Republic of Serbia's main trade partners, are shown in the tables and charts below for the years 2012 to 2021 (UN Comtrade Database).

Table No. 13 - Import and export of poultry meat and edible offal 2012-2021 in thousand tonnes

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Import	7.05	9.15	12.63	10.34	4.7	8.09	12.76	11.82	12.34	11.93
Export	2.73	3.01	6.44	6.05	5.4	5.73	7.46	6.662	5.77	6.61

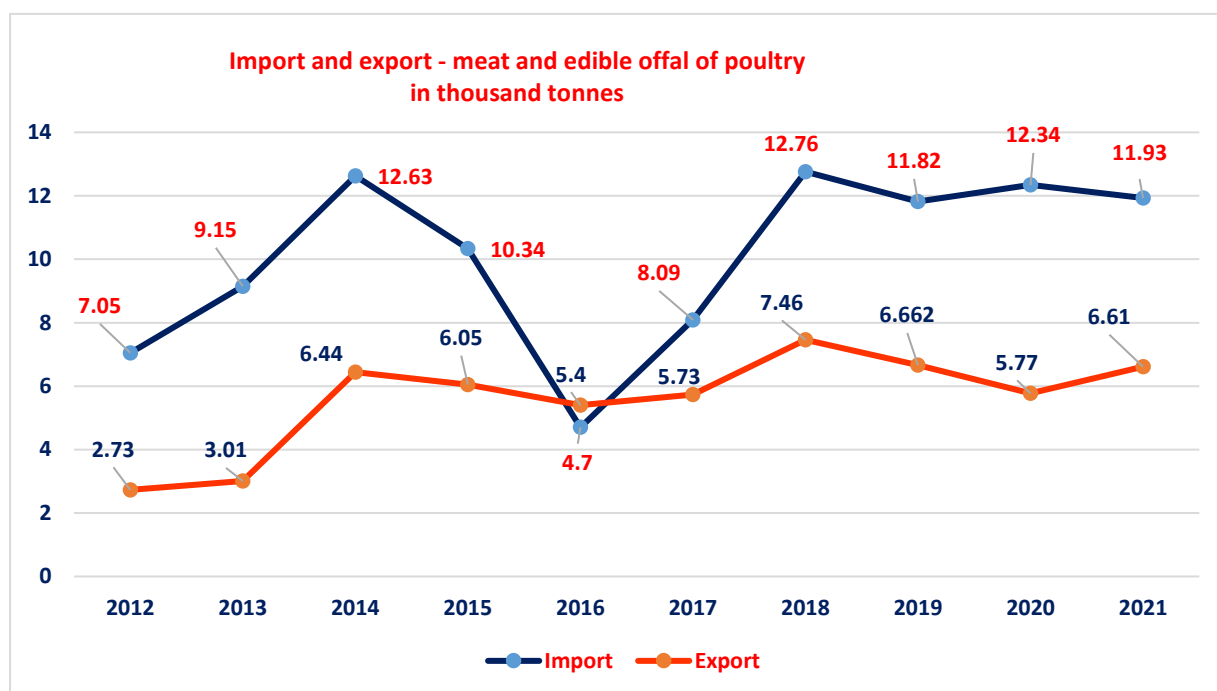
Source: UN Comtrade Database

Table No. 14 - Import and export of fertilised and table eggs 2012-2021 in tonnes

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fertilised eggs	Import	38.84	92.56	348.95	146.69	417.77	1063.39	1244.8	243.87	625.91	1275.85
Fertilised eggs	Export	89.02	60.77	56.53	57.95	93.2	107.64	63.52	93.59	191.1	68.75
Table eggs	Import	134.78	401.6	554.03	125.4	366.71	474.31	565.48	816.7	885.38	281.21
Table eggs	Export	762.87	655.35	1496.73	1923.6	2490.44	2649.91	2863.16	2792.28	2128.54	2728.71

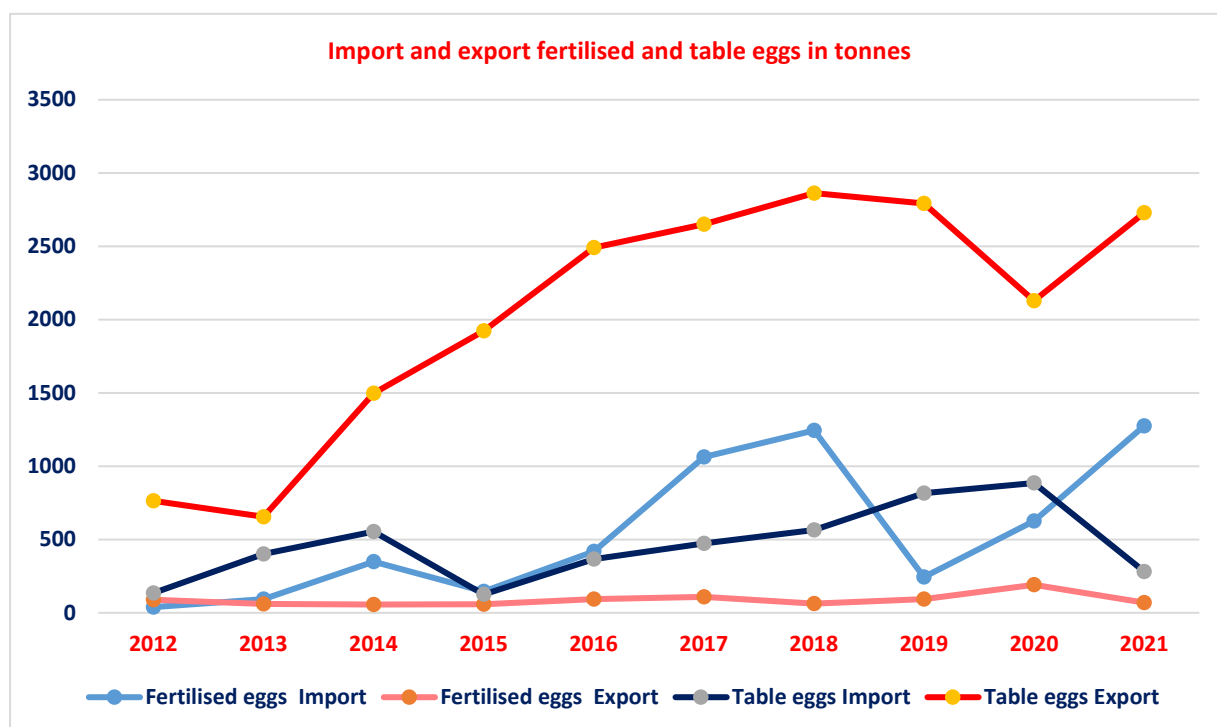
Source: UN Comtrade Database

Chart No. 10 - Import and export of poultry meat and edible offal 2012-2021 in thousand tonnes



Source: UN Comtrade Database

Chart No. 11 - Import and export of fertilised and table eggs 2012-2021 in tonnes



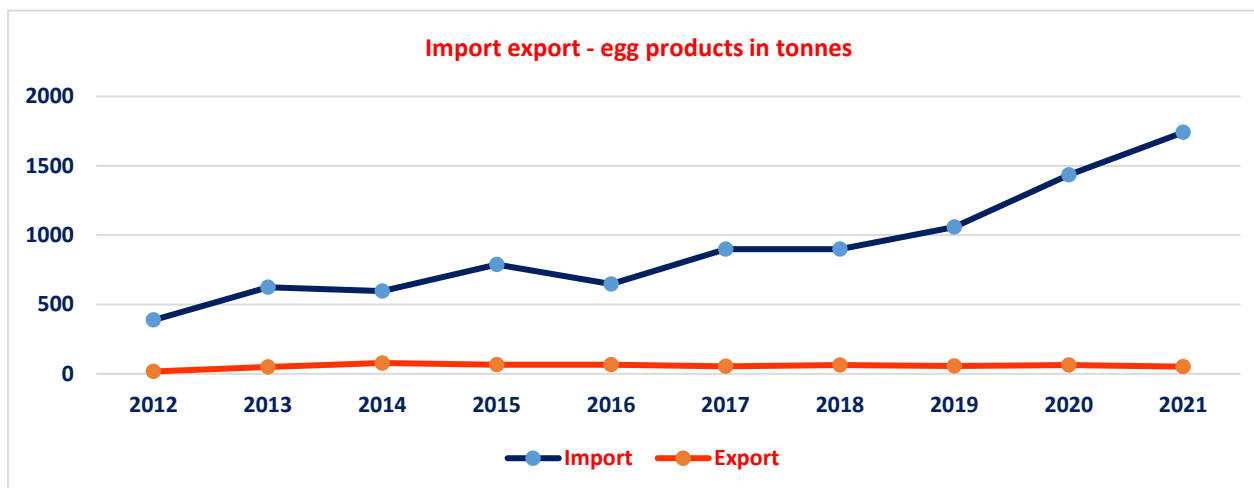
Source: UN Comtrade Database

Table No. 14 - Import and export of egg products 2012-2021 in tonnes

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Import	387.68	623.33	596.49	787.69	647.76	899.56	898.04	1057.26	1434.89	1740.99
Export	16.99	48.92	78.09	65.97	64.95	53.62	62.52	56.69	62.3	51.65

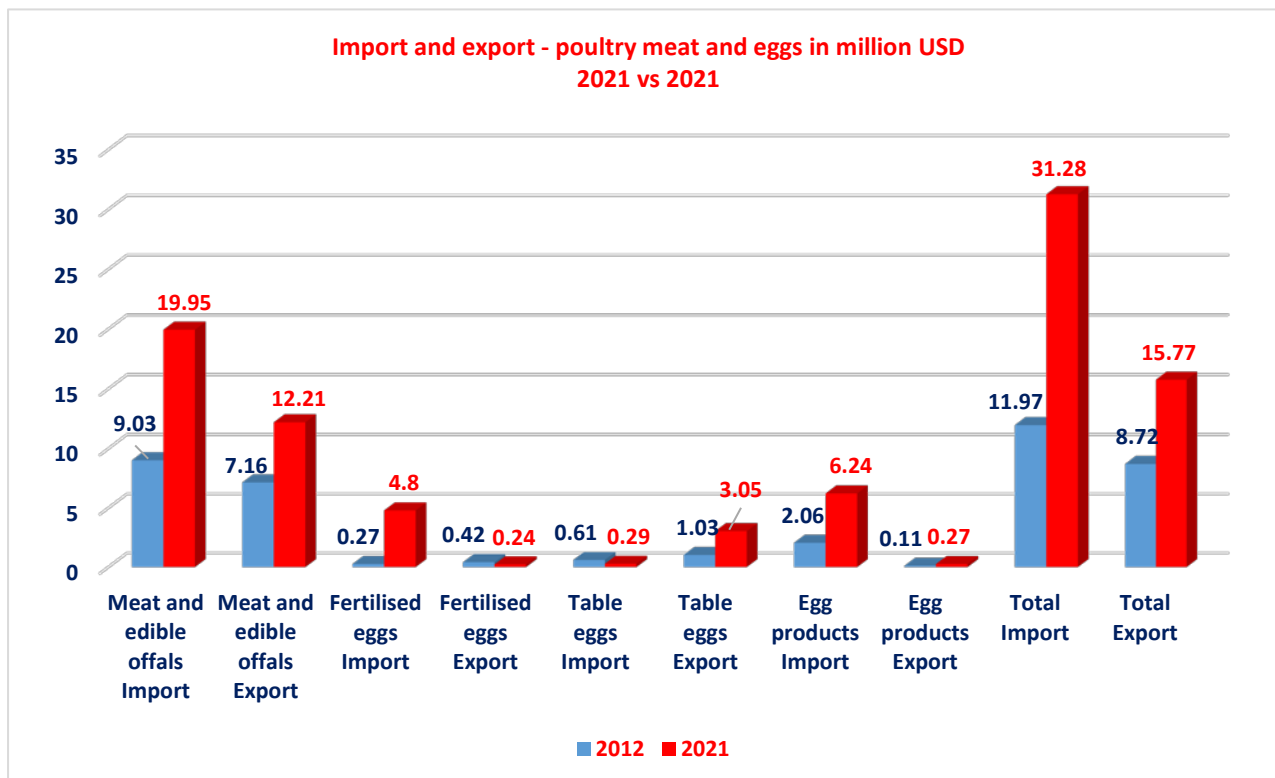
Source: UN Comtrade Database

Chart No. 12 - Import and export of egg products 2012-2021 in tonnes



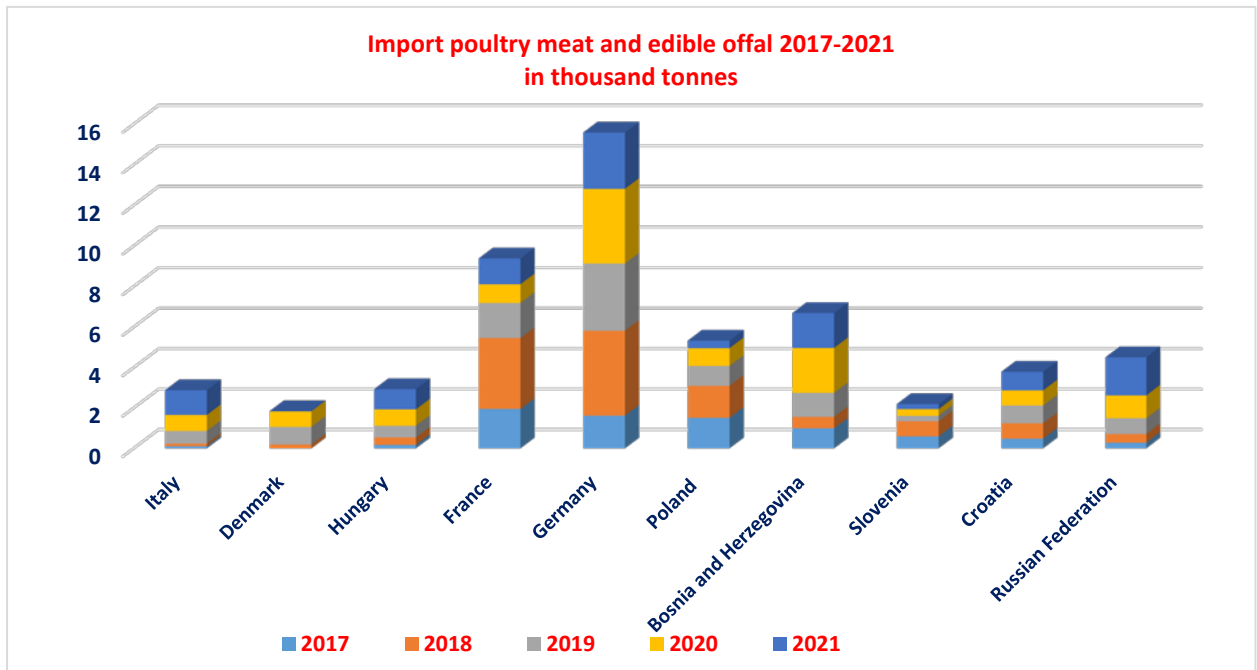
Source: UN Comtrade Database

Chart No. 13 – Import and export of poultry meat and eggs 2012 vs 2021 in million USD



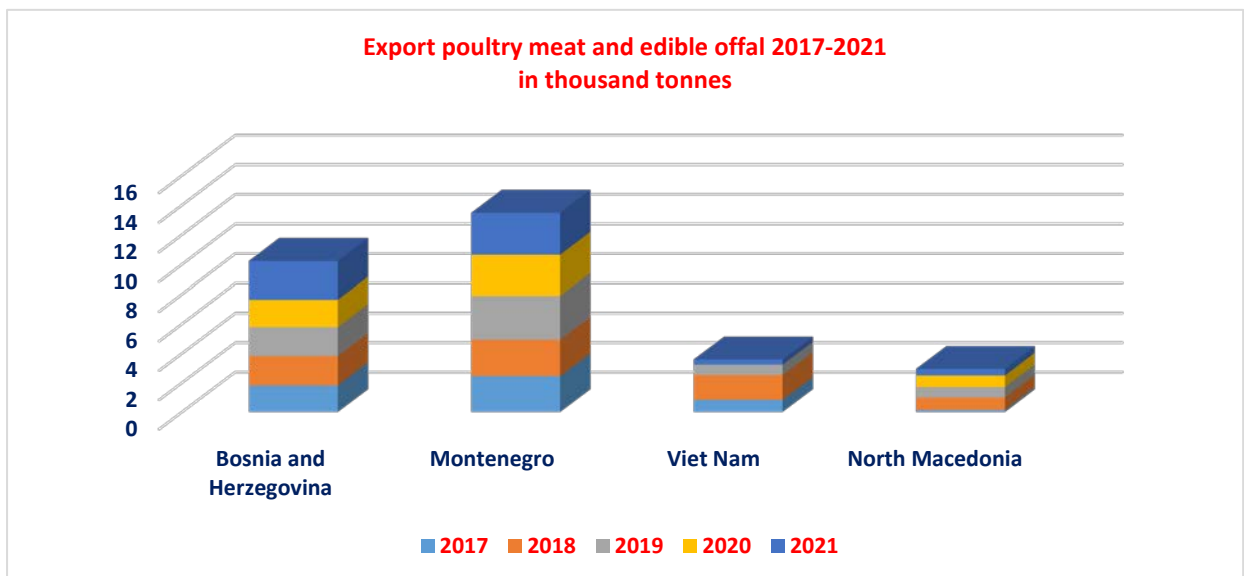
Source: UN Comtrade Database

Chart No. 14 – Import trade partners - poultry meat and edible offal 2017-2021 in thousand tonnes



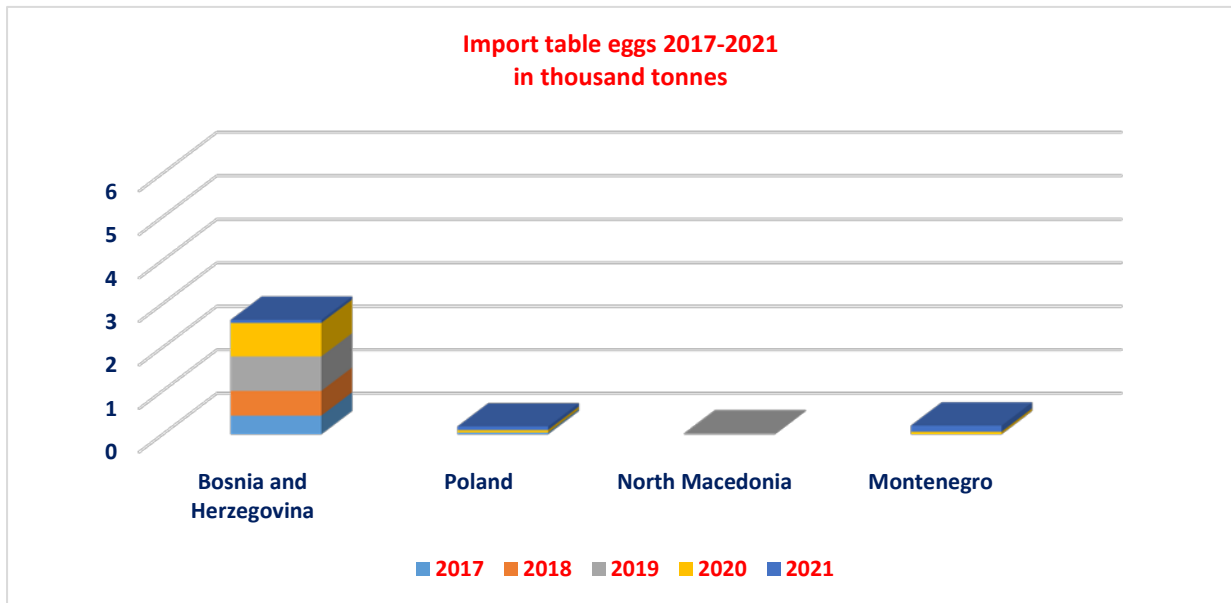
Source: UN Comtrade Database

Chart No. 15 – Export trade partners - poultry meat and edible offal 2017-2021 in thousand tonnes



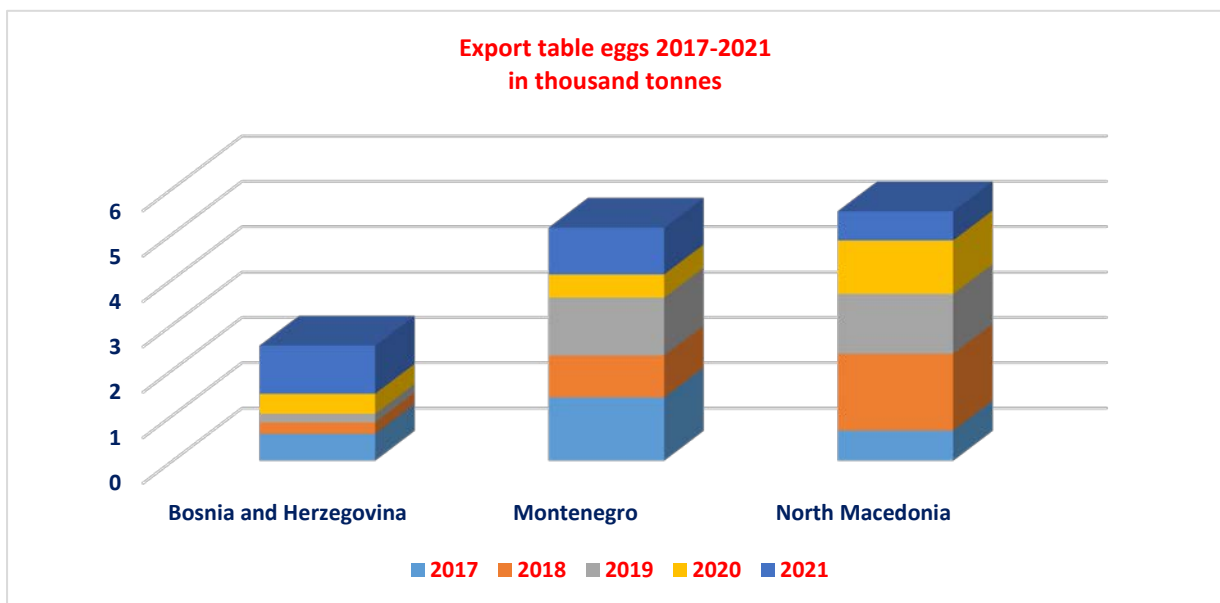
Source: UN Comtrade Database

Chart No. 16 – Import trade partners – table eggs 2017-2021 in thousand tonnes



Source: UN Comtrade Database

Chart No. 16 – Export trade partners – table eggs 2017-2021 in thousand tonnes



Source: UN Comtrade Database

In the previous decade, in the period from 2012 to 2021, the following changes have taken place in the foreign trade of the Republic of Serbia:

- an increase in poultry meat and edible offal imports from 7.05 to 11.93 thousand tonnes, representing an increase of 69.22%;
- an increase in poultry meat and edible offal exports from 2.73 to 6.61 thousand tonnes, representing an increase of 142.12%;
- an increase in fertilised egg imports from 38.84 to 1275.8 tonnes, representing an increase of 3184.76%;
- a decrease in fertilised egg exports from 89.02 to 68.75 tonnes, representing a decrease of 22.77%;
- an increase of table egg imports from 134.78 to 281.21 tonnes, representing an increase of 108,64%;
- an increase of table egg exports from 762.87 to 2728.7 tonnes, representing an increase of 257.69 %;
- an increase of day-old chick imports from 1.37 million to 5.74 million birds, representing an increase of 318.98 %; and
- an increase of day-old chick exports from 0.03 million to 1.84 million birds, representing an increase of 6033.33 %.

In the poultry production sector, the following trading partners have recently been the most important for the Republic of Serbia:

- for import of poultry meat and edible offal: Germany, France, Bosnia and Herzegovina, Poland, Russian Federation;
- for export of poultry meat and edible offal: Montenegro, Bosnia and Herzegovina, Viet Nam, North Macedonia;
- for import of fertilised eggs: Bosnia and Herzegovina, Bulgaria, Hungary, Czech Republic, Poland, Netherlands;
- for export of fertilised eggs: North Macedonia, Bosnia and Herzegovina, Montenegro;
- for import of table eggs: Bosnia and Herzegovina, Poland;
- for export of table eggs: North Macedonia, Montenegro, Bosnia and Herzegovina;
- for import of day-old chicks: Croatia, Hungary, Bulgaria, Poland, Slovakia, Germany, Czech Republic;
- for export of day-old chicks: Montenegro, North Macedonia;
- for import of egg products: France, Poland, Denmark, Germany, Italy, Croatia, Bosnia and Herzegovina;
- for export of egg products: Bosnia and Herzegovina.

Imports contribute for the following percentage of total Serbian production:

- fertilized eggs and day-old chicks - 25-30%
- egg products – 70-75%
- poultry meat – 4-5%
- table eggs – insignificant.

Imports from EU member states and Bosnia and Herzegovina, and more recently, poultry meat from the Russian Federation, have been made to the Republic of Serbia in prior years.

In previous years, most of the Serbian exports of poultry meat and eggs have been made to Northern Macedonia, Montenegro, and Bosnia and Herzegovina. For the time being, Serbia cannot export poultry meat or eggs to the European Union, and the quantities exported to other countries around the world, with the exception of neighbouring countries, are quite small. The only exception is the export of poultry meat to Vietnam.

In the 10th week of 2022, the average price of broilers in EU member states was 230.59 euros/100 kg of carcasses, which represents a weekly price increase of 0.9%, a monthly price increase of 3.3% and an annual price increase of 21.8%. In the period from 2019 to 2021, the price of broilers varied between 175 and 210 euros per 100 kg of carcass and is currently the highest in recent times.

In the 10th week of 2022, the average price of table eggs in the EU was 158.90 euros per 100 kg, which represents a weekly price increase of 3.4%, a monthly price increase of 9.1% and an annual price increase of 20.5%. In the period from 2019 to 2021, the price of table eggs was between 120 and 150 euros per 100 kg, and currently, like the price of meat, it is the highest in recent times.

In Serbia, the current price of broilers is close to 200 euros per 100 kg of carcasses, and the price of table eggs is roughly 150 euros per 100 kg. The price of broilers in the previous 3–4 years ranged between 155 and 195 euros per 100 kg of carcasses, and the price of table eggs varied between 115 and 140 euros per 100 kg.

February and March 2022, due to the war in Ukraine, the price of feed and energy increased dramatically, which, like in the EU, led to higher production costs and consequently higher prices of poultry meat and eggs.

In Serbia, customs duties are not paid on the import of live poultry and fertilised eggs from the EU, including the import of parents, chickens, day-old chickens, turkeys, and geese. Customs duties are paid on imports of chicken meat and edible offal of between 9 and 10.5%. The customs duty on imports from the EU for table eggs is 6% and is not paid for egg products.

Additional levies in 2022 are charged for the import of chicken meat at 5.5 to 9.3 euro cents per kilogram and for eggs at 0.24 euro cents per piece.

Despite the higher price of soybean meal on the domestic market, the price of chicken meat and especially eggs in Serbia is competitive with prices in the EU.

3.12 Government policies with an impact on the poultry sector

3.12.1 EU pre-accession assistance for rural development (IPARD)

The Republic of Serbia was identified as a potential candidate for EU membership during the Thessaloniki European Council summit in 2003, and in 2009 it formally applied for EU accession. In 2010, the process to ratify the Stabilization and Association Agreement (SAA) began, and the European Council granted the Republic of Serbia the status of a candidate country on 1st March 2012, based on the Commission's Opinion on the membership application adopted in October 2011.

The implementation of this comprehensive agreement will facilitate the gradual alignment of Serbia's legislation with the whole body of EU law and standards. It will provide Serbia with the overall framework to move closer to the EU and prepare the country for its future participation in the EU single market.

By signing the Framework Agreement between the Republic of Serbia and the European Commission on the Arrangements for the Implementation of Union Financial Assistance to the Republic of Serbia under the Instrument for Pre-Accession Assistance (IPA II) and the Sectoral Agreement on the Provisions for Management and Implementation of Union Financial Assistance to the Republic of Serbia under the Instrument for Pre-Accession Assistance in the Policy Area Agriculture and Rural Development (IPARD), the legal requirements for providing support in the field of rural development

have been created. From this instrument, the Republic of Serbia counted on receiving investment support in the amount of EUR 175 million for the period from 2014 to 2020.

By the decision of the European Commission dated March 9, 2022, the IPARD III programme of the Republic of Serbia for the period 2021–2027 was adopted. The financial contribution of the European Union for the IPARD III programme has increased compared to the previous programming period and amounts to 288 million euros.

The investments which will be supported by the IPARD III programme are related to the procurement of equipment and machines and the construction and reconstruction of facilities, with the aim of reaching EU standards in hygiene, food safety, animal welfare, and environmental protection, strengthening agricultural producers for the placement of products in the EU market and preparation for the use of EU funds which will become available to local agricultural producers and processors upon joining the EU.

Investments under Measure 1 of the IPARD III programme are investments in physical assets of agricultural holdings aimed at increasing the productivity and competitiveness of agricultural production and achieving the EU standards for animal welfare and environmental protection.

Specific sector objectives under measure 1 for the meat sector are to:

- improve environmental protection standards, production infrastructure and equipment in order to achieve sustainability and competitiveness in the EU market;
- increase the value of agricultural production by adding value to primary products by supporting higher processing stages on holdings;
- increase support for larger specialised holdings for investments in biosafety, animal welfare, manure and/or waste and/or wastewater handling and storage, in order to fulfil EU standards;
- improve the horizontal integration of agricultural producers.

Specific sector objectives under measure 1 for the egg sector are to:

- improve the competitiveness and productivity of agricultural holdings engaged in egg production by investing in facility construction and equipment purchases;
- achieve EU standards regarding the safety and quality of eggs, animal welfare and environmental protection through investments related to the construction of facilities and the purchase of equipment for keeping (breeding) laying hens, the storage and distribution of manure, as well as the production of energy from renewable sources in the agricultural holding.

For measure 1 in the meat and egg sectors, specific eligibility criteria for animal holdings have been precisely defined in the IPARD 3 programme.

Animal holdings with a total capacity of the facility with the minimum of 5,000 and the maximum of 50,000 broilers and/or the minimum of 1,000 and the maximum of 10,000 turkeys and/or the minimum of 300 and the maximum 3,000 geese per a production cycle at the end of the investment at registered facility are eligible for:

- investments in construction and/or in reconstruction and/or in equipment of facilities or stables, in facilities and equipment for farm biosecurity in facilities and equipment for waste management, waste water treatment, air pollution prevention measures, in construction and/or in reconstruction of manure storage capacities including specific equipment of facilities for handling and usage of animal feed, fodder and manure, like manure reservoirs, specialized manure transportation equipment;
- investments in farm mechanisation (including tractors up to 100 KW) and equipment;
- investments in on-farm energy production from renewable sources.

Animal holdings, with capacity of more than 50,000 broilers and/or more than 10,000 turkeys and/or more than 3,000 geese per a production cycle at the beginning of investment are eligible for:

- construction and/or in reconstruction of manure storage capacities and/or in specific equipment and mechanisation of facilities for handling and usage of manure;
- investments in on-farm energy production from renewable sources;
- investments in improving biosafety measures.

Animal holdings with a total capacity of the facility with the minimum of 5,000 and the maximum of 200,000 laying hens in exploitation at the end of the investment are eligible for:

- investments in construction and/or equipment of facilities for laying hens, production and storage of eggs, as well as animal feed; waste management facilities, wastewater treatment, air pollution prevention measures, construction of manure storage capacities;
- investments in farm mechanisation (including tractors up to 100 kW) and equipment;
- investments in on-farm in energy production from renewable sources.

Animal holdings with a total capacity of facility with more than 200,000 laying hens, at the beginning of the investment are eligible for:

- investments in reconstruction related only to replacement of old unenriched cages and or equipment for meeting EU standards regarding animal welfare, facilities and equipment for waste management, wastewater treatment, air pollution prevention measures, construction of manure storage capacities;
- investments in on-farm energy production from renewable sources;
- Investments in improving biosafety measures.

Public aid under Measure 1 of the IPARD III programme is up to 60% of the total eligible cost of the investment. It can be increased up to:

- 65% for investments in mountain areas,
- 70% for applications submitted by certified organic farmers and/or young farmers (a farmer, who is a natural person, under 40 years of age at the time of submitting the application, possessing adequate occupational skills and competences).

An additional 10%, provided that cumulative combined support does not exceed 75%, can be given for:

- investments related to effluent and waste management and renewable energy;
- collective – agricultural cooperative investments.

For Measure 1 of the IPARD III programme EU co-financing rate is 75% of the public aid.

A recipient can claim the support, irrespective of the total value of the investment, for eligible expenditure within the following ceilings:

- Minimum EUR 20,000;
- Maximum EUR 1,000,000.

Recipient can receive a total support of maximum EUR 2,000,000 of public support under this measure for the entire IPARD III programming period. Recipient may submit the next application for project approval after submitting the final payment request of approved projects or after withdrawing from the previously approved project.

Investments under Measure 3 of the IPARD III programme are investments in physical assets concerning processing and marketing of agricultural and fishery products.

The specific objectives for the meat processing sector and marketing are to:

- improve slaughtering, cutting and processing facilities in order to comply with EU standards;
- introduce new technologies, improve processes and products in order to achieve a better position in the domestic and international markets;
- introduce food safety and quality systems (GHP, GMP, HACCP and ISO) for production monitoring, control and management; and
- improve waste and wastewater treatment management and renewable energy sources.

The specific objectives of the egg processing sector and marketing are to:

- improve the new and existing processing capacities, in order to comply with EU standards and increase their competitiveness and productivity;
- introduce the new technologies and improve the processes and products in order to achieve better position on the domestic and international market;
- introduce a safety and quality food system (GHP, GMP, HACCP and ISO);
- improve treatment and waste management.

According to the Law on Veterinary Matters, at the end of the investment, recipients must be registered in the List of Establishments.

- In case of slaughterhouses, eligible are recipients with a minimum slaughtering capacity for 500 turkeys and geese or 5,000 poultry per day at the end of investment;
- In case of cutting and/or processing facilities eligible recipients are enterprises with a minimum cutting or processing capacity of 500 kg per day at the end of investment.

For egg processing sector and marketing only micro, small and medium sized enterprises, as defined in accordance with the EU recommendation 2003/361 are eligible.

Aid intensity can be up to a maximum of 50% of the total eligible expenditures. For investments relating to the treatment of effluents and investments in the productive use of waste materials – circular economy - and in renewable energy, the maximum aid intensity can be increased by 10%. The maximum level of aid for collective investments is 70%.

For Measure 3 of the IPARD III programme EU co-financing rate is 75% of the public aid.

A recipient can claim the support, irrespective of the total value of the investment, for eligible expenditure within the following ceilings:

- Minimum EUR 20,000;
- Maximum EUR 1,300,000.

Recipient can receive a total support of maximum EUR 2,500,000 of public support under this measure for the entire IPARD III programming period.

3.12.2 The National Rural Development Programmes (NRDP)

The agricultural budget is a safe and permanent source of agrarian funding. It has been designed as unified support provided by the state to agriculture for the maintenance of current production, but it is also aimed at fostering the development of this strategically important activity. This is more in theory, and the national agricultural subsidy system is primarily focused on direct payments rather than investments, which is a major issue given the level of investment required by the poultry sector to meet EU standards. The direct payment support schemes are implemented with very simple requirements and low thresholds and make very little contribution to the growth of competitiveness and the acceleration of structural changes.

The following support measures envisaged by the Law on Incentives in Agriculture and Rural Development ("Official Gazette of RS", No. 10/2013, 142/2014, 103/2015 and 101/2016) are applied in the poultry sector:

- Incentives for livestock production:
 - incentives for quality breeding stock;
- Subsidies for investments in agriculture to improve competitiveness and achieve quality standards:
 - subsidies for investment in agricultural production on farms;
 - establishment and strengthening of producer groups;
 - subsidies for investment in the processing of agricultural products and marketing;
 - insurance premium subsidy on crops, perennial plantations, nurseries and animals;
- Subsidies for sustainable rural development:
 - the implementation of agro-environmental measures;
 - organic production;
 - the preservation of plant and animal genetic resources;
 - compensatory payments for the implementation of good agricultural practices, animal welfare and other policies to protect and preserve the environment.

Within the National Rural Development Programmes support for lower intensity investments are provided. The demarcation criteria of IPARD and NRDP are established at several levels through:

- different measures;
- potential recipients;
- types of eligible investments;
- limits of financial support for investments.

For investments, there are demarcation criteria between IPARD III and NRDP measures:

- Animal holding having at the end of the investment a total capacity of maximum of 4,999 broilers and/or 999 turkeys and/or 299 geese and/or 4,999 laying hens;
- In case of slaughterhouses eligible are recipients with maximum capacity for: 4,999 broilers or 499 turkeys and geese per day at the end of the investment;
- In case of cutting and/or processing facilities eligible recipients are enterprises with a maximum cutting or processing capacity of 499 kg per day at the end of the investment.

The incentives for quality breeding stock also apply to parent flocks, 0.5 euros per parent of the heavy line of chickens, 0.8 euros per parent of the light line of chickens, and 2.5 euros per parent of turkeys.

3.13.3 Harmonization of national legislation with EU legislation

Food safety, human and animal health, animal welfare, environmental protection, trade and marketing are only few of the areas where EU legislation impacts the poultry meat and egg sectors.

Many of the issues currently affecting the sectors are related to the large-scale and intensive production practices. While high stocking densities and rapid growth impact negatively on poultry welfare, intensive farming can also be harmful to the environment and human health.

Harmonization of national legislation with EU legislation imposes additional costs on producers in the areas of animal health, animal welfare, food safety, and environmental protection. Economic research has shown that the application of EU legislation increases the cost of egg production by an average of 16%.

All food production in the EU is subject to the General Food Law (Regulation (EC) No 178/2002), which covers all the food production, processing and distribution stages. It set out an overarching and

coherent framework for the development of food and feed legislation at both Union and national levels.

Regulation (EU) 2017/625 of the European Parliament and of the Council on official controls and other official activities was adopted in March 2017 to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products.

Regulation (EU) 2016/429 of the European Parliament and of the Council on transmissible animal diseases was adopted in March 2016, and it is also known as “Animal Health Law”.

Captive birds must fulfil the animal health requirements laid down in Regulation (EU) 2016/429 Animal Health Law Part V (Articles 229 to 243), which are based on:

- the health status of livestock, of other animals and wildlife;
- the legislation of the non-EU country;
- the country's rules on the prevention and control of animal diseases;
- the organisation, structure, competence and power of the veterinary services; and
- the regularity and rapidity of information on infectious animal diseases provided by the non-EU country to the European Commission and the World animal health organisation (OIE).

Commission Delegated Regulation (EU) 2020/692 lays down specific animal health requirements for non-EU countries supplementing the measures laid down in the Animal Health Law. These include requirements related to infection with Newcastle disease virus, highly pathogenic avian influenza or in the case of psittacidae (parrots) avian chlamydiosis, residency periods in the country of origin, requirements for establishments of origin, health requirements for the animals and certification.

Serbia's legislation had been largely harmonised with the EU, but following the adoption of Regulation (EU) 2017/625 on official controls, Regulation (EU) 2016/429 on transmissible animal diseases, and a number of related regulations, it is now necessary to quickly harmonise Serbia's regulations with those of the EU.

In the coming year, Serbia will adopt a comprehensive strategy and action plan for alignment, implementation and enforcement of the EU acquis on agricultural policy and food safety, veterinary and phytosanitary policy.

Regulation No 589/2008 lays down marketing standards for eggs sold in the EU, including egg grading, labelling, hen living conditions and record keeping and Commission Regulation No 543/2008 lays down detailed rules on marketing standards for poultry meat, fixing the parameters for monitoring water content and labelling of different methods of production. These directives have been largely transposed into the legislation of the Republic of Serbia.

The Integrated Pollution Prevention and Control Directive (IPPC Directive 2008/1/EC) was transposed into the legislation of the Republic of Serbia through the Law on Integrated Pollution Prevention and Control, adopted in December 2004 (Official Gazette of the Republic of Serbia No. 135/2004 and 25/2015). IPPC refers to new or existing industrial operations having a high pollution potential, as specified in the Regulation on the types of activities and installations for which an integrated permit is issued (O.G. of RS, No. 84/2005). With more than 90 farms which are obliged to obtain an integrated permit, the intensive rearing of poultry and pigs is the sector with the biggest number of IPPC installations in Serbia. This regulation applies to farms with over 40,000 poultry, slaughterhouses with a production capacity of more than 50 tonnes per day, and meat processing plants with a production capacity of final products of more than 75 tonnes per day.

The Council Directive 91/676/EEC on the protection of waters against pollution caused by nitrates from agricultural sources (the Nitrates Directive) was adopted on December 12, 1991. It has been partially integrated into Serbia in the Regulation on the conditions to be fulfilled by facilities for animal waste and plants for processing and treatment of animal waste ("Official Gazette of RS", 94 of 19/17, and 94/19), but there is a need to review this regulation and its full harmonisation with EU requirements.

The Rulebook on Animal Welfare Conditions (Official Gazette of RS, Nos. 6/10, 57/14, and 152/20) is in compliance with Council Directives 98/58/EC, 2007/43/EC, and 1999/74/EC, and must be implemented until the end of 2023. From January 1, 2024, each hen shall have a floor space of at least 750 cm² in enriched battery cages, which is a significant increase over the current surface area of 550 cm² in unenriched battery cages.

Because EU poultry legislation has undergone substantial revisions and changes in recent years, the Republic of Serbia must harmonise its requirements as soon as possible and completely implement them.

4. SWOT (Strength, Weakness, Opportunity, Threat) analysis of the sector

Strengths	Weaknesses
<p>The whole sector</p> <ul style="list-style-type: none"> • Good agro-climatic conditions for agricultural production; • Land availability; • Excellent quality and quantity of animal feed produced; • Long tradition and well-known technology of poultry production and processing; • Legislative and institutional framework in the meat and eggs production and processing sector established; • Investment incentives - EU pre-accession assistance for rural development (IPARD) and the National Rural Development Programmes (NRDP); • The existence of commercially well-organized producers and processors; • New technologies and adequate modern equipment already present on some farms as well as in slaughterhouses and for meat processing; • The existence of a large number of educational and scientific institutions; • <i>Salmonella</i> vaccination partially funded by the government; <p>Layer production</p> <ul style="list-style-type: none"> • Adequate capacities for breeding of parent flocks and in hatcheries too; <p>Broiler Production</p> <ul style="list-style-type: none"> • EU approved slaughtering, cutting, and processing establishments; • Medium-sized farms and slaughtering, cutting and meat processing facilities that can improve their production with investment support; <p>Egg production</p> <ul style="list-style-type: none"> • High productivity of the market-oriented commercial sector. 	<p>The whole sector</p> <ul style="list-style-type: none"> • Socio-economic problems - depopulation in rural areas, insufficient human resources, old population; • Insufficient education of producers and processors and their resistance to the adoption of new technology and practices; • Low productivity and competitiveness; • Expensive feed primarily due to the exclusive use of non-GMO soybean that is drastically more expensive than GMO soybean; • Insufficient level of production compliance with animal health and welfare, food safety and environmental protection standards; • Inadequate biosecurity measures in poultry production; • Old machinery, equipment and facilities; • Poor farm management skills; • Insufficient capacity and the level of manure management and wastewater management; • Lack of a functional and efficient system of safe disposal of animal carcasses and animal waste; • Insufficient use of renewable energy sources; • Lack of adequate advisory support and training; • Weak connection between research and development in the agro-food sector; • Inadequate and out-of-date registers and databases; • Not well-organized association with a small number of members; • Improving the monitoring program of <i>Salmonella</i> and other zoonotic agents; <p>Layer production</p> <ul style="list-style-type: none"> • Complete dependence on genetic material; • High price of day-old chicks compared to some EU countries; <p>Broiler Production</p> <ul style="list-style-type: none"> • Insufficient level of concentration, specialization, vertical integration and efficiency; • Limited range of products e.g. poultry cuts, battered and breaded poultry products, ready to use...; <p>Egg production</p> <ul style="list-style-type: none"> • A large number of manufacturers have not replaced unenriched cages in their production yet; • In reality and practice the complete absence of egg processing.

Opportunities	Treats
<p>The whole sector</p> <ul style="list-style-type: none"> • Continuously increasing demand for meat, meat products and eggs at regional, European, and world levels; • Free trade regime in CEFTA region, free trade with EU, hub location for Russian and CIS markets; • The Open Balkans Initiative, signed in 2021, offers deeper integration to the participating countries, Serbia, North Macedonia and Albania, is a great chance for the Serbian poultry sector to access the new common market; • Full harmonization and implementation of national legislation with EU legislation will provide the opportunity to increase exports due to full compliance with EU standards; • Increased support from the state budget for agriculture and the food industry to modernize, increase in production and higher competitiveness; • The use of EU pre-accession assistance for rural development - IPARD Program 3; • Favourable regions for organic production; • Increased consumer demand for domestic products; • Increased consumer demand for organic, products • The focus of agricultural policy measures towards greater consumer protection and compliance with EU regulations, the promotion of food quality and safety • Market development and branding - the development of competitive products in the global market, branding local products, branding „clean“ earth and healthy food, marketing and better product sales; • The development of organic and sustainable agriculture; • The possibility of synergy with rural tourism - production of traditional, autochthonous and organic food as well as the placement of the tourism; <p>Broiler Production</p> <ul style="list-style-type: none"> • High price of beef and possible drastic increase in the price of pork due to the devastation of a given sector by African swine fever; • Farming slow growth/heritage broiler chicken, • Farming of other poultry species e.g. turkeys, ducks, geese ...; <p>Egg production</p> <ul style="list-style-type: none"> • Establishing the production of egg products at least for the domestic market. 	<p>The whole sector</p> <ul style="list-style-type: none"> • Lack of stable and predictable national policy in agriculture including poultry sector; • Underdeveloped and not too frequent public-private dialog and cooperation; • The national system of subsidies in agriculture is not focused on investment rather than mainly on direct payment, • High costs of fulfilling animal welfare and health, food safety and quality and ecological standards; • Infectious animal diseases that may affect domestic production and consumption, as well as export; • Climate change and natural disasters; • Fluctuation of meat and eggs prices on the regional, European and world markets; • Lack of financial resources and weak financial potential for development; • Reduced ease of access and higher cost for labour; • Strong competition on the market with producers from the region and the EU; • Hints of a total ban on cage keeping in the EU; <p>Broiler Production</p> <ul style="list-style-type: none"> • Closure of slaughterhouses and meat processing plants if they do not meet the new higher national requirements that are in line with EU standards; <p>Egg production</p> <ul style="list-style-type: none"> • Ban on keeping laying hens in unenriched cages in Serbia from 31.12.2023. - producers who do not meet the given requirements will shut down their production

5. Potential business opportunities for Dutch poultry businesses (*business and investment cases*)

Opportunities for Dutch Companies

1. Inputs (include breeding, hatchery, parent flocks and feed)

- **Parents flocks and hatcheries**

- Establishment of breeding farms for layers and broilers – parent flocks;
- Investment in efficient hatcheries - both equipment and technology;
- Knowledge transfer in breeding and hatchery;

Imports account for 25–30% of total Serbian demand in fertilised eggs and day-old chicks. Such high percentages indicate a shortage of particular inputs on the Serbian market, as well as the EU's price and quality competitiveness.

- **Nutrition – soybean meal alternatives e.g. insect feed for poultry.**

Since the use of genetically modified organisms (GMOs) is prohibited in Serbia, due to the expensive cost of non-GMO soybeans, feed and production costs are high. For increased production competitiveness, it is critical to identify another alternate source of protein in poultry nutrition.

2. Production (layers and broilers)

- **Transfer of technology** - focus on decrease of production costs; improvement of feed conversion and consequently increase in profitability. Technology transfer in biosecurity, alternative systems, slow-growing broilers...
- **Farm equipment –enriched cages and alternative systems - barns, free-range or organic rearing systems.** Because unenriched cages will be phased out in Serbia by January 1, 2024, they must be replaced within the next two years.
- **Slow-growing broilers.** Traditionally, fattening chickens have been bought at green markets, and most consumers still prefer them to fast-growing broilers. Slow-growing hybrids with their characteristics correspond to the perception of natural food by consumers in Serbia.

3. Processing (slaughterhouses and meat processing, egg processing)

- **Slaughterhouse equipment.** In Serbia, the great majority of slaughterhouses use outdated equipment and employ a large number of people. New technology and process automation can actually lower operating costs in light of predicted salary increases. Investment in slaughterhouses and meat processing plants – in both equipment and technology.
- **Egg processing plants.** Investment in egg processing – in both equipment and technology. For a long time, 70–75% of Serbian demand for egg products has been covered by imports.

4. Other (consultancy opportunities, generation of renewable energy)

Consultancy in setting up a Producer Organization. For many years, the sector has been inadequately organised, and there has been no coordinated strategy planning or market operations.

Renewable energy sources and waste management equipment. Investments under Measure 1 and Measure 3 of the IPARD III programme have public aid up to 60% of the total eligible cost of the investment. The construction of a biogas plant is a great example of successful manure management and the use of renewable energy sources.

6. Conclusion: possible ways forward

The overall conclusion is that Serbia has great potential for progress in poultry production and processing. Serbia has an abundance of high-quality feed, and the location between the EU, the Russian Federation, and CEFTA countries is optimal for future markets.

In the Republic of Serbia, poultry production can be significantly higher than the current domestic demand, so exports are crucial for the future development of the poultry sector.

Unfortunately, the opportunities for strengthening the poultry sector in Serbia are unexploited due to low domestic demand, the inability to export to the EU, prices that are not competitive in the international markets, primarily for poultry meat and egg products, and a rather limited range of products.

The poultry meat and egg production and processing sectors in Serbia are characterised by an insufficient level of concentration, specialization, vertical integration and efficiency. However, to compete in the world market, the commercial sector must further improve technology, reduce production costs, and improve marketing efficiency. Knowledge, hardware and genetics can be improved, which makes Serbia an interesting country for investment by Dutch companies.

Serbia has started the process of proving the fulfilment of the requirements for the export of eggs and chicken meat to the EU, and, realistically, it will be approved in the next year.

The Open Balkans Initiative, signed in 2021, offers deeper integration to the participating countries, demonstrating a clear commitment to creating a functioning common market. Creating an integrated EU-like market without excessive border control is a great chance for the placement of products from the poultry sector of the Republic of Serbia into the markets not only of North Macedonia, Montenegro, Bosnia and Herzegovina but also of Albania.

In the Republic of Serbia, there is a great need for the existence of a strong association within the poultry meat and egg production and processing sector, which would advocate for interests both nationally and internationally.

This is a publication of
Netherlands Enterprise Agency
Prinses Beatrixlaan 2
PO Box 93144 | 2509 AC The Hague
T +31 (0) 88 042 42 42
Contact us
www.rvo.nl

This publication was commissioned by the ministry of Foreign Affairs.
© Netherlands Enterprise Agency | September 2022

Publication number: RVO-196-2022/RP-INT

NL Enterprise Agency is a department of the Dutch ministry of Economic Affairs and Climate Policy that implements government policy for Agricultural, sustainability, innovation, and international business and cooperation. NL Enterprise Agency is the contact point for businesses, educational institutions and government bodies for information and advice, financing, networking and regulatory matters.

Netherlands Enterprise Agency is part of the ministry of Economic Affairs and Climate Policy.