

FEED PRODUCTION AND FEED ADDITIVES IN RUSSIA

January-April 2023



This report is for the client company's employees' use only. No part of the report may be distributed, quoted or reproduced for use outside the client company without prior written permission from Feedlot. The prices shown in Feedlot reports are estimates based on information obtained from market participants and industry unions in various countries. This information may be used as an indicator and not as a recommendation for a sale or purchase price.

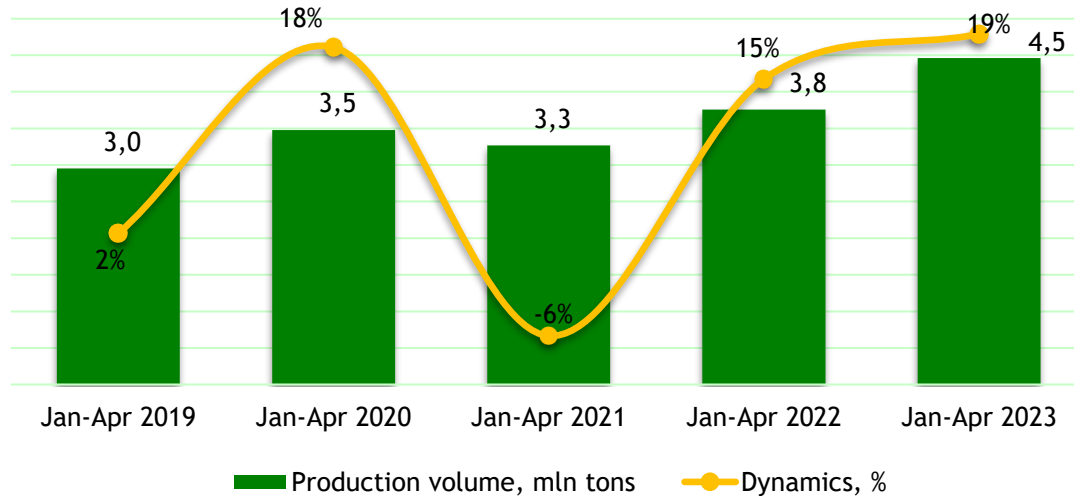


CONTENTS

1. Oilcake and other solid residues of vegetable fats or oils
2. Ready-made feeds for farm animals (except alfalfa meal and pellets)
 - 2.1. Plant feeds
 - 2.2. Animal Feed Dry
 - 2.3. Fish feed
 - 2.4. Feed protein
 - 2.5. Premixes
 - 2.6. Compound feed
 - 2.7. Protein-vitamin-mineral concentrates
 - 2.8. Amido-vitamin-mineral concentrates
 - 2.9. Concentrates and feed mixes
 - 2.10. Boiled feeds
 - 2.11. Feed for farm animals, other
3. Coarse ground flour and alfalfa pellets
4. Fine and coarse flour and pellets of meat or meat by-products
5. Fine and coarse meal and pellets from fish and other aquatic invertebrates

1. Oilcake and other solid residues of vegetable fats or oils

Volume and dynamics of production of oilcake and other solid residues of vegetable fats or oils in Russia, million tons

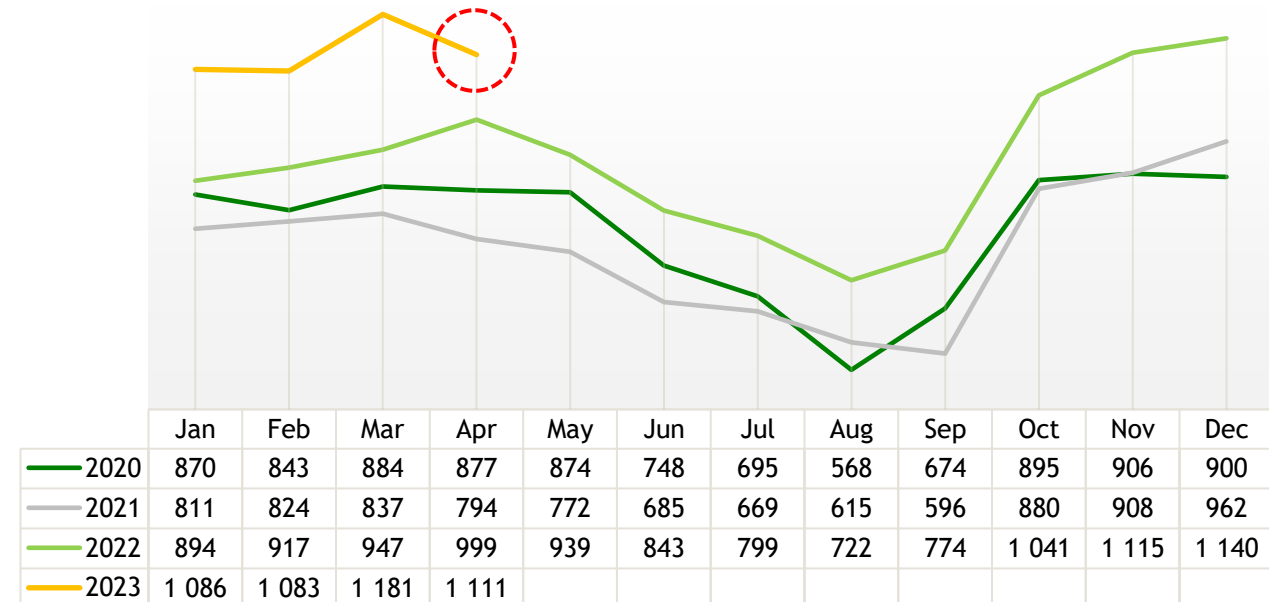


In April 2023, production of cake and other solid residues of vegetable fats and oils was 1.1 million tons, down 5.9% on a monthly basis and up 11% on an annual basis. Since the beginning of 2023, production has been showing record highs.

The dynamics over the past four years trace a clear seasonality in production: output during the summer months decreases significantly.

In January-April 2023 the volume of production of cake of other solid residues of vegetable fats or oils increased by 19% compared to the previous year to 4.5 million tons. Over the last five years the growth of production left about 51%.

Monthly dynamics of production of oilcake and other solid residues of vegetable fats or oils in Russia in 2020-2023, thousand tons



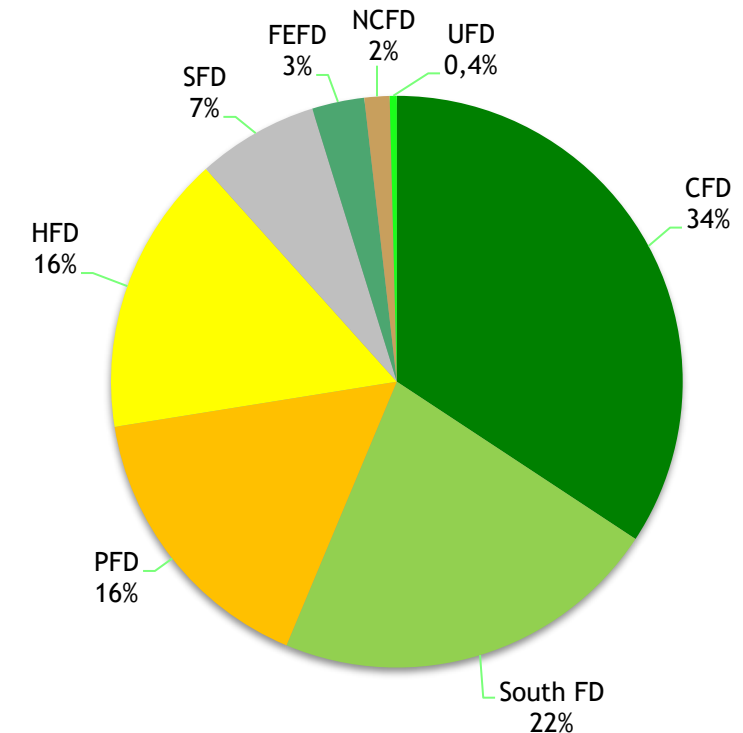
1. Oilcake and other solid residues of vegetable fats or oils

The Central Federal District remains the leader in production of oilcake by federal districts - 1.5 million tons (34% of the total production volume). Next is the Southern Federal District - 983 thousand tons (22%). The Northwestern and Privolzhsky Federal Districts each account for 16% of production. The most significant production growth was observed in the Central and Far Eastern Federal Districts by 48.5% on average.

Production of cake and other solid residues of vegetable fats or oils by federal districts, thousand tons

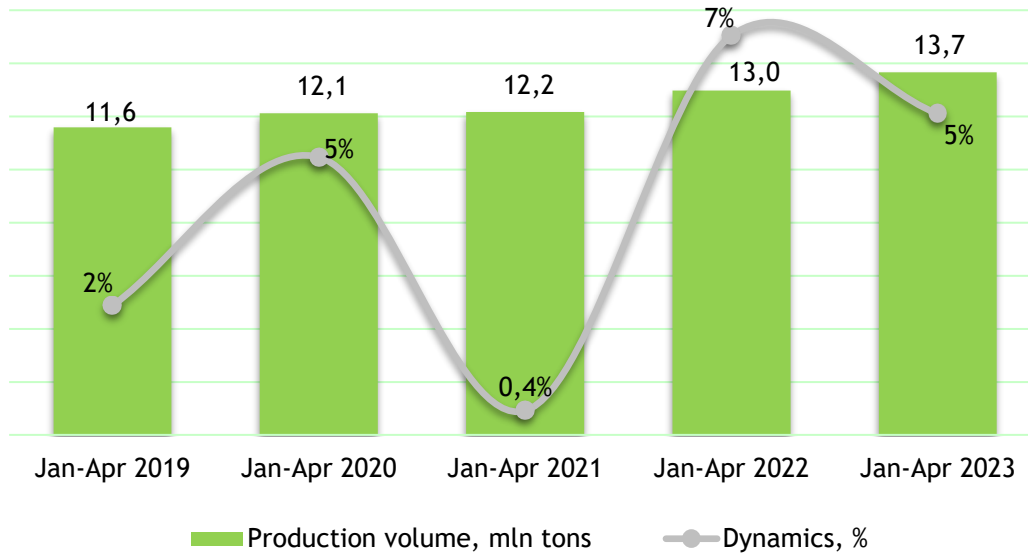
Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	750	984	908	1 031	1 529	48,3%
South FD	659	749	729	908	983	8,3%
PFD	525	726	634	719	721	0,3%
NFD	699	697	678	722	709	-1,8%
SFD	148	185	195	206	306	48,7%
FEFD	130	78	72	101	132	30,9%
NCFD	32	40	36	56	63	13,9%
UFD	12	16	13	16	18	13,5%
Total in the RF	2 954	3 475	3 266	3 757	4 461	18,7%

Production structure by federal districts in January-April 2023, %



2. Ready-made feeds for farm animals (except alfalfa meal and pellets)

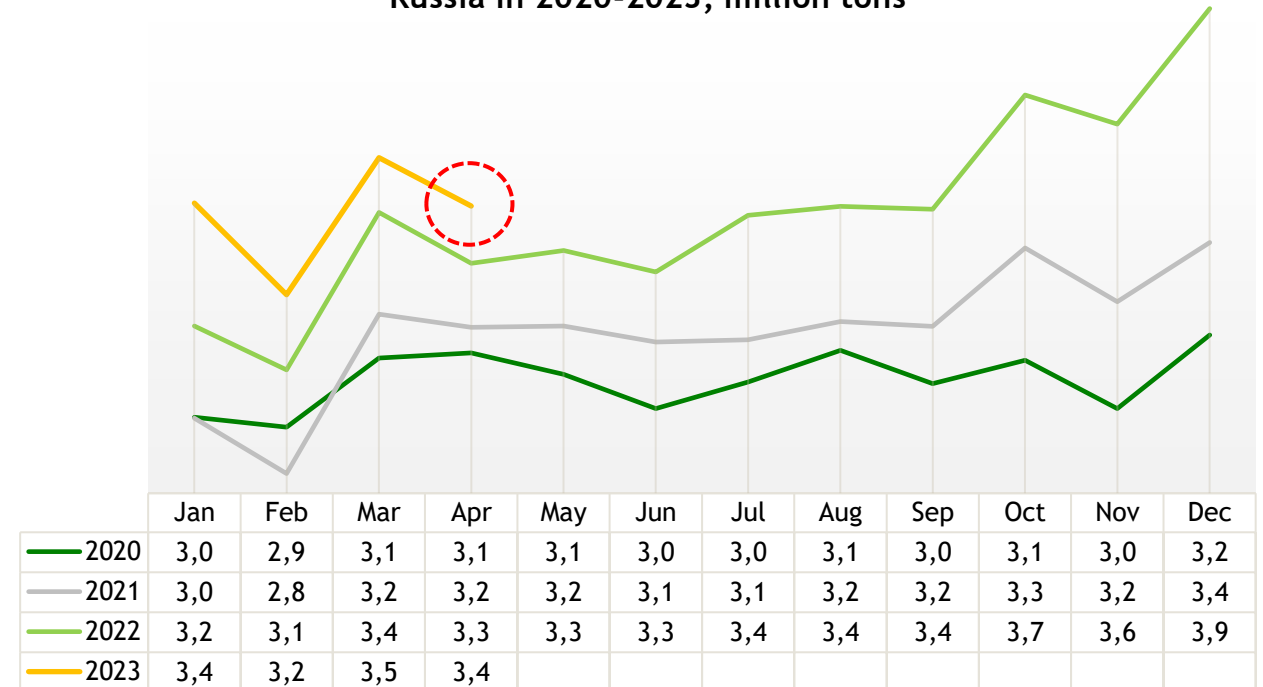
Volume and dynamics of finished animal feed production in Russia, million tons



In April 2023, production of finished animal feeds declined 3.0% month-over-month and rose 3.8% year-over-year to 3.4 million tons. This is a record high in the last four years.

In January-April 2023, Russia produced 13.7 million tons of finished feed for farm animals, up 5% year-on-year. We can see from the dynamics that production grows almost annually and over the past five years the growth has been about 18%.

Monthly dynamics of finished feed production for livestock in Russia in 2020-2023, million tons



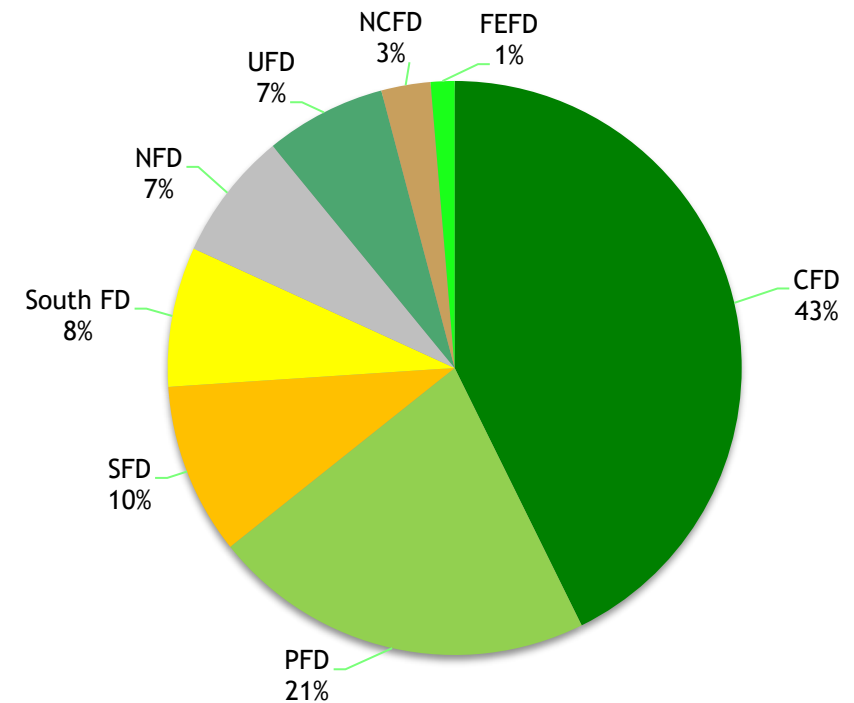
2. Ready-made feeds for farm animals (except alfalfa meal and pellets)

In January-April 2023 the leader in the volume of feed production for farm animals is the Central District, which produced about 5.8 million tons - 43% of the total production. Volga FD also produces a significant amount of fodder - 2.9 mln tons or 21%. The decline was observed only in the North Caucasian (by 9.7%) and Northwestern Federal District (by 2.2%).

Volume of finished feed production for farm animals by federal districts, thousand tons

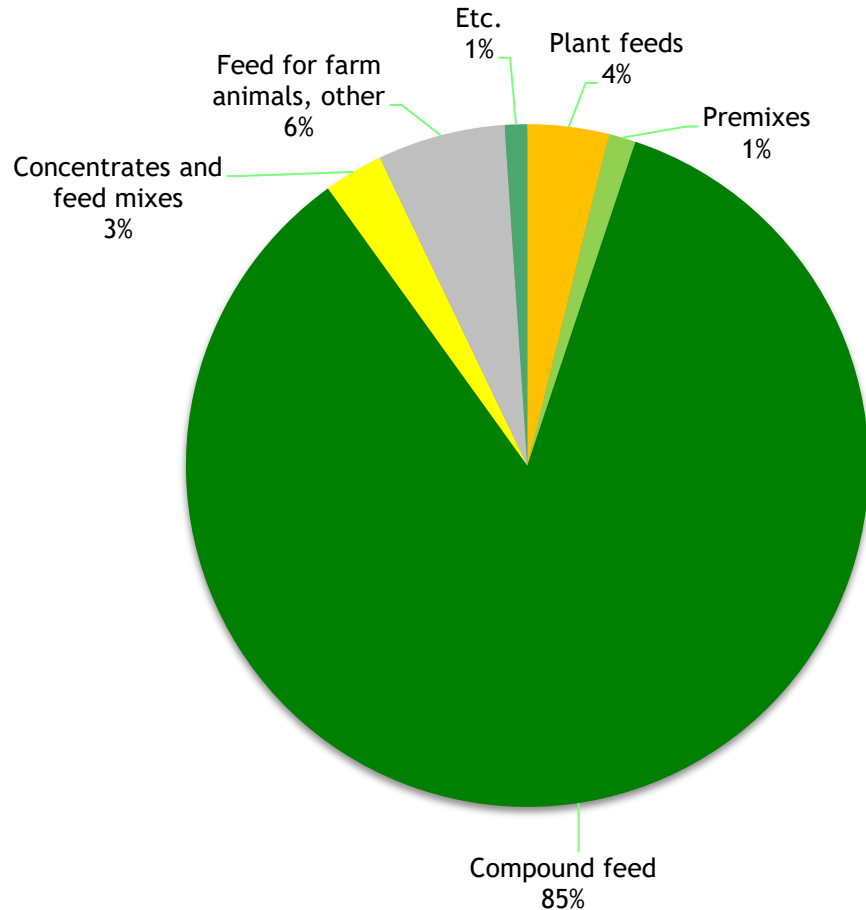
Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	4 737	5 118	5 138	5 535	5 835	5,4%
Southern FD	2 537	2 663	2 653	2 690	2 949	9,6%
PFD	1 249	1 232	1 238	1 267	1 320	4,2%
NFD	840	824	860	1 005	1 076	7,1%
SFD	901	985	966	1 013	990	-2,2%
FEFD	941	865	856	878	930	5,9%
NCFD	312	361	358	419	379	-9,7%
UFD	77	77	105	168	183	9,1%
Total in the RF	11 594	12 125	12 174	12 976	13 663	5,3%

Production structure by federal districts in January-April 2023, %



2. Ready-made feeds for farm animals (except alfalfa meal and pellets)

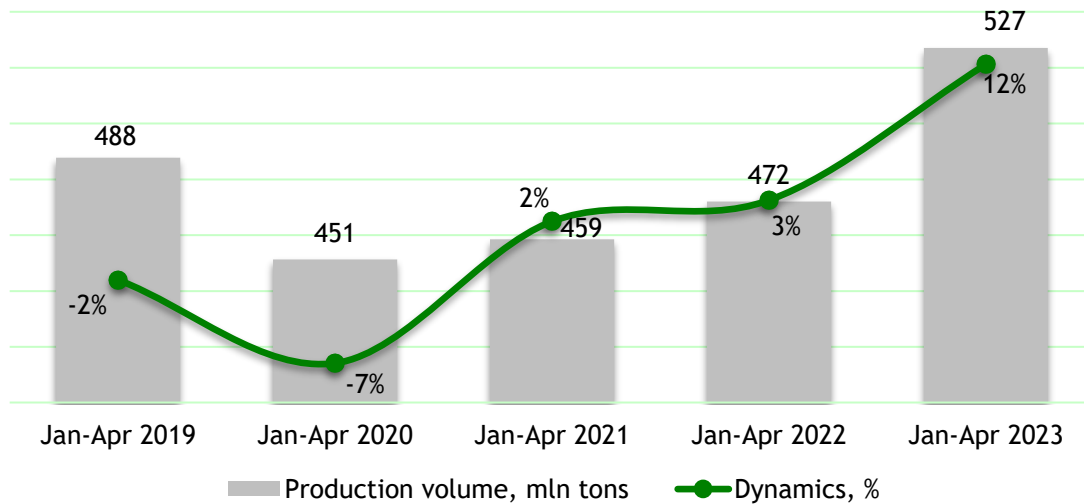
Production structure by type in January-April 2023, %



Feedstuffs account for 85% of the total production. Premixes account for only 1% of total production.

The structure does not change significantly from month to month.

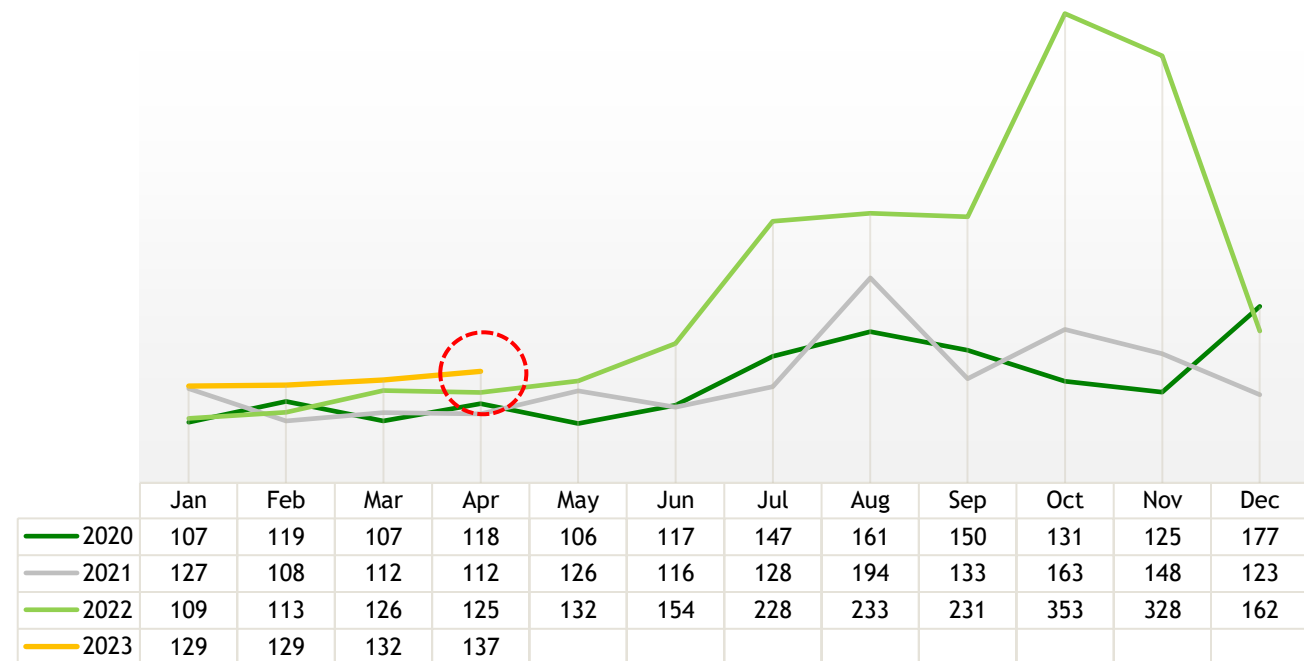
Volume and dynamics of plant feed production in Russia, thousand tons



In April 2023, plant fodder production in Russia for the month increased by 4.0% to 137 thousand tons. Compared to April 2022, this figure increased by 10%.

The volume of plant feed production in January-April 2023 increased by 12% relative to the same period in 2022 and reached 527 thousand tons. Over the last five years the growth was about 8%.

Monthly dynamics of plant feed production in Russia in 2020-2023, thousand tons

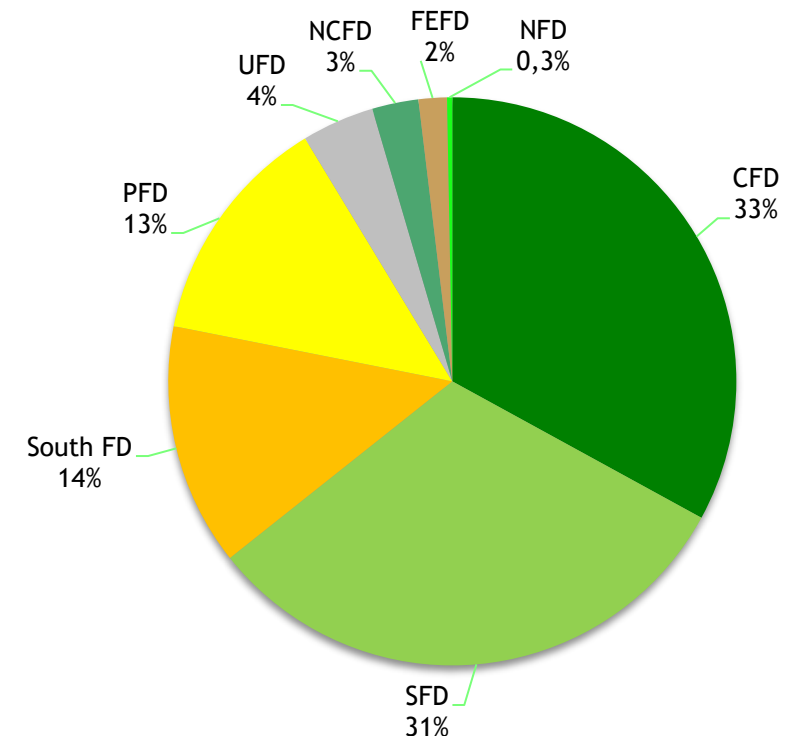


In January-April 2023 the largest volume of plant feed was produced in the Central Federal District - 174 thousand tons or 33% of the total production. Also a significant amount of plant feed is produced by enterprises in Siberia - about 165 thousand tons or 31% of the total production in Russia. The Privolzhsky and Southern federal districts take 14% and 13% of the production structure respectively. Significant reduction in production over the last year was recorded in the Northwestern Federal District - 45%. The most intensive growth was observed in the Southern and Far Eastern Federal Districts (by 33% per year on average).

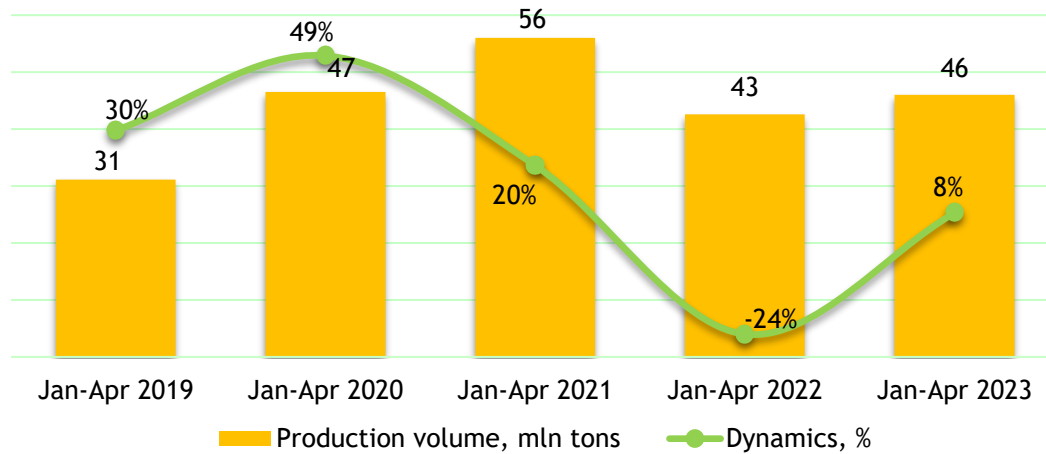
Production of plant feeds by federal districts, thousand tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	161	153	153	183	174	-4,8%
SFD	183	167	168	139	165	19,0%
South FD	35	36	31	50	73	44,7%
PFD	61	58	70	59	70	18,2%
UFD	10	15	12	19	22	15,5%
NCFD	33	15	15	13	14	8,0%
FEFD	2,9	3,9	6,6	7,0	8,5	22,1%
NFD	2,8	2,8	1,9	2,8	1,6	-45,1%
Total in the RF	488	451	459	472	527	11,6%

Production structure by federal districts in January-April 2023, %



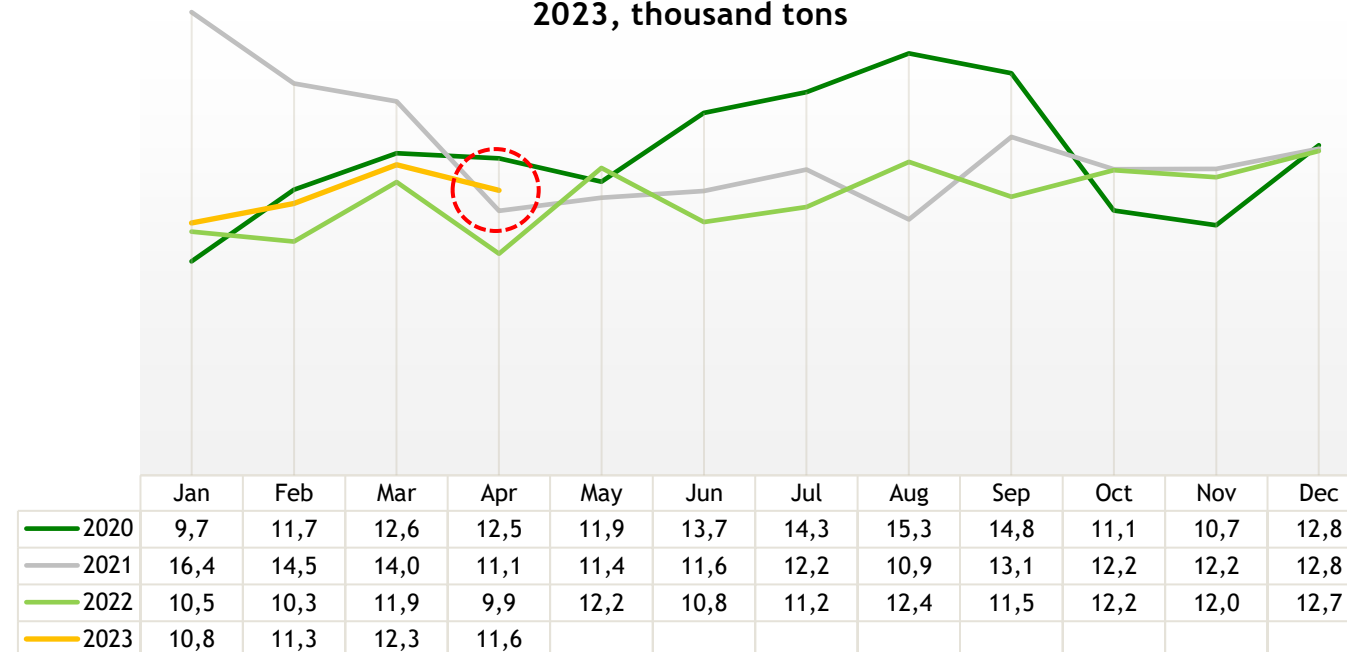
Volume and dynamics of dry animal feed production in Russia, thousand tons



The volume of dry animal feed production in Russia in the first four months of 2023 increased by 8% year-on-year to 46 thousand tons.

In April 2023, Russia's production of animal dry feed for the month decreased by 5.5% to 11.6 thousand tons, or increased by 17% over the year.

Monthly dynamics of dry animal feed production in Russia in 2020-2023, thousand tons

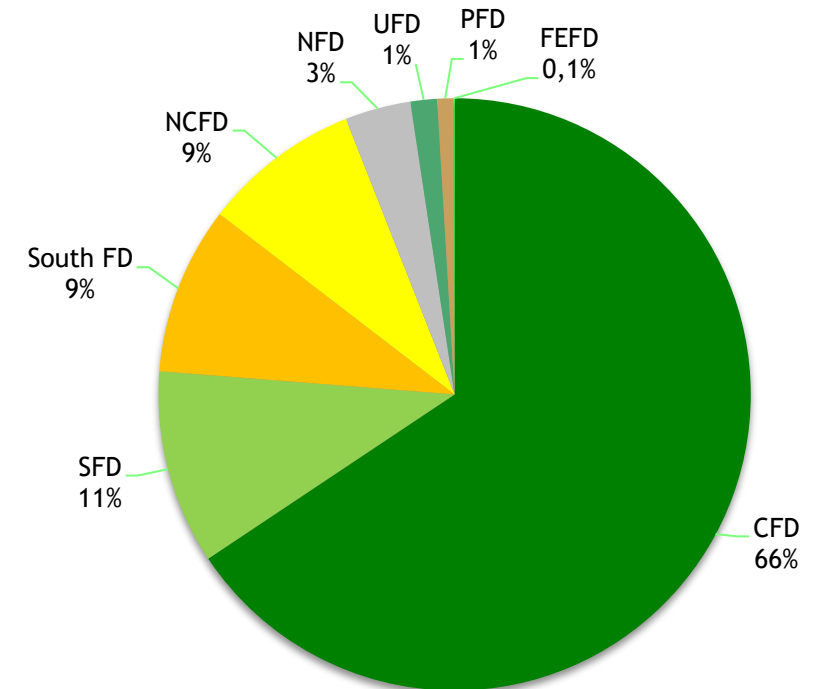


The leader in the production of animal dry feed in January-April 2023 is also the Central District - 30 thousand tons (66% of total production). Siberian, Southern and North Caucasian federal districts take 9%-11% respectively. It is worth noting that a significant decrease in production is noted in the North Caucasian and Privolzhsky federal districts by 52% on average. The most intensive growth of production is demonstrated by Siberian and Ural districts.

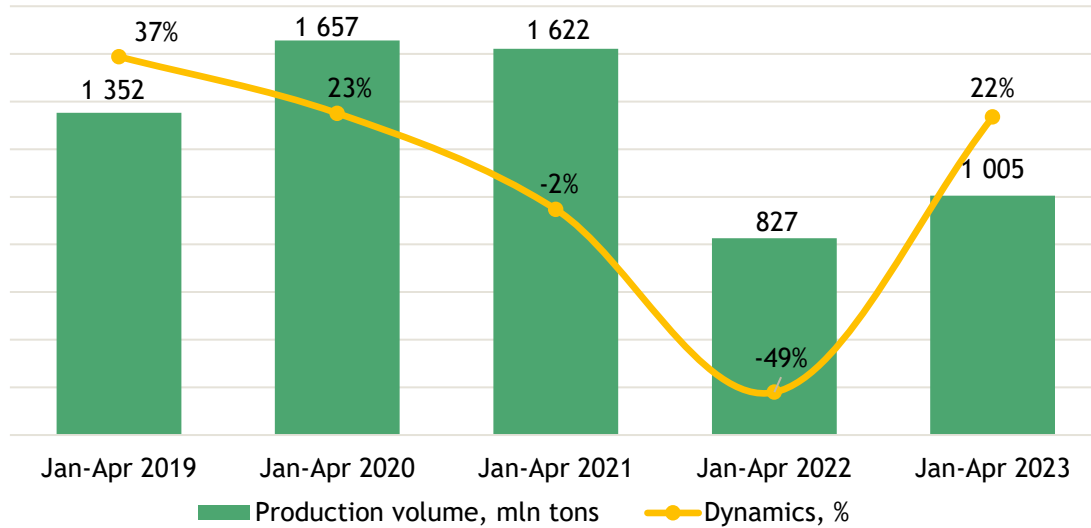
Production of dry animal feed by federal districts, thousand tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	16	28	36	25	30	21,8%
SFD	2,0	3,1	3,8	1,5	4,9	227%
South FD	2,0	3,4	3,4	4,1	4,2	2,6%
NCFD	1,1	7,2	8,2	8,9	4,0	-55,7%
NFD	2,7	2,4	2,6	2,0	1,7	-18,3%
UFD	7,3	2,3	1,7	0,4	0,7	49,9%
PFD	0,5	0,6	0,5	0,8	0,4	-48,9%
FEFD	0,04	0,02	0,02	0,03	0,03	11,1%
Total in the RF	31	47	56	43	46	8,0%

Production structure by federal districts in January-April 2023, %



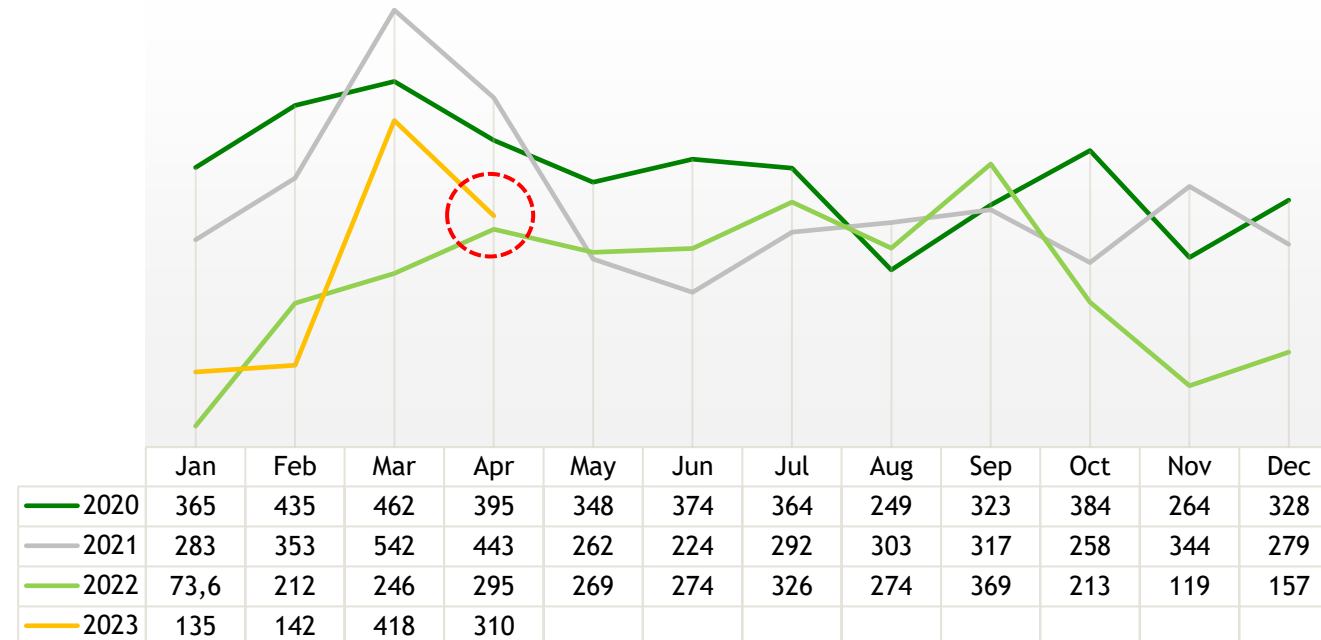
Volume and dynamics of fish fodder production in Russia, tons



In April, fish fodder production decreased by 26% to 310 tons compared to March of this year, or increased by 5.1% in annual terms.

The volume of fish fodder production in Russia in January-April of this year increased by 22% year-on-year and reached 1.0 thousand tons. Over the past four years the decline was about 39%.

Monthly dynamics of fish fodder production in Russia in 2020-2023, tons

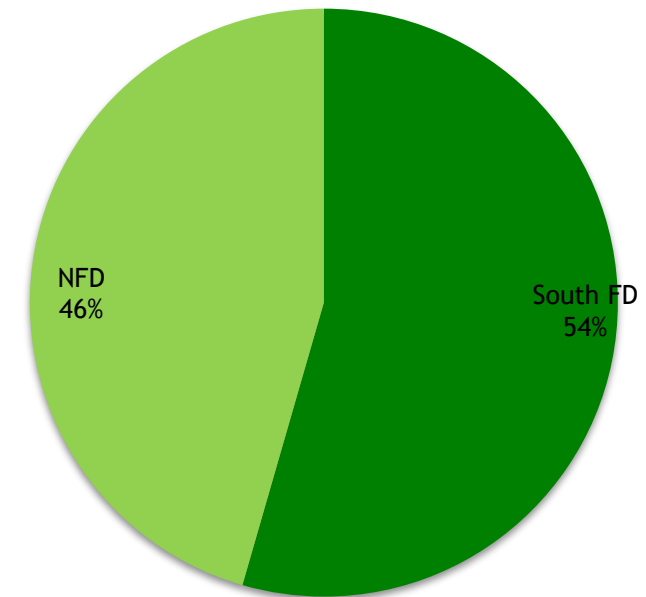


During the first four months of the current year fish fodder was produced only in two federal districts: Southern - 540 tons (54%) and North-Western - 465 tons (46%). In these districts there was intensive growth in annual terms: in the South -78% and in the North-West - 35%.

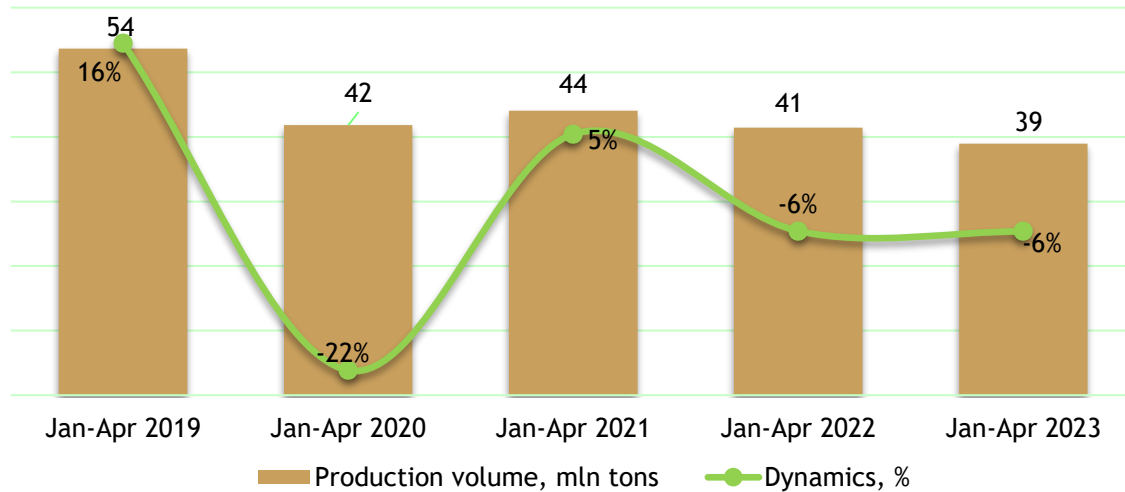
Production of fish fodder by federal districts, tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
South FD	569	430	430	303	540	78,2%
NFD	552	986	953	344	465	35,1%
SFD	228	239	239	179		-
FEFD	2,5	2,1				-
Total in the RF	1 352	1 657	1 622	827	1 005	21,6%

Structure of fish fodder production by federal districts in January-April 2023, %



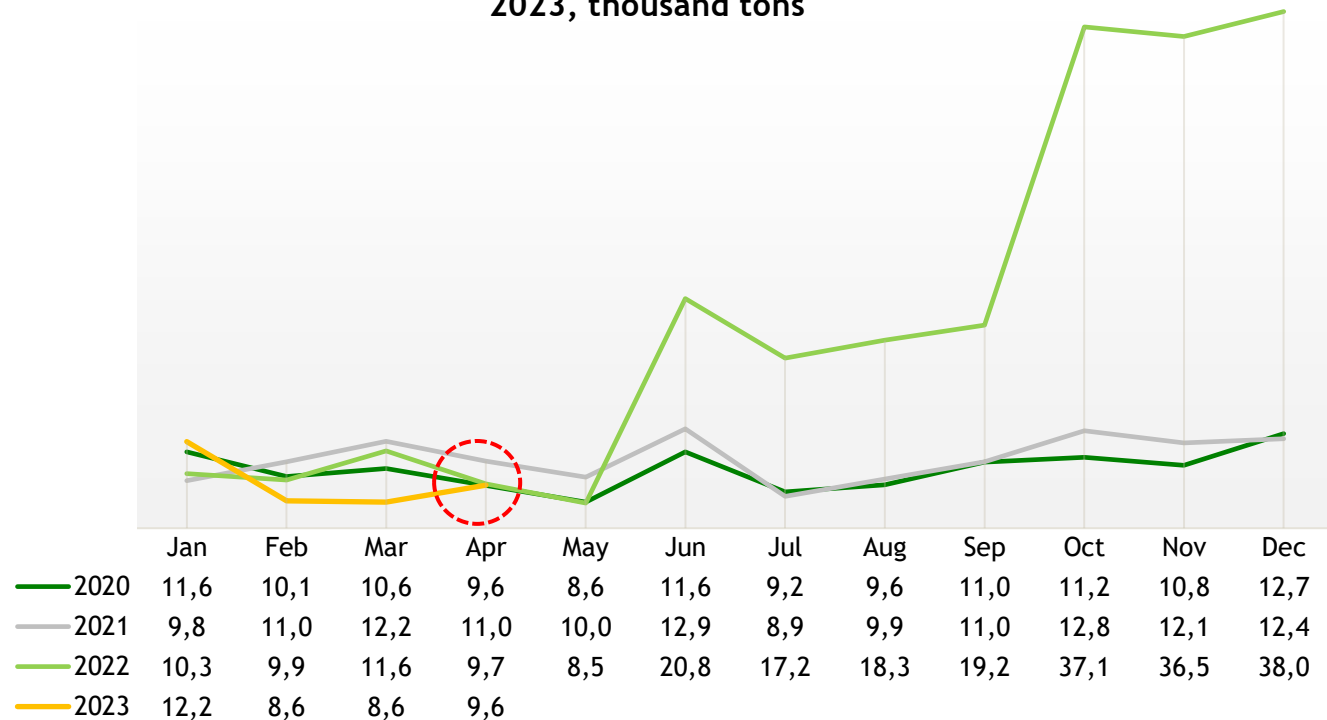
Volume and dynamics of feed protein production in Russia, thousand tons



In January-April 2023, fodder protein production in Russia decreased by 6% compared to the same period of 2022 and amounted to 39 thousand tons. Compared to 2019 production volume decreased by 27%.

In April, the production of fodder protein increased by 12% to 9.6 thousand tons compared to March. In annual terms, the decrease in production was only 0.8%.

Monthly dynamics of feed protein production in Russia in 2020 - 2023, thousand tons

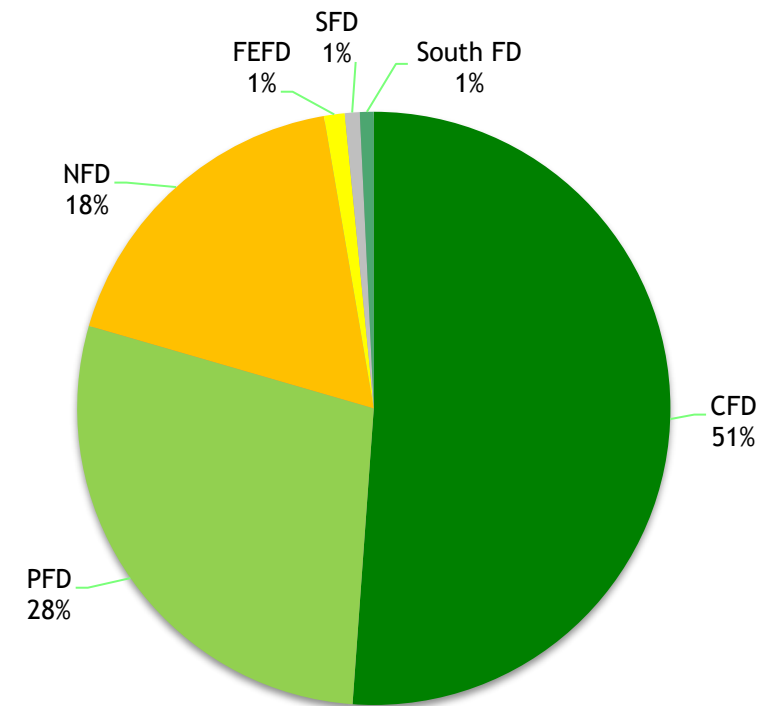


In the structure of fodder protein production during the analyzed period of 2023, the Central District increased its share to 51% (20 thousand tons). Also a significant volume is produced in the Privolzhsky and Northwestern Federal Districts (28% and 18% respectively). The most intensive production in annual terms is demonstrated by the Northwestern and Siberian districts. Significant decrease was observed in the South and the Far East.

Feed protein production by federal districts, thousand tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	27	20	22	23	20	-13,7%
PFD	20	11	11	11	11	1,7%
NFD	2,0	2,1	2,0	1,9	6,9	259%
FEFD	2,0	0,8	0,8	1,3	0,4	-66,3%
SFD	0,002			0,02	0,3	1327%
South FD	3,6	7,7	8,1	4,2	0,3	-93,0%
Total in the RF	54	42	44	41	39	-6,0%

Structure of feed protein production by federal districts in January-April 2023, %



Marketing research by FEEDLOT

MARKET ANALYSIS OF ESSENTIAL OILS IN RUSSIA



@FEEDLOT_RU

 FEEDLOT

This research is a marketing analysis of the market of essential oils in Russia. **FEEDLOT** analysts have analyzed the industry in the current economic situation.

Analysis period: 2017-2022

 FEEDLOT

Object of research: essential oils market in Russia

The report consists of 47 slides (61 charts, 12 tables).

Standard package – 49 000 rubles (pdf report).

Extended package – 69 000 rubles (pdf report + excel data)

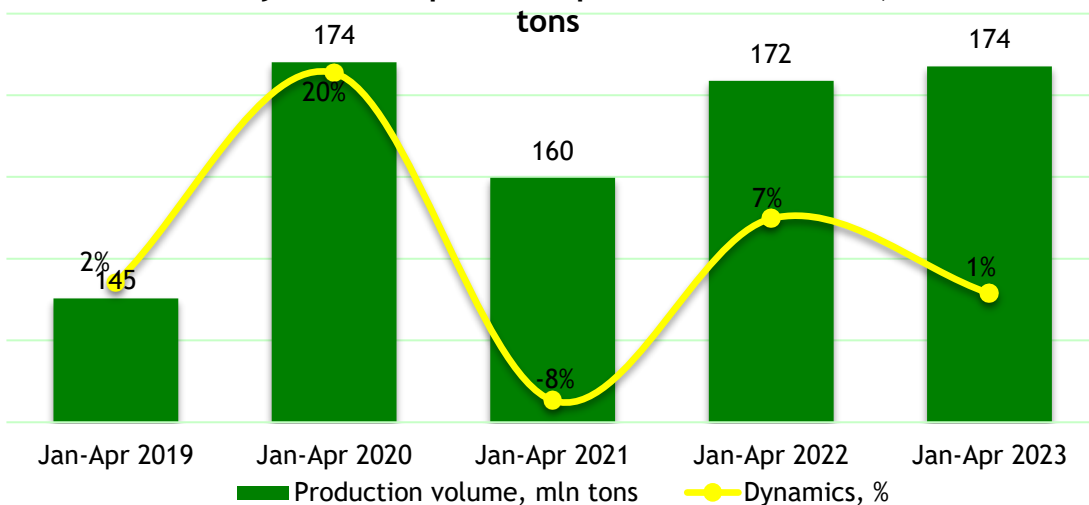
Service period – 1 working day after payment.

 FEEDLOT



[DOWNLOAD A DEMOVERSION](#)

Volume and dynamics of premixes production in Russia, thousand



The structure of production remains unchanged. The largest share is taken by premixes for birds - 36%.

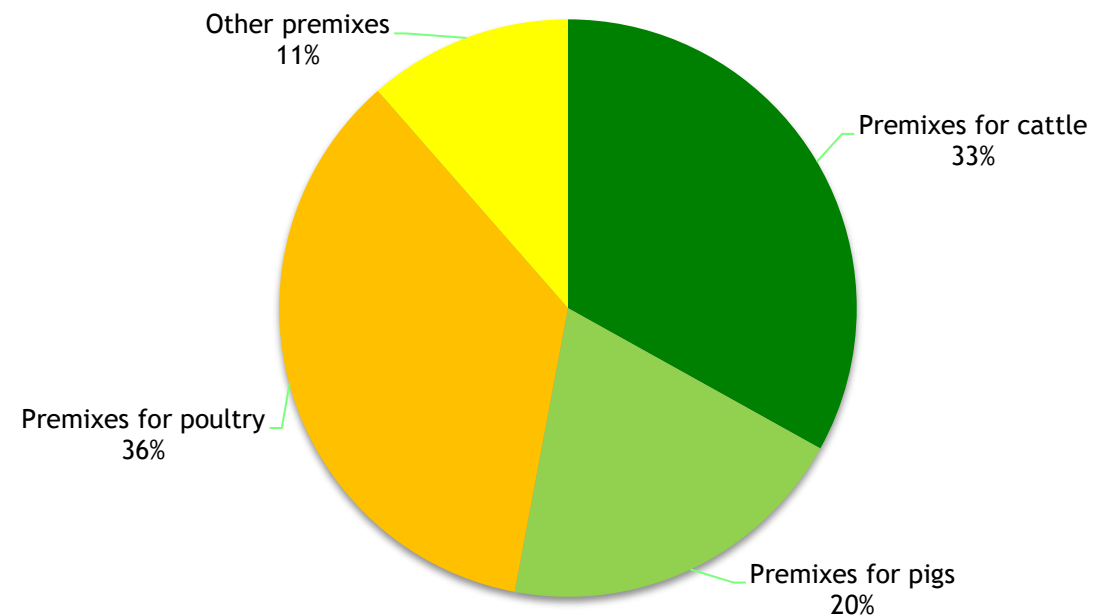
The share of premixes for cattle is about 33%.

Premixes for pigs accounted for 20% of the total production volume.

In January-April 2023, the production of premixes in Russia increased by only 1% year-on-year to 174 thousand tons. As compared to 2019, the growth was about 20%.

In April of this year, production decreased by 5.9% in monthly terms or increased by 2.4% in annual terms to 46 thousand tons.

Production structure of premixes by type in January-April 2023, %

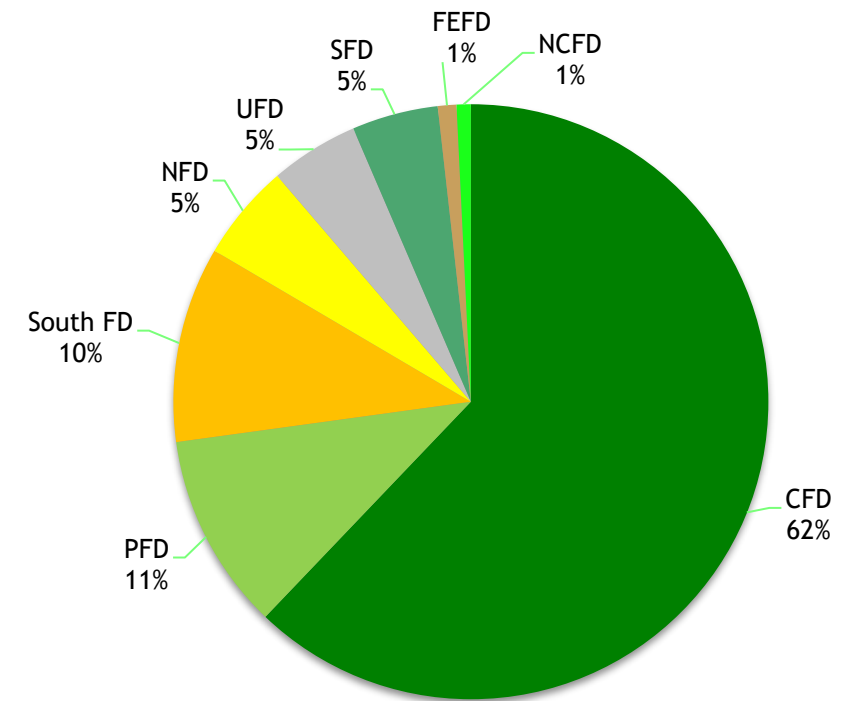


Significant volume, more than 60%, of premixes is produced in the Central Federal District - 108 thousand tons, followed by the Privolzhsky and Southern Federal Districts with the share of 10%-11% respectively. The most significant growth of production volume was observed in the Far East and the North Caucasus. In Siberia, the North-West and the Southern Federal District the decline in annual terms averaged 6.3%.

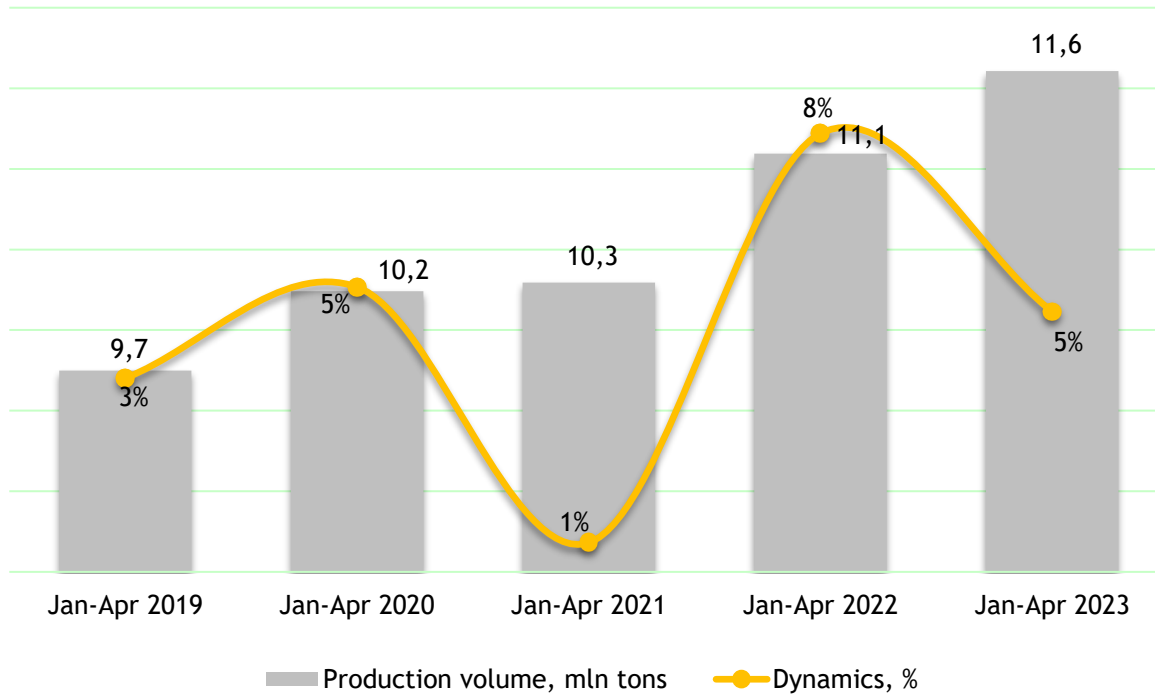
Production of premixes by federal districts, thousand tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	88	111	101	109	108	-0,6%
PFD	14	18	19	17	19	6,4%
South FD	20	22	21	19	18	-5,2%
NFD	8,2	8,8	7,4	9,8	9,1	-7,2%
UFD	4,2	4,7	4,4	6,7	8,3	24,2%
SFD	9,8	9,2	7,2	8,7	8,1	-6,4%
FEFD	0,1	0,1	0,1	1,1	1,8	61,7%
NCFD	0,1	0,03	0,3	0,02	1,3	5845%
Total in the RF	145	174	160	172	174	1,0%

Structure of premixes production by federal districts in January-April 2023, %



Volume and dynamics of mixed fodder production in Russia, million tons



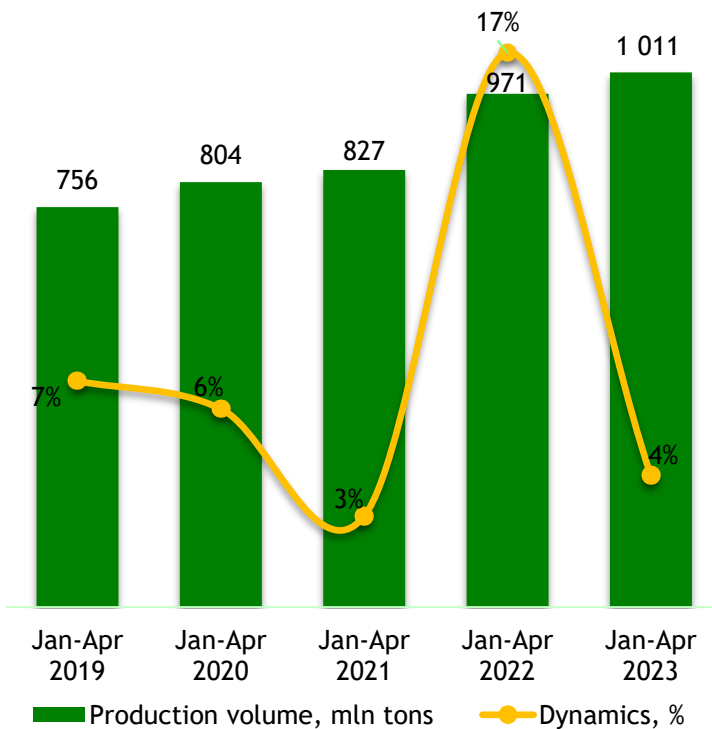
According to the results of January-April 2023, the volume of mixed fodder production **increased by 5% year-on-year** and amounted to **11.6 million tons**. Over the past five years the production of mixed fodders increased by 19%.

In April, the total production of all types of mixed fodders decreased by 3.3% relative to March to **2.9 million tons**. But relative to April 2022, the output of mixed fodders **increased by 3.2%**.

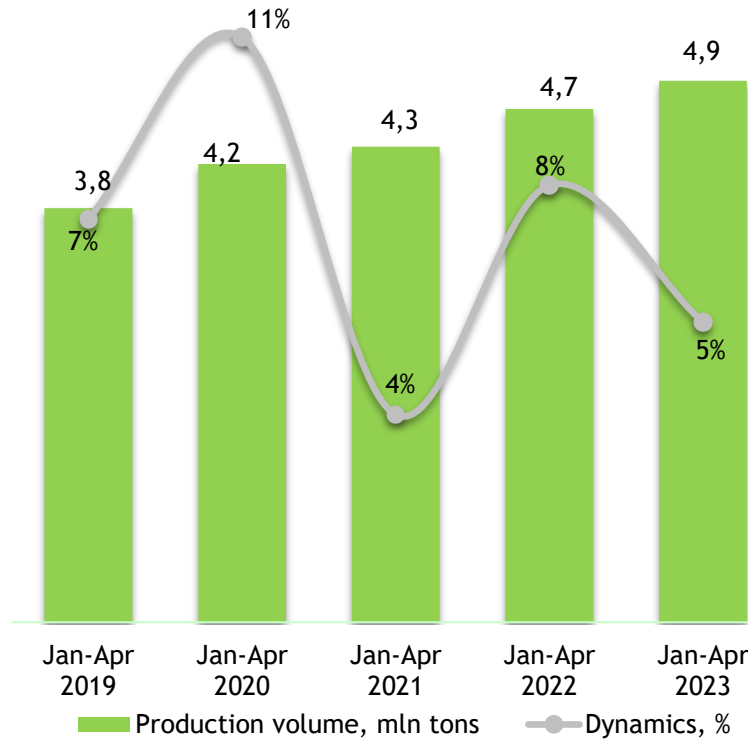
The leader by the volume of production among mixed fodders is compound feed for poultry, also not a small part of production falls on mixed fodders for pigs.

The total volume of mixed fodder production for cattle in January-April 2023 reached 1.0 million tons, which is 4% higher than the previous year for the same period. Production of mixed fodder for pigs reached 4.9 million tons, up 5% year-on-year. In January-April 2023, poultry compound feed production was up 4% year-over-year to 5.6 million tons.

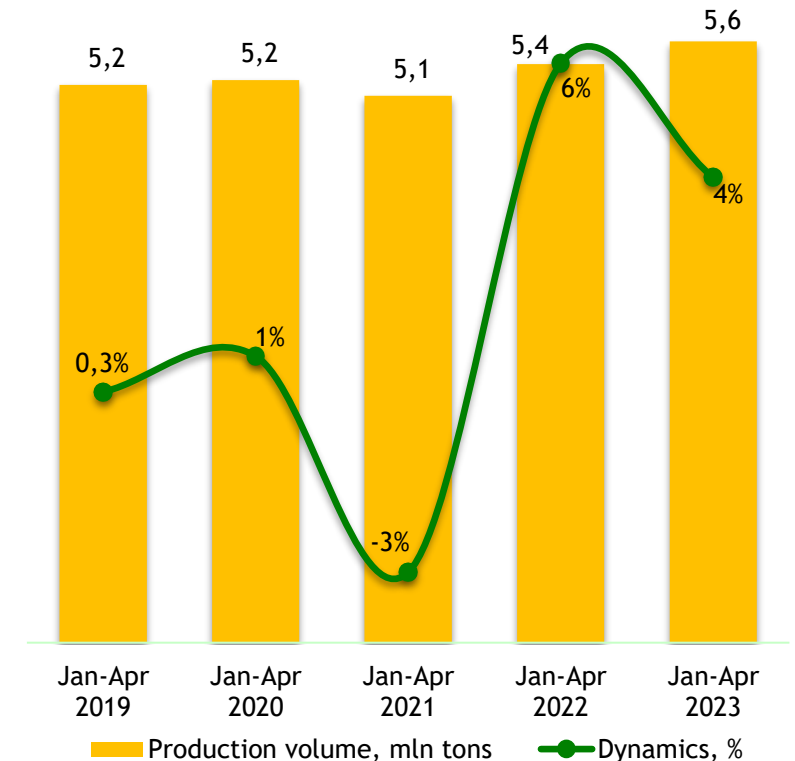
Volume and dynamics of mixed feed production for cattle in Russia, thousand tons



Volume and dynamics of compound feed production for pigs in Russia, million tons



Volume and dynamics of production of mixed fodder production for poultry farms in Russia, million tons



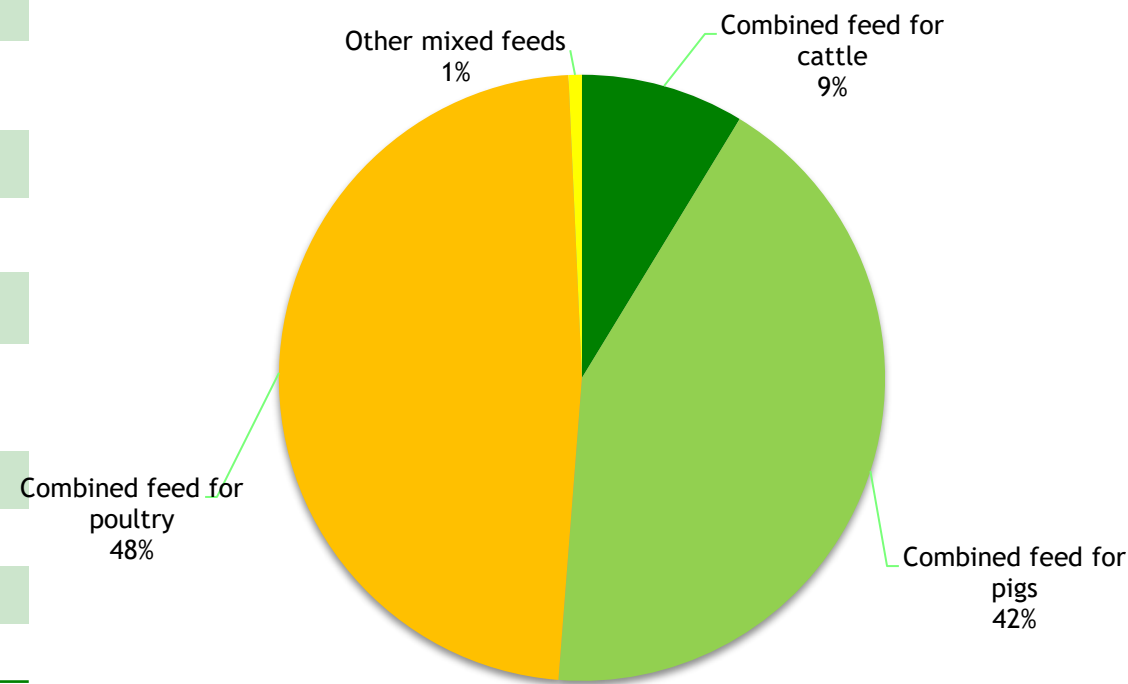
The structure of mixed fodder production copies the structure of meat production. In the first four months of this year the largest share is taken by feed for poultry - 48%, feed for pigs accounts for 42% of the total production of compound feed. The share of mixed fodder for cattle is 9%. Other types of mixed fodders occupy only 1% of the total production volume. This structure changes without significant changes.

Among other kinds of mixed fodders there is intensive growth of mixed fodders production for fish (by 2,6 times) and horses (by 2,7 times) per year. The output of mixed fodder for sheep decreased by 21%.

Production of mixed feed by type, thousand tons

Type of feed	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
Combined feed for farm poultry	5 172	5 217	5 070	5 367	5 577	3,9%
Combined feed for pigs	3 774	4 176	4 334	4 680	4 935	5,5%
Combined feed for cattle	756	804	827	971	1 011	4,2%
Compound feeds for other animals	22,4	20,1	32,7	45,5	42,2	-7,1%
Combined feed for fur-bearing animals, rabbits and nutria	21,5	19,8	22,5	22,4	22,5	0,2%
Compound feed for fish	2,7	4,6	5,9	5,4	14,1	162%
Combined feed for sheep	0,5	0,3	1,6	3,3	2,6	-21,0%
Combined feed for fowl	0,1	0,1	0,6	0,5	0,6	16,9%
Combined feed for horses	0,4	0,2	0,1	0,2	0,5	168%
Combined feed total	9 749	10 241	10 295	11 095	11 606	4,6%

Structure of mixed fodder production by type
In January-April 2023, %



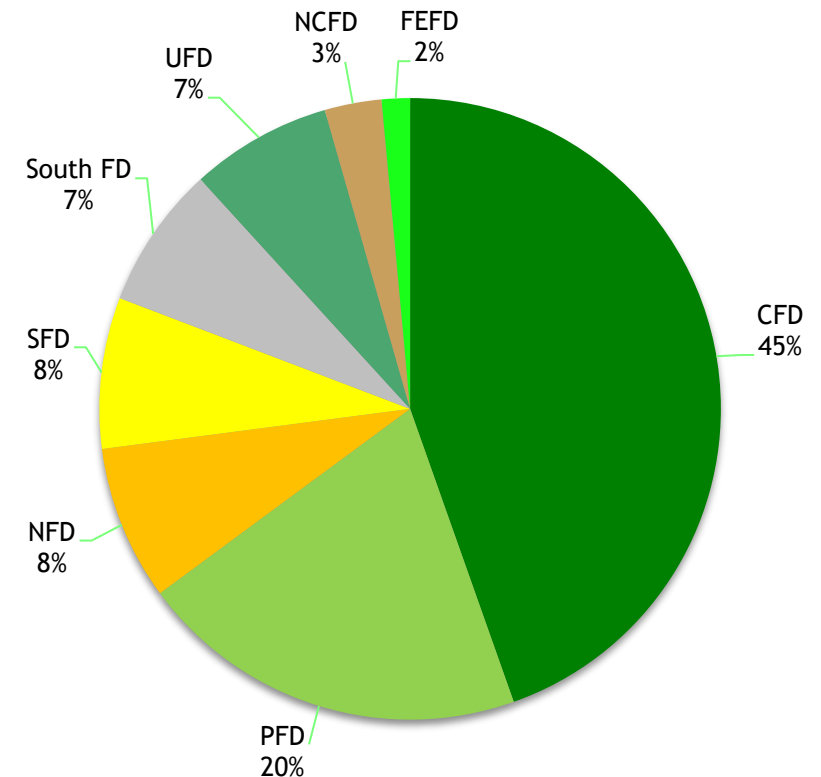
The largest share in the structure of mixed fodder production is taken by the Central Federal District - 45%. It produced 5.2 million tons of mixed fodder. Another 20% were produced by the enterprises of the Privolzhsky FD - 2.4 million tons. The most significant decrease in production was observed in the North Caucasus Federal District - 13% for the year. In the Northwestern Federal District the decrease was 4.1%.

Production of mixed feeds by federal districts, thousand tons

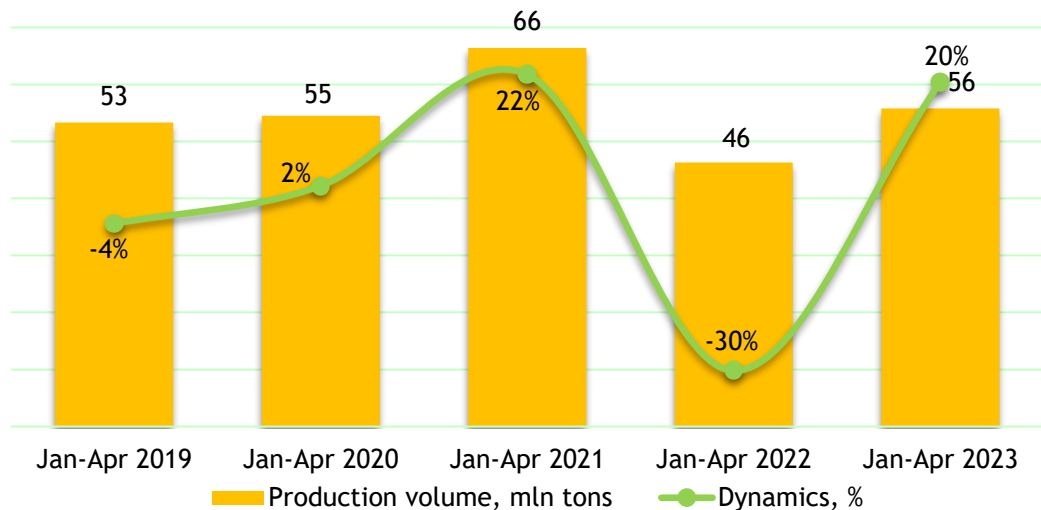
January-April

Region	2019	2020	2021	2022	2023	Dynamics for the year, %
CFD	4 143	4 489	4 461	4 848	5 175	6,7%
PFD	1 976	2 101	2 119	2 202	2 356	7,0%
NFD	868	944	928	975	934	-4,1%
SFD	834	813	845	892	913	2,3%
South FD	727	704	736	838	862	2,8%
UFD	864	782	784	791	853	7,9%
NCFD	271	338	328	393	344	-12,6%
FEFD	66	70	95	156	170	9,1%
Total in the RF	9 749	10 241	10 295	11 095	11 606	4,6%

Structure of mixed fodder production by federal districts in January-April 2023, %



Volume and dynamics of protein-vitamin-mineral concentrates production in Russia, thousand tons

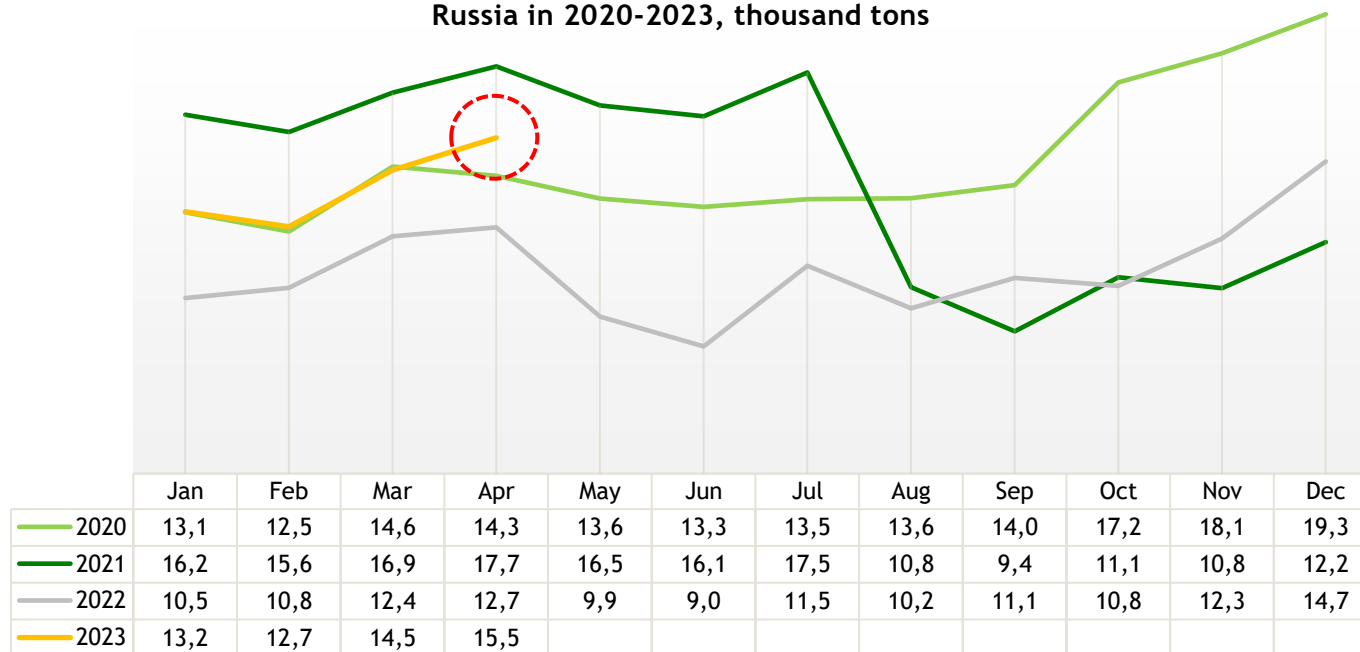


For April 2023, production increased by 6.9% to 15,500 tons, and relative to April 2022, it increased by 22%.

2.7. Protein-vitamin-mineral concentrates

The production volume of protein-vitamin-mineral concentrates during the analyzed period of 2023 increased by 20% year-on-year to **56 thousand tons**.

Monthly dynamics of protein-vitamin-mineral concentrates production in Russia in 2020-2023, thousand tons

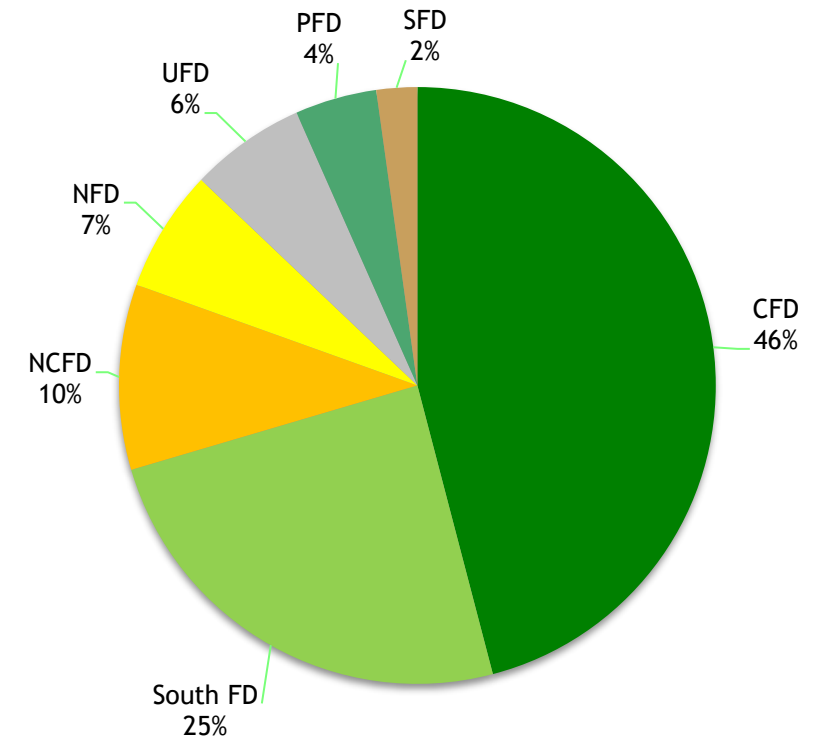


46% of the total volume of protein-vitamin-mineral concentrates produced in January-April 2023 was produced by the enterprises of the Central Federal District - 26 thousand tons. Up to 25% in the structure of production has increased in the Southern Federal District (14 thousand tons). The North Caucasian Federal District closes the top three with 10% (5.6 thousand tons). North-Western Federal District showed the most intensive increase in reproduction in annual terms.

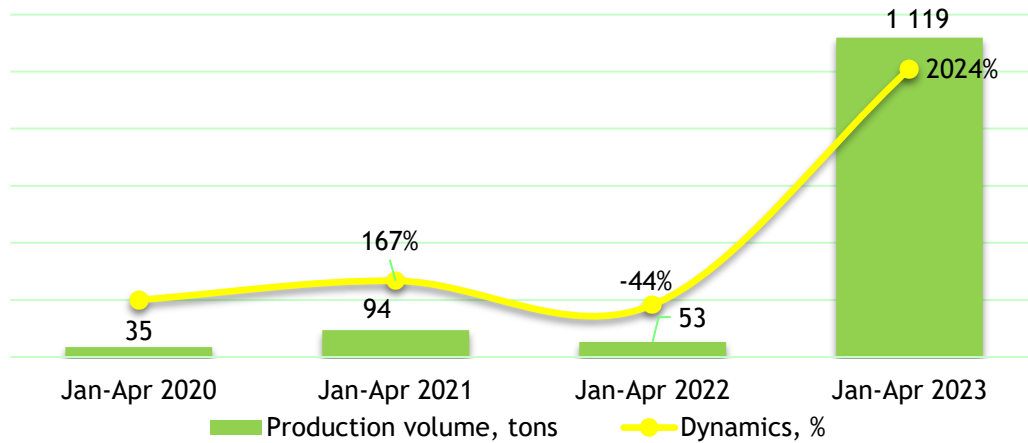
Production of protein-vitamin-mineral concentrates by federal districts, thousand tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	35	38	42	21	26	19,2%
South FD	4,8	8,4	7,5	12	14	17,7%
NCFD	0,8	0,6	8,3	5,7	5,6	-2,3%
NFD	1,9	0,1	0,1	0,3	3,7	1041%
UFD	2,7	3,3	3,7	3,1	3,5	11,1%
PFD	5,9	2,0	2,6	2,6	2,5	-4,2%
SFD	0,6	1,1	1,3	1,3	1,2	-4,7%
FEFD	1,4	0,4	0,4	0,1	0,0	-
Total in the RF	53	55	66	46	56	20,4%

Structure of production of protein-vitamin-mineral concentrates by federal districts in January-April 2023, %



Volume and dynamics of production of amido-vitamin-mineral concentrates in Russia, tons

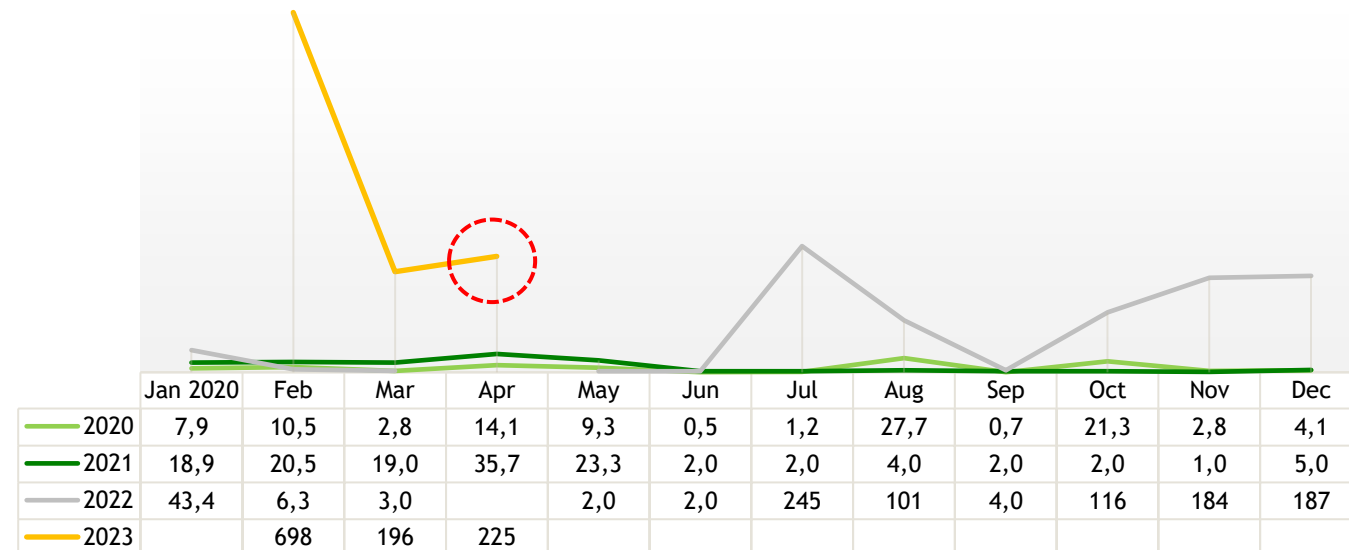


In April the production volume reached **225 tons**, which is **15% higher** than in March.

2.8. Amido-vitamin-mineral concentrates

In **January-April 2023**, the production of amido-vitamin-mineral concentrates reached **1.1 thousand tons**, which is a record for the last years.

Monthly dynamics of production of amido-vitamin-mineral concentrates in Russia in 2020-2023, tons

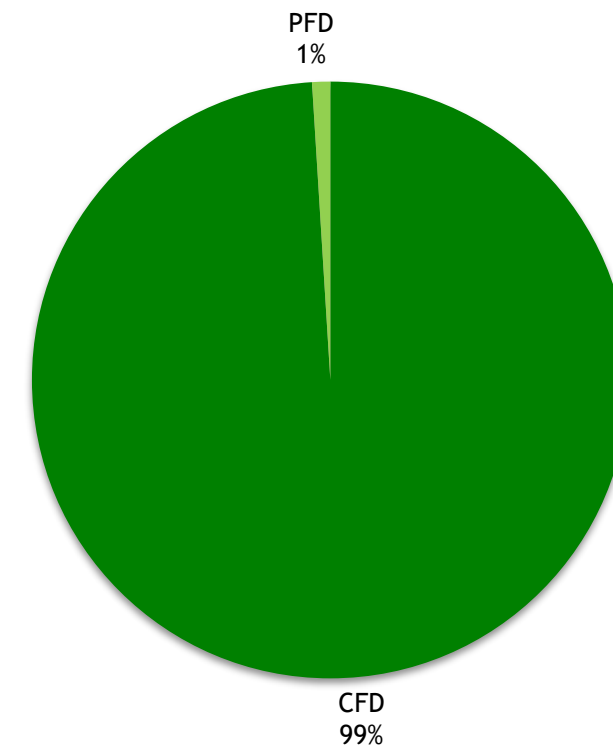


In January-April 2023, production was recorded only in the Central and Volga Federal Districts. The Central District accounted for 99% of production. In the Privolzhsky okrug the output of amido-vitamin-mineral concentrates decreased by 63% as compared to January-April 2022.

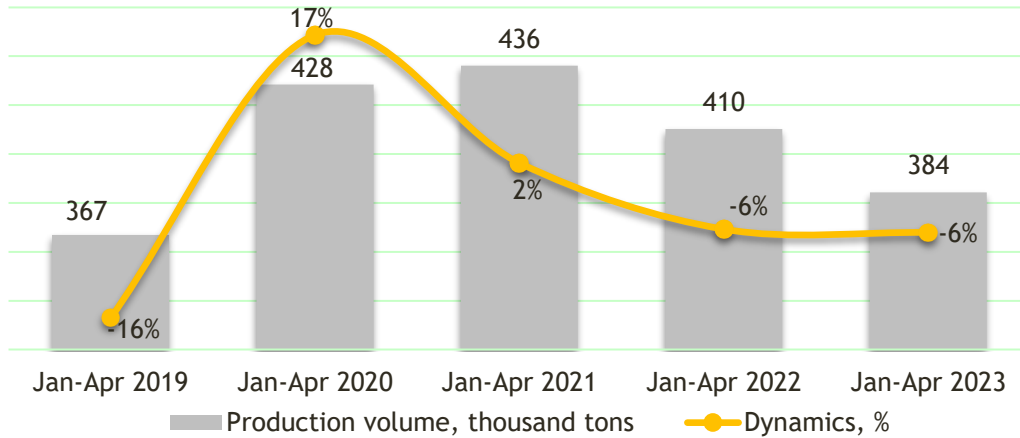
Production of amido-vitamin-mineral concentrates by federal districts, tons

Region	January-April				Dynamics for the year, %
	2020	2021	2022	2023	
CFD	19,0	19,0		1 108	-
PFD	31	75	29	11	-62,5%
South FD			23		-
Итого в РФ	35,2	94,0	52,7	1 119	2024%

Production structure of amido-vitamin-mineral concentrates by federal districts In January-April 2023, %



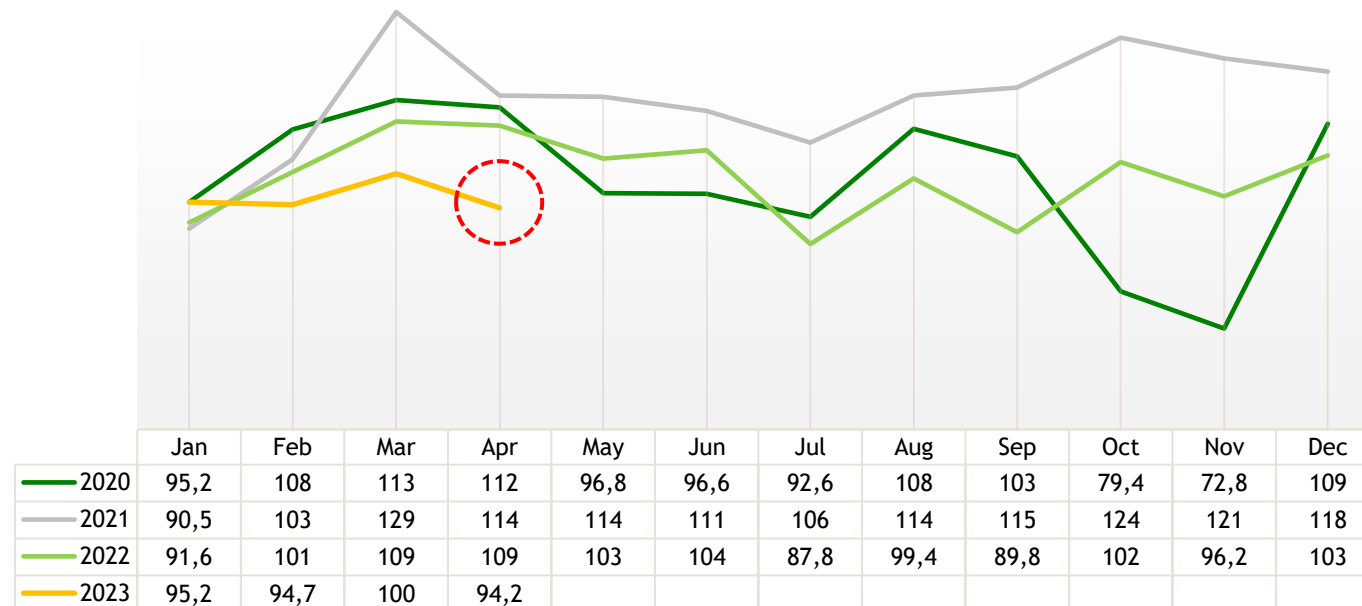
Volume and dynamics of concentrates and feed mixtures production in Russia, thousand tons



For April, production was down 6.0% relative to March and down 13% relative to April 2023. These are the lowest production volumes in recent years.

In the first four months of this year, the volume of concentrates and feed mixtures production decreased by 6% year-on-year to 384,000 tons.

Monthly dynamics of concentrates and feed mixtures production in Russia in 2020-2023, thousand tons

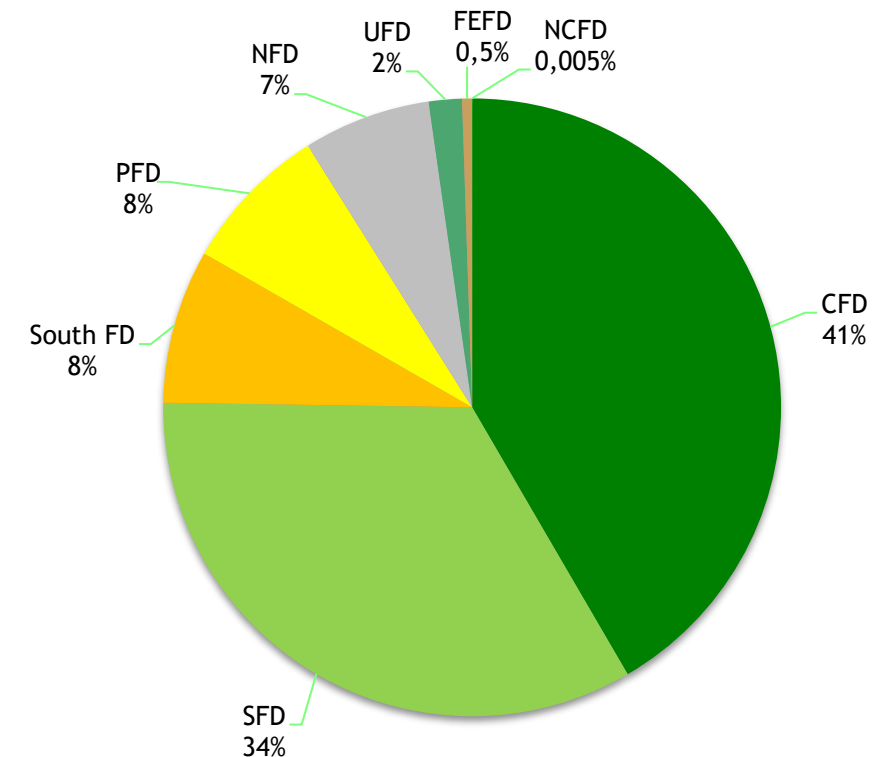


In January-April of this year 41% of production of concentrates and mixtures of feed was fixed in Central FD - 160 thousand tons, 34% took Siberian FD - 129 thousand tons. It should be noted that in these districts there is a decrease in production. The most significant growth is recorded in the Northwestern Federal District (by 52% for the year) and the Southern District (by 31%).

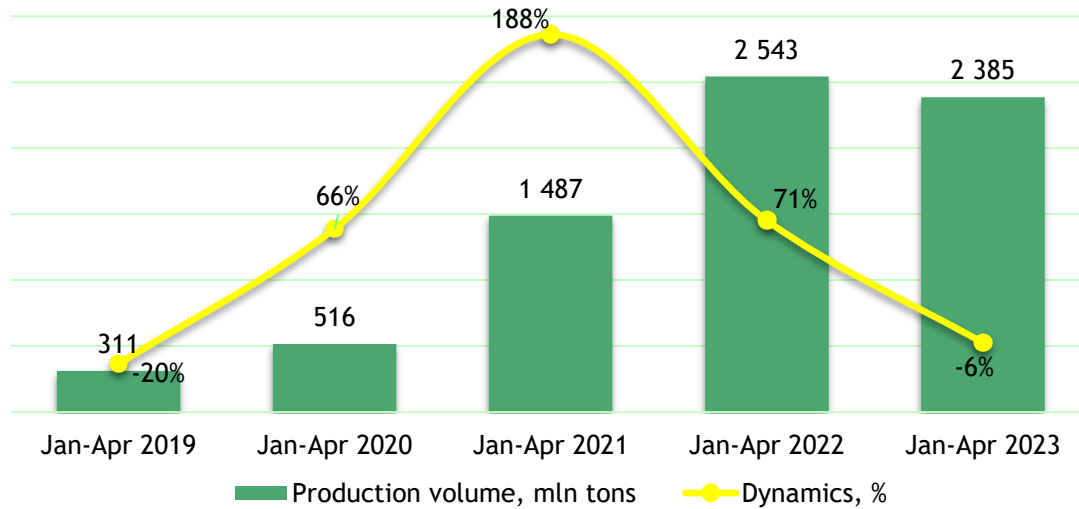
Production of concentrates and feed mixtures by federal districts, thousand tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	163	190	217	194	160	-17,5%
SFD	133	147	125	134	129	-3,3%
South FD	15	16	25	24	31	31,1%
PFD	23	35	32	29	30	3,7%
NFD	11	18	18	17	26	52,1%
UFD	20	21	18	12	6,6	-42,4%
FEFD	2,0	2,0	2,0	2,0	2,0	1,3%
NCFD	0,1	0,03	0,03	0,02	0,02	-12,5%
Total in the RF	367	428	436	410	384	-6,3%

Production structure of concentrates and feed mixtures by federal districts in January-April 2023, %



Volume and dynamics of boiled feed production in Russia, tons

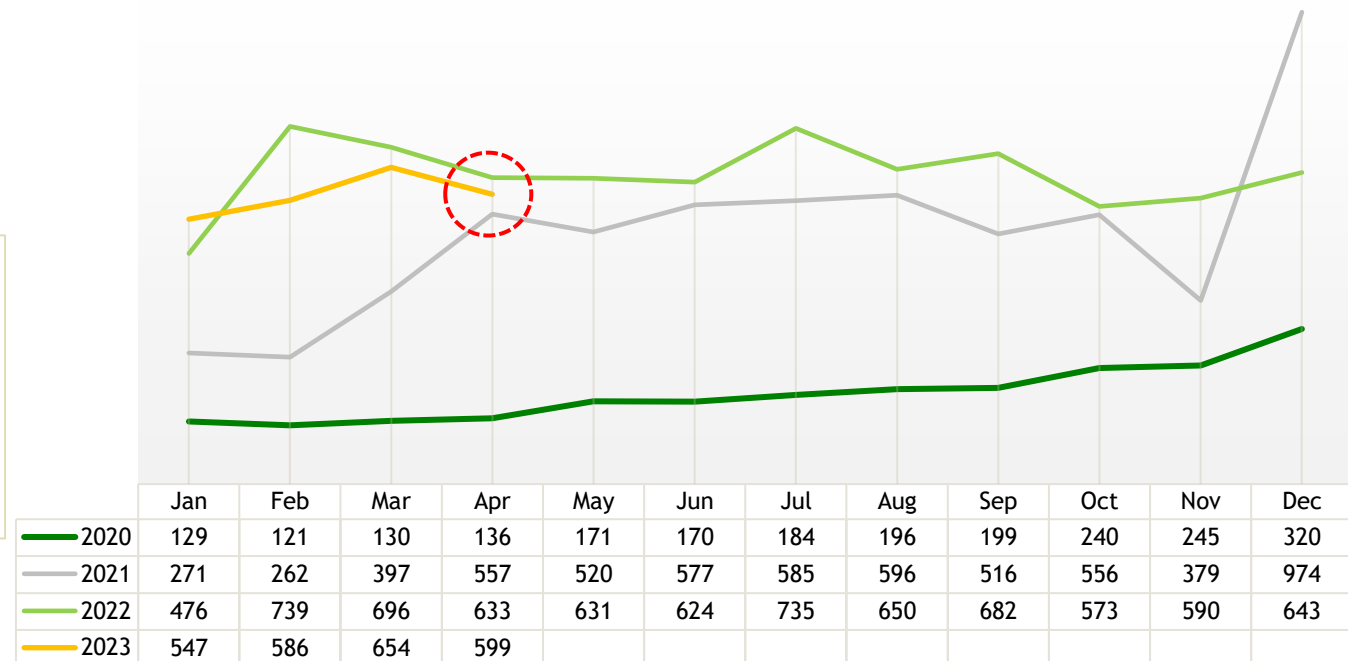


In April, production of boiled feed decreased by 8.5% to 599 tons in monthly terms and fell by 5.4% in annual terms.

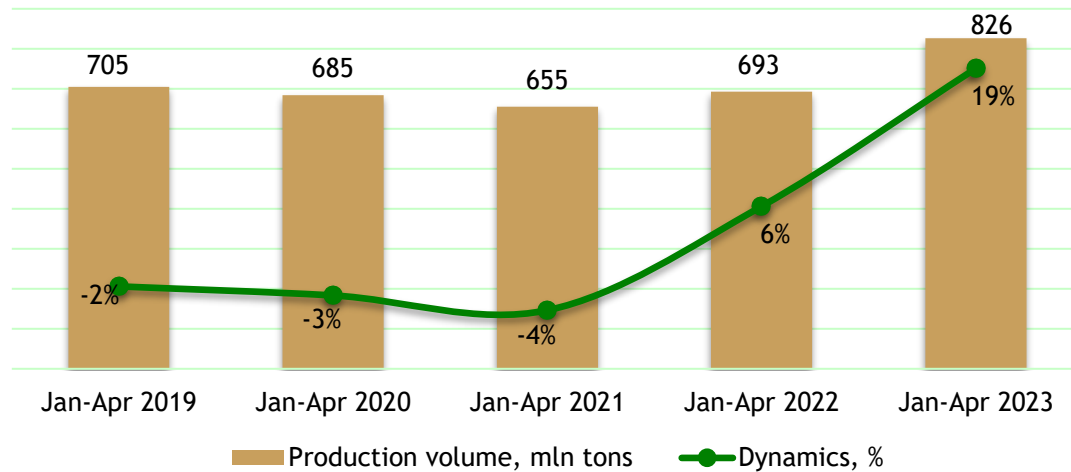
The entire volume of production since 2018 was concentrated in the Volga Federal District.

During the analyzed period of 2023, the volume of production of boiled feed decreased by 6% on an annualized basis to 2.4 thousand tons. Over the past five years, production has increased by almost 7.7 times.

Monthly dynamics of the production of boiled feed in Russia in 2020-2023, tons



Volume and dynamics of production of other feeds for farm animals in Russia, thousand tons

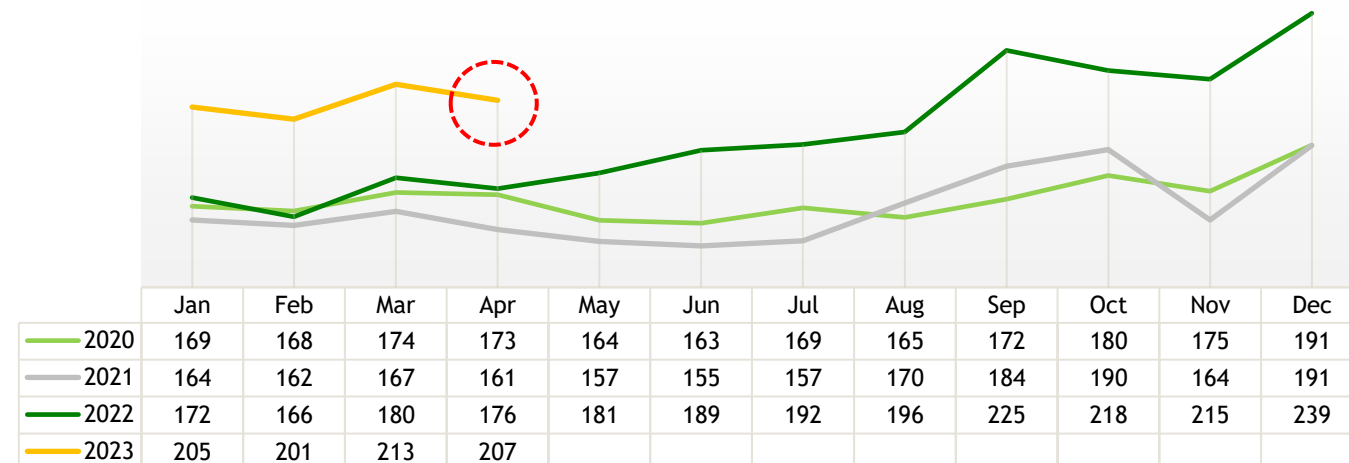


In April, monthly production decreased by 2.7% to 207 tons. Compared to April last year, production increased by 18%. This also dismantles the record production figures for the last four years.

2.11. Feed for farm animals, other

Other feeds for farm animals were produced in **January-April 2023** in the amount of **826 thousand tons**. This is **19% more** compared to the previous year.

Monthly dynamics of production of other feeds for farm animals in Russia in 2020-2023, thousand tons

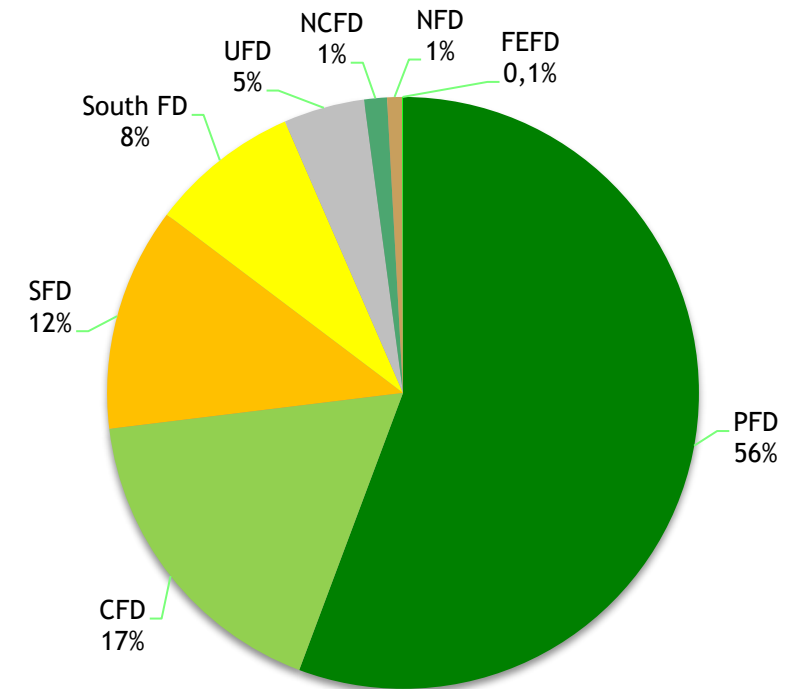


In January-April 2023 the leader in the production of other feeds for farm animals is the Privolzhsky FD. Here about 56% of the total volume (459 thousand tons) is produced. Another 17% is produced in the Central FD and 12% in Siberian FD. Significant growth in production was observed in the North-West and South by 65% on average.

Structure of production of other feeds for farm animals by federal districts, thousand tons

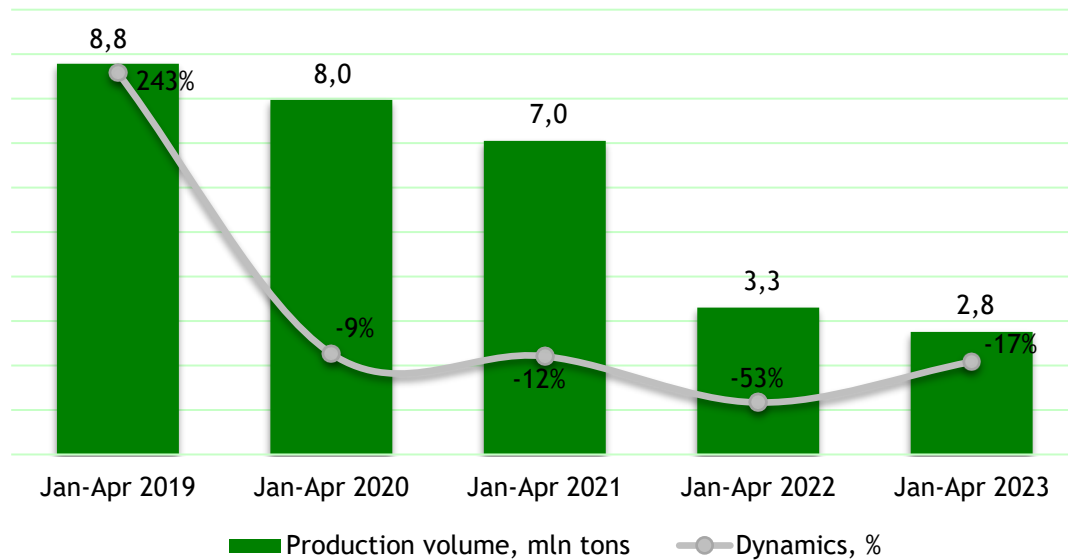
Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
PFD	437	437	398	366	459	25,2%
CFD	105	89	106	133	141	6,4%
SFD	87	90	88	90	98	8,8%
South FD	33	23	22	49	74	51,5%
UFD	32	37	33	47	36	-22,6%
NCFD	4,3	3,4	3,7	3,6	10	187%
NFD	3,6	6,3	4,5	4,0	7,2	79,2%
FEFD	2,8	0,1	0,1	0,4	0,3	-5,5%
Total in the RF	705	685	655	693	826	19,2%

Structure of production of other feeds for farm animals by federal districts in January-April 2023, %



3. Coarse ground flour and alfalfa pellets

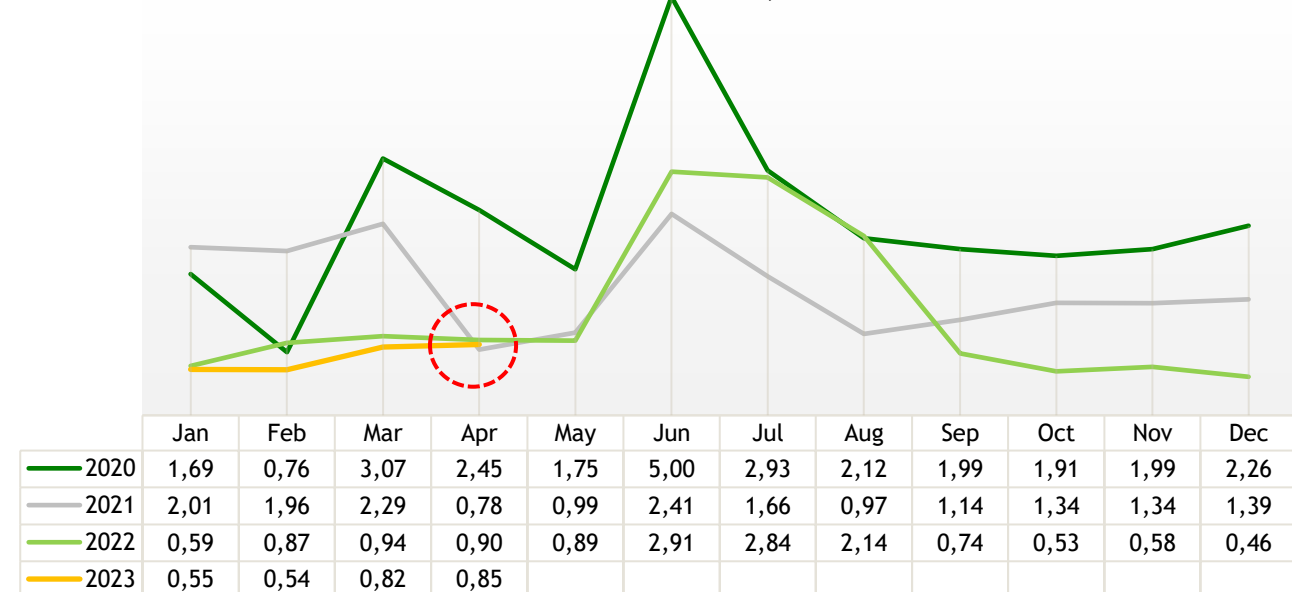
Volume and dynamics of coarse meal and alfalfa pellets production in Russia, tons



In April against March 2023 production increased by 3.6% to 846 tons. In annual terms (compared to April of the previous year) production decreased by 5.6%.

In the first four months of 2023, alfalfa coarse meal and pellets production was 2,800 tons, down 17% from the same period last year. Production decreased by 69% relative to 2019.

Monthly dynamics of coarse meal and alfalfa pellets production in Russia in 2020-2023, tons



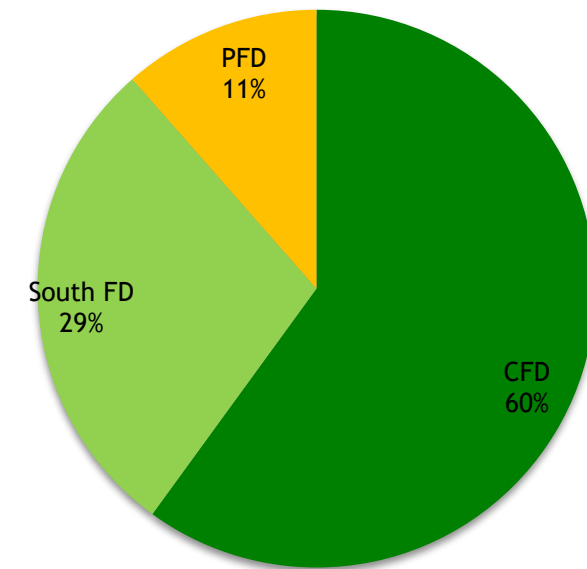
3. Coarse ground flour and alfalfa pellets

During the analyzed period of the current year coarse ground flour and alfalfa pellets were produced only in the three federal districts of Russia: 60% or 1.7 thousand tons were produced in the Central Federal District, 29% or 785 tons were produced in the South, in the Privolzhsky district production for the year decreased by 8.9% to 316 tons (11% in the production structure). In the Central District, production in annual terms decreased by 31%.

Structure of coarse flour and alfalfa pellets production by federal districts, thousand tons

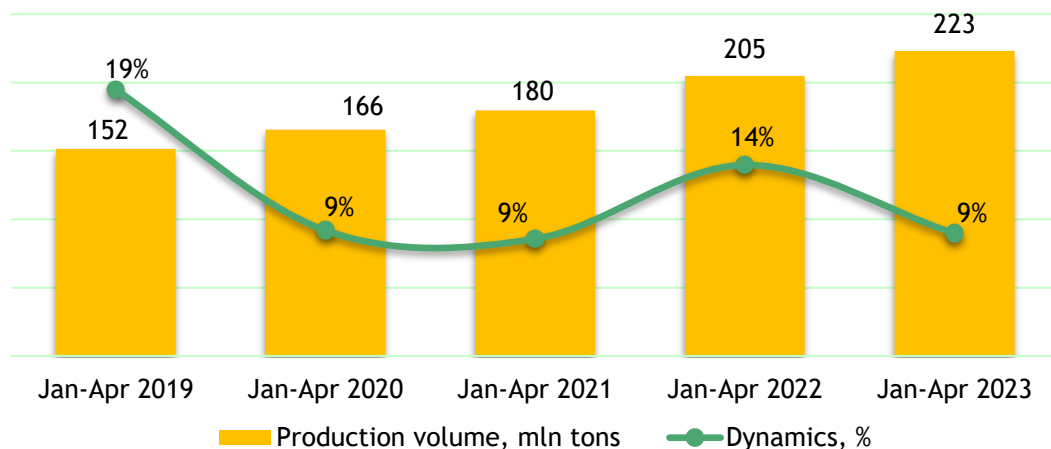
January-April						
Region	2019	2020	2021	2022	2023	Dynamics for the year, %
CFD	0,6	3,2	4,2	2,4	1,7	-31,0%
South FD		0,03	0,03	0,6	0,8	40,7%
PFD	8,2	4,7	2,8	0,3	0,3	-8,9%
Total in the RF	8,8	8,0	7,0	3,3	2,8	-16,5%

Production structure of coarse ground flour and alfalfa pellets by federal districts in January-April 2023, %



4. Fine and coarse flour and pellets of meat or meat by-products

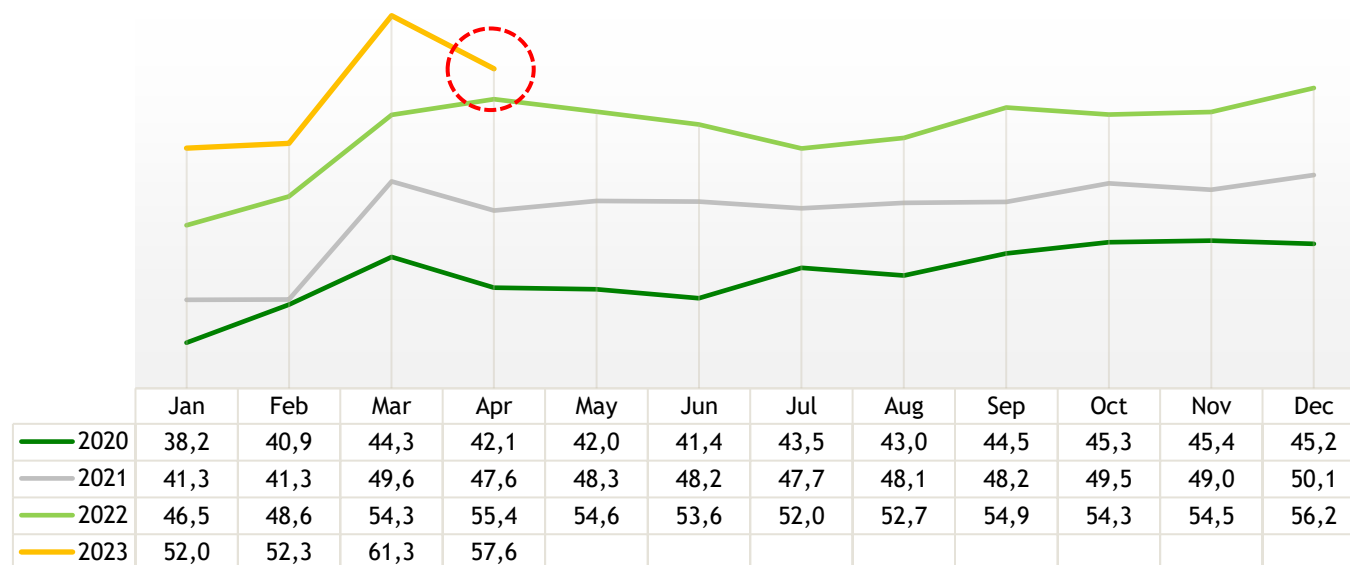
Volume and dynamics of flour and pellets production from meat or meat by-products in Russia, thousand tons



The volume of flour and pellets made of meat or meat by-products in Russia in January-April 2023 increased by 9% year-on-year to 223 thousand tons.

In April 2023, production in Russia for the month decreased by 6.1% to 57.6 thousand tons. This figure is higher than the volume in April 2022 by 3.9%. Since the beginning of 2023, records of meat meal production have been recorded.

Monthly dynamics of flour and pellets production from meat or meat by-products in Russia in 2020-2023, thousand tons



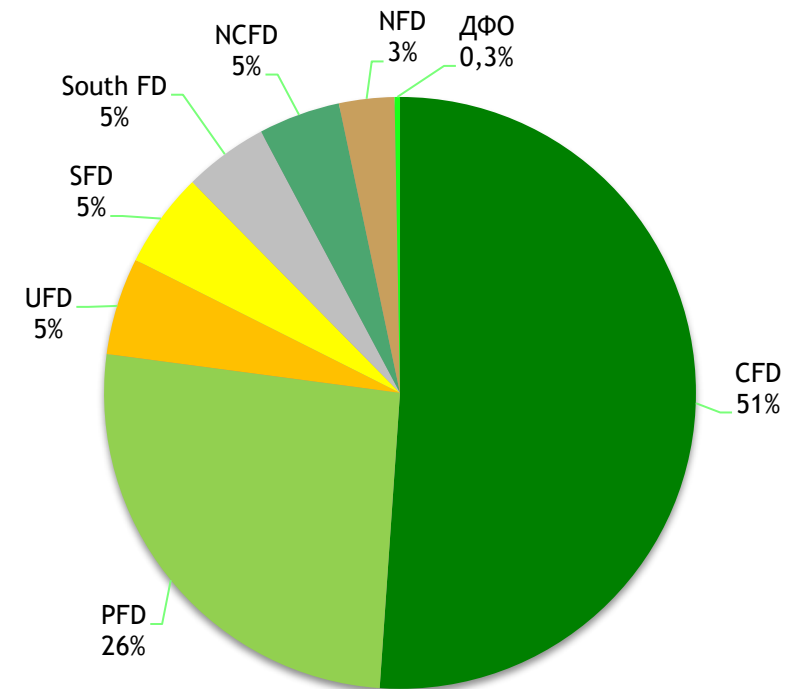
4. Fine and coarse flour and pellets of meat or meat by-products

During the analyzed period of the current year flour and pellets from meat or meat by-products leader is the Central District - 114 thousand tons or 51% in the structure of production. Privolzhskiy Federal District produced 58 thousand tons or 26%. It should be noted that the growth of output was recorded in all districts except Southern Federal District. In this district the decrease was about 12% relative to January-April 2023.

Structure of production of flour and pellets from meat or meat by-products by federal districts, thousand tons

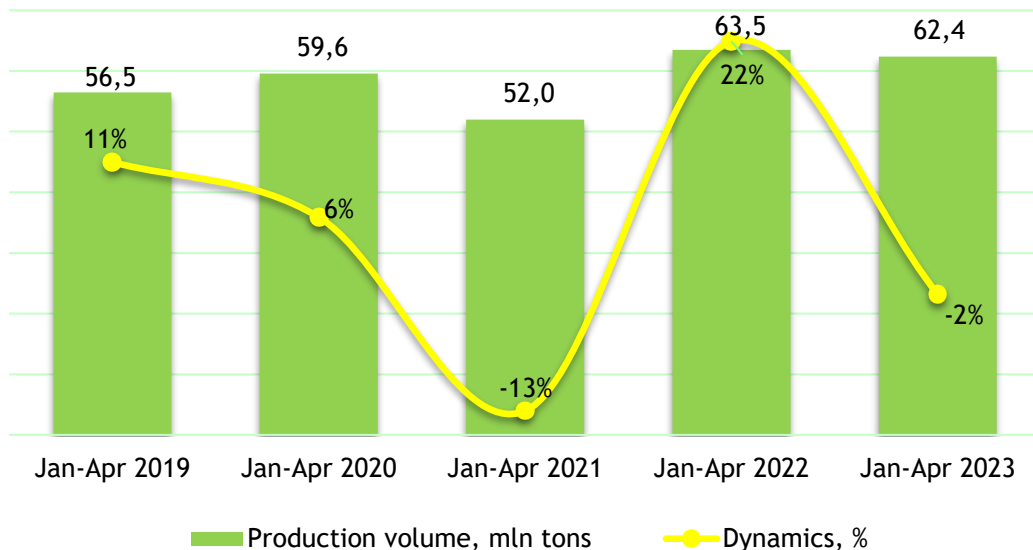
Region	Январь-апрель					Dynamics for the year, %
	2019	2020	2021	2022	2023	
CFD	69	71	90	102	114	11,7%
PFD	41	50	49	54	58	6,6%
UFD	11	12	9,3	11	12	9,5%
SFD	11	11	10	11	12	1,5%
South FD	5,9	7,8	8,7	12	10	-11,8%
NCFD	8,2	9,2	8,6	8,4	10	18,0%
NFD	5,4	3,9	4,8	5,4	6,7	24,9%
FEFD	0,2	0,2	0,1	0,6	0,7	10,7%
Total in the RF	152	166	180	205	223	9,0%

Structure of production of flour and pellets from meat or meat by-products by federal districts in January-April 2023, %



5. Fine and coarse meal and pellets from fish and other aquatic invertebrates

Volume and dynamics of flour and pellets production from fish and other aquatic invertebrates in Russia, tons

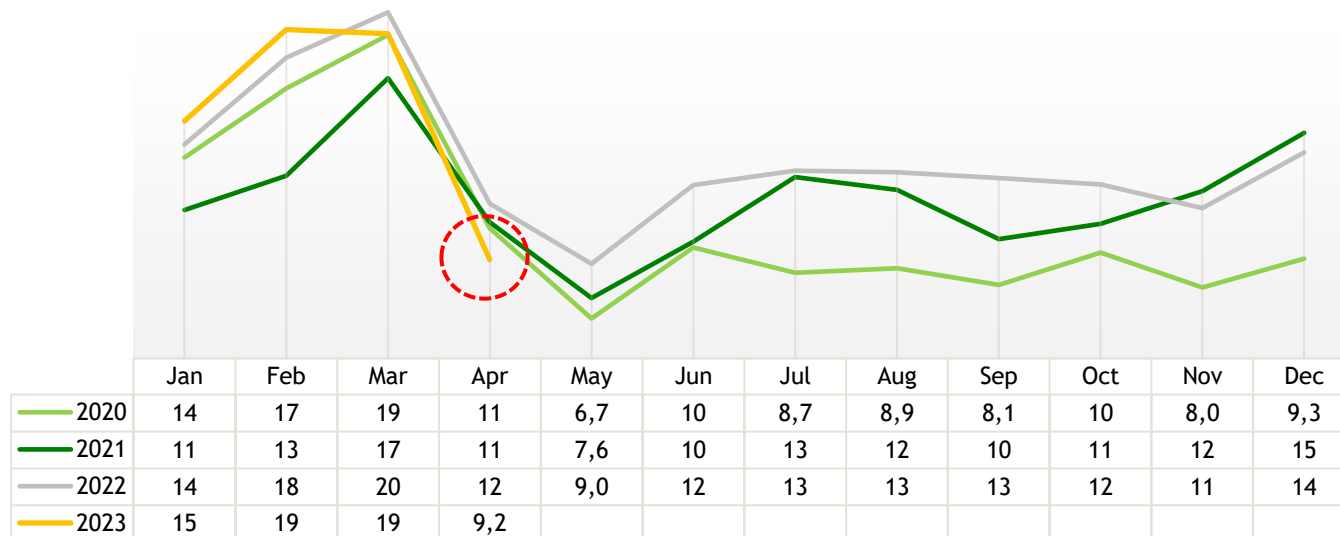


In January-April 2023 the output of flour and pellets from fish and other aquatic invertebrates in Russia amounted to **62.4 thousand tons**, which is **2% lower** than in the same period of the previous year.

In April the production volume reached **9.2 thousand tons**, which is **72% lower** than in March. The decrease in production was about **21% year on year**.

Dynamics shows the tendency of production growth in winter period with sharp reduction of reproduction in spring. In May, a decrease in production is also expected.

Monthly dynamics of flour and pellets production from fish and other aquatic invertebrates in Russia in 2020-2023, tons



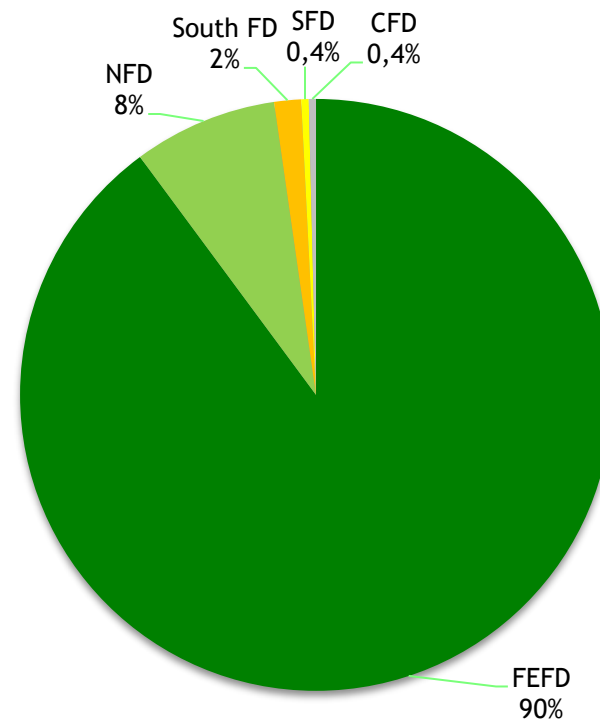
5. Fine and coarse meal and pellets from fish and other aquatic invertebrates

The Far East is the leader in terms of production of fish and other aquatic invertebrates flour and pellets, accounting for 90% of production (56 thousand tons). Northwestern Federal District accounts for 8% of production or 4.9 thousand tons. It is worth noting a significant increase in production in the Central district - 58% in annual terms. Reduction was recorded only in Siberia by 14% and in the Far East by 3.3% in annual terms.

Structure of production of flour and pellets from fish and other aquatic invertebrates by federal districts, thousand tons

Region	January-April					Dynamics for the year, %
	2019	2020	2021	2022	2023	
FEFD	47	52	48	58	56	-3,3%
NFD	5,6	4,4	3,0	4,2	4,9	16,3%
South FD	1,4	0,9	0,9	0,9	0,9	4,8%
SFD	0,1	0,1	0,1	0,3	0,3	-14,3%
CFD	2,4	2,4	0,0	0,2	0,2	58,3%
UFD				0,004		-
Total in the RF	56	60	52	63	62	-1,7%

Structure of production of flour and pellets from fish and other aquatic invertebrates by federal districts in January-April 2023, %





FEEDLOT

News and Analytics of the Feed Market

Feed industry analytics

- Monitoring of prices for feed amino acids, vitamins and soybean meal
- Market review of feed additives, compound feeds, premixes, and grains
- Monthly selling prices of feed ingredients
- Analysis of feed markets in Russia, USA, Southeast Asia, European Union and Latin America
- Market research and mini-market reports, feed additives, enzymes and other feed ingredients
- Market forecasting
- Evaluation of new investment projects in the industry
- Interviews with leading livestock producers
- Business planning and marketing strategies
- Analysis of related industries



@FEEDLOT_RU



www.feedlot.ru



info@feedlot.ru



+7 (495) 649-62-88



Moscow, Novinskiy boulevard, 11,
office 331, 332