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TRENDS AND OUTLOOKS

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The review “Russian Economy. Trends and Outlooks” has been published by the Gaidar Institute since 1991. This is the 44th issue. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 5 big sections that highlight different aspects of Russia’s economic development, which allow to monitor all angles of ongoing events over a prolonged period: the monetary and budget spheres; financial markets and institutions; the real sector; social sphere; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

Reviewer:

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State of agricultural production and food security in Russia in 2022⁵

In 2022, index of physical volume of agricultural output in agricultural organizations, peasant (private) farms and household farms grew by 10.2% as compared to the previous year. In monetary terms growth was 14.8% due to rising prices on agricultural products (+4.2%, i.e. much lower as compared to general inflation). Such high growth in physical volume is determined among other things by a lower comparison base — in 2021 index was 99.6% against 2020.

Fig. 10 shows contribution of main products to the change in volume of agricultural production. Main positive factor of change was increase in the gross harvest of grain crops (+29.9% relative to 2021) that led to an increase in physical volume index by 8.0 p.p. for wide range of products.

In 2022, output of livestock went up, however here an impact on overall dynamics of agricultural production is much less significant than in crop production (+1.1 p.p., vs. 9.6 p.p.). Largest increase was observed in pork (+5.0%) which led to a 0.5 p.p. increase in the index. Beef is the only livestock product with negative dynamic (drop in the production of cattle meat in slaughter weight came to 3.6%).

Increase in grain production in 2022 was mainly on the back of a sharp increase in yields (126.9% vs. 2021), which resulted in a record-high gross harvest

- 1 The EU countries have decided to reduce gas consumption by 15%. What's important to know // RBC. URL: <https://www.rbc.ru/business/27/07/2022/62dfeca29a7947649a78baef>
- 2 Gas production in Russia dropped by almost 12% // Vedomosti. URL: <https://www.vedomosti.ru/business/articles/2022/12/05/953639-dobicha-gaza-v-rossii-snizilas>
- 3 Potential losses from leakage at Nord Streams have been estimated // Vzgliad. URL: <https://vz.ru/news/2022/9/27/1179658.html>
- 4 ACRA announced the recovery of Russian oil exports amid the embargo // RBC. URL: <https://www.rbc.ru/business/08/12/2022/6390756f9a794733bf81beb9>
- 5 Authors: *Shagaida N.I.*, Doctor of Economic Sciences, Director of Center for Agro-Food Policy, IAES RANEPa; *Ternovskiy D.S.*, Doctor of Economic Sciences, Leading Researcher at the Center for Agro-Food Policy, IAES RANEPa.

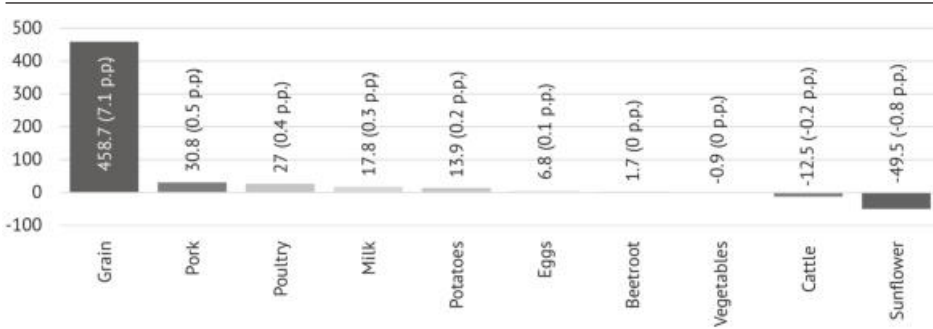


Fig. 10. Contribution of main agricultural products to gross output growth in 2022 (preliminary estimate in 2021 prices, Rb bn)

Source: Own calculations based on Rosstat data.

in country's history. Crop area expansion was negligible at 101.1% relative to 2021 which is within five-year range of crop area fluctuations.

Jump in prices for vegetables in 2021 stimulated an increase in areas sown by agricultural organizations and peasant (private) farms, especially for potatoes (+7.3 and +10.9%, respectively). At the same time, production of vegetables in household farms — main producer of these products, continues to decline (-2.4%) and production of potatoes — slightly increases (+2.0%). Weak dynamics in household farms was compensated by the growth of production of all-farm organizations and peasant farms, which allowed to raise potato production by 4.2% and vegetables production by 3.8%.

Opposed to 2020—2021 when the rise in food prices was mainly owing to higher prices for primary agricultural products or products with a low depth of processing (flour, sunflower oil, potatoes, vegetables) in 2022 rise in prices affected other groups of food products to a greater extent (Fig. 11).

In December 2022 against December 2021, retail prices for basic foodstuffs increased by 11.0%.¹ Main contributors to rising prices were milk and dairy products (2.0 p.p., 18.2% of total increase), meat and meat products (1.8 p.p., 16.4% of total increase) (Fig. 12). It is worth noting that increasing contribution of meat and meat products to growing consumer prices was played by rising prices for sausages and other meat products rather than rising prices for most common types of meat (poultry, pork, beef). Similarly, milk and dairy products drove up consumer prices (by 4-fold) not because of the higher prices for cheese and other products but because of higher price for milk.

At the end of 2022, real prices (current/nominal prices adjusted for general inflation) for a large part of food products remained above the five-year average (Fig. 13). However, lower prices for meat and alcohol (-3.2% and -11.6%, respectively) led to only a 1.3% increase in the value of food consumed in constant prices, given dietary structure.

¹ Excluding catering.

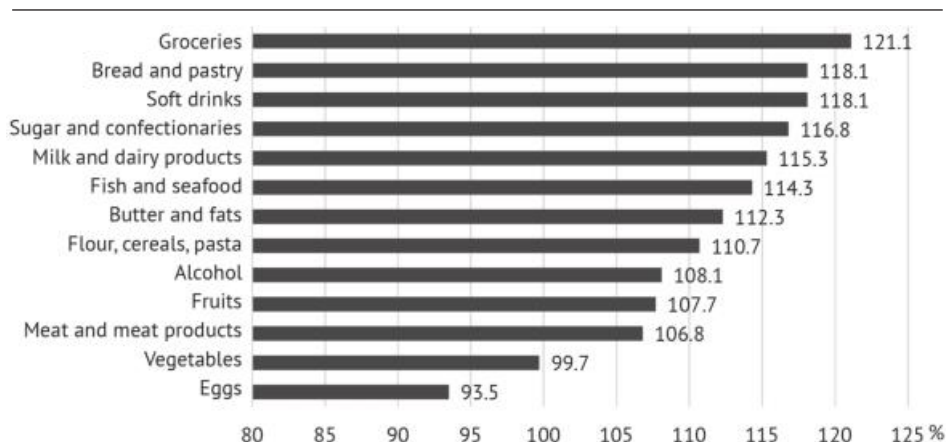


Fig. 11. Growth rate of consumer prices for certain food groups (December 2022 to December 2021)

Source: Own calculations based on Rosstat data.

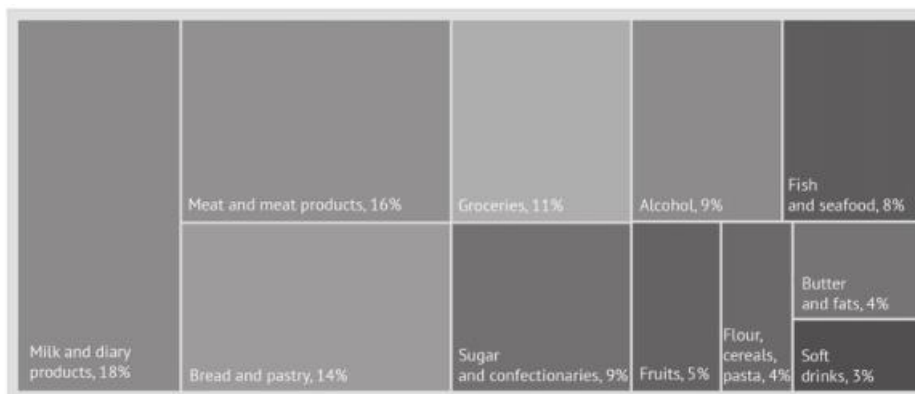


Fig. 12. Contribution of individual commodity groups to overall growth of food retail prices in 2022

Source: Authors' calculations based on Rosstat data.

List of products with a significant contribution to the growth rate of real prices shows that these are the products which are highly self-sufficient (Table 15). Thus, grain is the most self-sufficient product but prices for flour, cereals and bread, basis for production of which is grain were the largest contributors to growth of consumer food prices. Fruits are the products with the highest level of import dependence while at the same time they do not contribute to the growth of food prices. As for meat, there is a high degree of import-independence and its contribution to increase in prices was not observed. In other words, level of

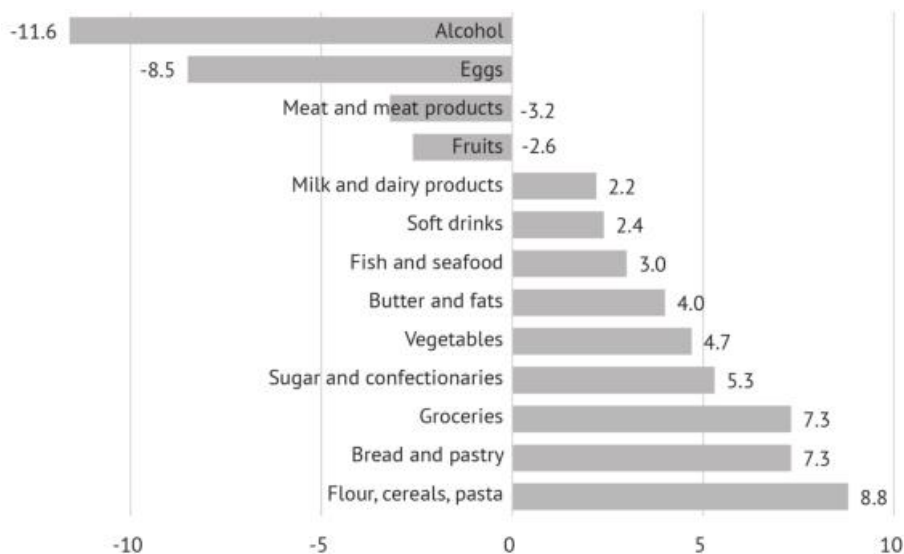


Fig. 13. Growth rate of real prices for individual commodity groups in 2022 to average prices in 2017—2021, %

Source: Own calculations based on Rosstat data.

Table 15

Share of domestic agricultural and fish products in total consumption, %

Products	Produced, mn tonnes		Used for personal, industrial purposes, mn tonnes		Ratio of own production to personal and industrial consumption, %		Value according to the “Food Security Doctrine” (criterion of food independence - at least), %
	2020	2021	2020	2021	2020	2021	
Grain	133.4	121.4	79.4	80.8	170	150	95
Sugar	5.8	5.9	5.7	6.0	101	99	90
Vegetable oil	7.5	6.7	4.7	5.1	158	133	90
Meat and meat products	11.2	11.3	11.2	11.4	100	100	85
Milk and dairy products	32.2	32.3	38.3	38.3	84	84	90
Fish and seafood	5.1	5.3	3.1	3.4	163	156	85
Potatoes	19.6	18.3	20.6	19.3	95	95	95
Vegetables and gourds	15.4	15.4	17.4	16.9	89	91	90
Fruits and berries	4.3	4.7	10.2	10.6	43	45	60

Sources: Rosstat; Food Security Doctrine of the Russian Federation.

self-sufficiency does not guarantee containing increasing prices which directly affects main aspect of food security — economic access to food for the Russian population.

Increase in food prices determined their high volatility. Annual volatility (calculated based on the Food and Agriculture Organization of United Nations (FAO) approach to price warnings¹) from 2006 to 2022 is shown in *Fig. 14*.

High volatility period of 2021—2022 differs from previous periods of high volatility: a shortened period of normal price volatility before the period of high volatility (price alert), the longest period of high volatility since 2006 and the highest amplitude of volatility. Only in October 2022 did the annual volatility indicator move out of the high zone and into the moderately high zone (price watching) and into the normal zone in December.

Based on available information we can conclude that in terms of food availability and stability of food chains epy situation in Russia was favorable in 2022: a high degree of self-sufficiency (main criterion for the state of food security according to Doctrine of Food Security 2020), country is a net exporter of food. By early 2022, most products became competitive with foreign products as evidenced by coefficient of nominal consumer support (*Table 16*).

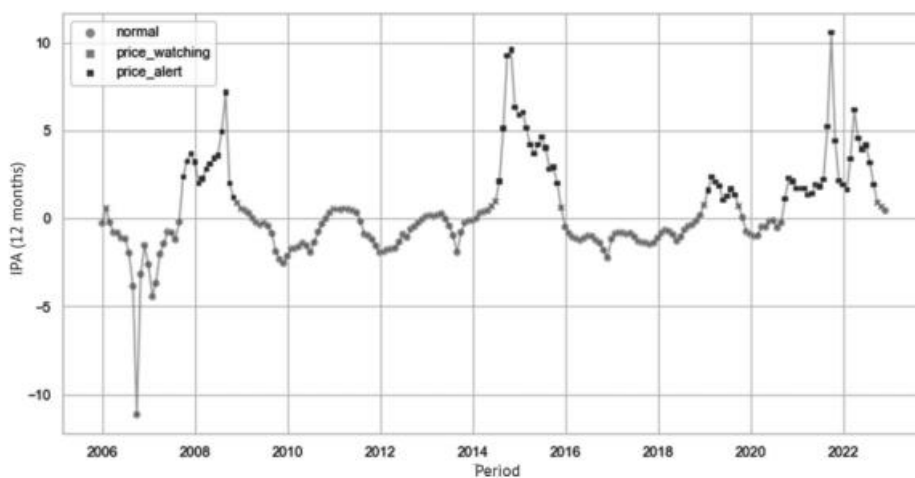


Fig. 14. Level of annual volatility of food prices in Russia
(FAO methodology, Price Anomaly Indicator, units)

Source: Rosstat; own calculations.

¹ Price volatility is calculated as the difference in the rate of increase in prices in the year under review and the average for the previous 3 years, divided by the standard deviation of the rate of increase. See: Price volatility and food security. Report of the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Rome, 2011. P. 104. URL: <https://www.fao.org/publications/card/en/c/ca7b994d-715a-5f6e-84ee-6879701d75b2/>

Table 16

Nominal consumer support coefficient in Russia

Products	2012	2017	2018	2019	2020	2021
Wheat	0.89	0.95	0.92	0.99	0.94	0.92
Barley	0.82	0.93	0.80	1.00	0.91	0.91
Corn	0.94	0.97	0.98	1.19	0.99	0.86
Oat	0.84	0.83	0.91	0.77	0.78	0.69
Rye	0.94	1.14	0.96	0.98	1.09	0.93
Sunflower	0.74	0.89	0.94	0.92	0.86	0.90
Sugar	1.00	1.31	1.43	1.30	1.23	1.00
Milk	1.17	1.25	1.42	1.05	1.07	1.00
Beef and veal	1.26	1.23	1.18	1.27	1.23	1.05
Pork	1.53	1.30	1.22	1.24	1.28	1.42
Poultry	1.07	1.13	1.07	1.07	1.11	1.02
Eggs	1.00	1.00	1.00	1.00	1.00	1.00
Potatoes	1.00	1.00	1.00	1.00	1.00	1.00
Other products	1.00	1.01	1.01	1.01	1.00	0.98

Note. Consumer nominal support coefficient: domestic prices + subsidies to agricultural producers / world prices.

Source: Producer and Consumer Support Estimates. OECD Agriculture statistics (database). URL: https://stats.oecd.org/Index.aspx?DataSetCode=MON2022_SINGLE_COMMODITY_INDICATORS

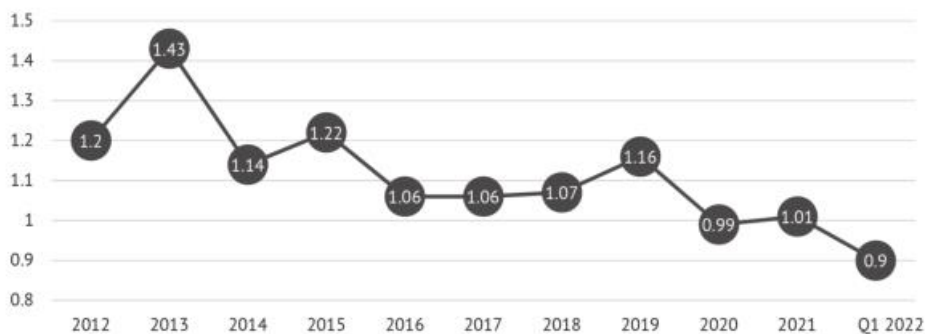


Fig. 15. Share of expenditures on agriculture in total expenditures of the consolidated budget, %

Sources: Federal treasury; Rosstat.

Federal policy in the field of agriculture is implemented through state programs. The budget of these programs in 2022 amounted to 451 billion rubles. (Table 17).

Main part of financing was directed to the “State program for development of agriculture and regulation of markets of agricultural products, raw materials and foodstuffs” (83%), main point of which was stimulation of investment activity in

Table 17

**Federal budget expenditures in 2022 for the implementation
of agrarian policy programs**

Expenditure directions	mn RB	%
State programs, overall	451 444.90	100.0
<i>SP for the development of agriculture and regulation of markets of agricultural products, raw materials and foodstuffs</i>	375 947.50	83.3
FP “Development of branches and technical modernization of the agro-industrial complex”	89 503.20	19.8
FP “Stimulation of investment activity in the agro-industrial complex”	183 181.80	40.6
FP “Development of vegetable and potato growing industries”	0.00	0.0
FP “Export of agro-industrial products”	62 957.40	13.9
KPM “Ensuring activities of the Ministry of Agriculture of the Russian Federation and subordinate organizations”	17 503.10	3.9
KPM “Organization of Veterinary and Phytosanitary Supervision”	12 661.40	2.8
Other	10 140.60	2.2
<i>SP “Integrated Rural Development”</i>	<i>50 136.40</i>	<i>11.1</i>
FP “Development of housing construction in rural areas and improving the level of home improvement”	21 660.90	4.8
FP “Modern Face of Rural Areas”.	18 635.60	4.1
Other	9 839.90	2.2
<i>SP “Effective involvement in turnover of agricultural land and development of land reclamation”</i>	<i>25361.00</i>	<i>5.6</i>
SP “Involvement and comprehensive reclamation of agricultural land”	4 927.70	1.1
SP “Export of agro-industrial products”	6 847.10	1.5
VP “Construction, reconstruction and overhaul of land reclamation facilities of state property of Russian Federation”	2 508.10	0.6
KPM “Ensuring effective management of land reclamation complex and organization of rational use of agricultural land”	10 578.10	2.3
Others	500.00	0.1

Source: According to the 2022 consolidated budget schedule

the agro-industrial complex. Additional measures (as compared with financing under general state programs for the whole country) are envisaged under the State Program “Integrated Development of Rural Areas” – which is 11% of the total federal agrarian budget. Despite the fact that Russia has a high degree of self-sufficiency in food, government supports development of export potential. To this end about 6% of federal agrarian budget was allocated for the involvement of unused land in agricultural turnover and for the development of land reclamation.

State support contributes to production of a sufficient volume of products (with the exception of fruit and dairy products for which the self-sufficiency level in 2022 was not reached) and sustainability of food chains. In 2022, the situation in this component of food security is favorable. The situation with possibility of maintaining access to imported resources that also provided the self-sufficiency and sustainability remains unclear. Based on preliminary data, investments in fixed assets of agricultural organizations declined in 2022 if we judge by available

operational data on medium and large business entities (*Table 18*). Meanwhile, in economy the level of investment surged (+7.6%).

Table 18

Index of physical volume of investment in fixed assets in agriculture in the Russian Federation in January-September (without small businesses and volume of investment not observed by direct statistical methods)

Year	Growth rate relative to previous year, %	In % to total
2021	105.3	3.4
2022	91.8	2.8
<i>For reference: total for all types of economic activity</i>	107.6	100

Source: Rosstat.

In terms of economic affordability of food in 2022, it is unlikely to improve in comparison with 2021 (data on consumption in 2022 will be available only in July-August 2023): income growth is not observed as well as annual food deflation. According to data for 2021, a member of an average household could purchase 94% of the cost of his or her diet (in 2020 it was 96%). About 30% of households steadily spend between 47% and 52% (+1/-1% year-on-year) of their final consumption expenditures on food but cannot go beyond 85% of the rational norm of consumption. The fact that consumption situation has not improved in 2022 is evidenced by dynamics of food retail sales (*Fig. 16*).

Access to food has not changed: the share of sparsely populated villages is not decreasing (where it is economically unprofitable to have stores with a wide range of food products), the share of villages with paved roads changes little (which makes it difficult to travel from sparsely populated villages to stores with a wide variety of products as there is no regular public transportation due to the lack of roads with paved surfaces).

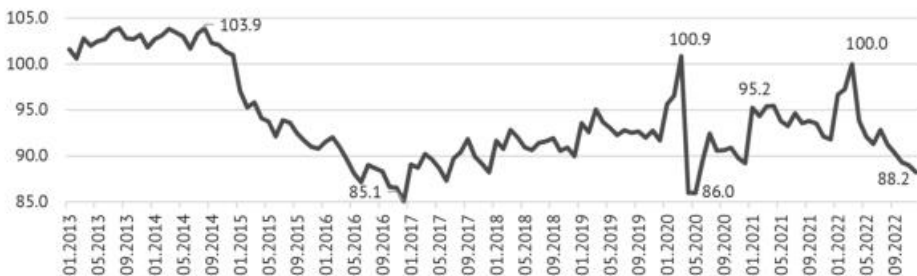


Fig. 16. Retail sales of food products relative to corresponding month of 2012 (in 2012 prices), %

Source: Rosstat.

From the position characterizing the use of food, there were no changes in 2022: average diet boasts of an excess consumption of fats and a lack of consumption of proteins and carbohydrates. Difference in quality of diet can be estimated through the cost per calorie of the actual diet: cost in the first income group (most vulnerable families) was 7 kopecks and in the tenth (most well-off) — 13 kopecks.

In conclusion, it is necessary to note the following. In 2022, agriculture demonstrated its resilience during deterioration of macroeconomic situation: 1) in the short term, industry was provided with resources for production of current year's crop even before the imposition of sanctions; 2) agricultural sector is very inertial and can function for a long time, moving from modern and imported resources to those produced in the country with varying compliance to international level; 3) agricultural products and resources for their production are not subject to direct sanctions and should be taken out from the secondary sanctions (but in fact barriers exist); 4) agricultural sector is largely modernized, machinery and process lines can function until their natural wear and tear.

It is difficult to estimate volume of exports, which in recent years has replaced domestic consumption as the main driver of agricultural growth due to lack of official data. According to industry estimates, since November 2022 the volume of grain exports of the current season began to exceed indicators of 2021, which is facilitated by the grain deal (over July-October 2022, 3.5% less wheat was exported than a year earlier but it is expected that in July-October shipments will exceed last year's level by 9%). In August 2022, total backlog of 2021 exports was approaching 30%. Above trend indicates that Russian grain exporters have overcome implicit sanctions restrictions (refusal of certain carriers to do the job, restrictions on entering ports, restrictions on insurance and financing of shipments). Nevertheless, growth rate of grain production is much higher than its exports: according to estimates of the International Grain Council growth of wheat production in Russia is 25 million tons and exports — 8 million tons. With insignificant growth of domestic consumption this situation will lead to actual doubling of stocks at the end of the season — to the highest level ever in Russia which negatively affects situation on the grain market and income of grain producers.

Export prices for Russian wheat are reduced not only in rubles due to strengthening of exchange rate in H2 2022 but also in dollars (in December 2022, a decrease of 6.3% from prices of the year before while ruble strengthened by 10.8%). Domestic wheat prices in 2022 dropped by 20—30% as compared with 2021 depending on variety and region, approaching level of 2019. A less acute but similar situation is typical for sunflower products of which constitute second most important article of Russian agricultural export.

Given the fact that grain producers are numerous and are mostly small businesses (more than 60% are peasant farms and organizations — small businesses) the problem of their financial standing may outgrow the framework of the sector. Prices for their products are falling while prices for resources are rising: in 2021, the overall growth of prices for agricultural products lagged behind growth of prices for resources (for products it was 14% and for resources

for agriculture — 17.8%). This situation is exacerbated by the fact that this level of domestic prices is due not only to export problems, level of external prices but also to export duties which are only partially returned to agricultural sector and distributed primarily to other beneficiaries. It would be advisable to reconsider refund mechanism if export duties are retained: return the entire volume to the agricultural sector and distribute it among producers in proportion to the volume of sold grain.

In general, the problem of food security in the Russian Federation has finally shifted from the need for self-sufficiency to facilitating economic access to food for citizens while support for functioning of the agro-industrial complex moved to helping producers to export products.
