Protección Social: Infraestructura Regional de Distribución de Asistencia Alimentaria

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Abstract: Este artículo describe los problemas de Rusia como un estado con una economía transformada relacionada con la seguridad alimentaria, la creación de infraestructura regional de distribución de asistencia alimentaria (FAD) para la población en necesidad. Este artículo presenta un análisis de las instituciones informales en el campo de la protección social, las reacciones de comportamiento en las acciones del Estado para combatir la pobreza, el diseño de mecanismos para combinar las relaciones de mercado y distribución. Este artículo proporciona un programa de alimentación con distribución de medidas en términos de ejercicios de influencia basados en nuestro análisis, a saber, en el ámbito del apoyo estatal - garantías estatales de ayuda alimentaria - la formación de asociaciones público-privadas para organizar el funcionamiento de la empresa en los complejos de infraestructura. En el campo de la ciencia y la tecnología - desarrollo de la infraestructura de la industria alimentaria, suministro tecnológico del proceso de cocción eliminando las pérdidas en ciertas etapas. En el desarrollo de base de recursos alimentarios - un aumento de la producción agrícola, la capacidad de producción en las empresas de proceso, la optimización del flujo de alimentos en el ciclo tecnológico. En el cambio de la tecnología de venta - el centro de logística operativa (OLC) introducción a la cadena alimentaria que permitirá a los productores para aumentar el volumen de productos vendibles a través de redes comerciales en sintonía con los requisitos tecnológicos.

Keywords: Social protection; Food assistance infrastructure; Operational-logistic center (OLC); WTO Green Box; Organic farming. Palabras clave: Protección social; Infraestructura de asistencia alimentaria; Centro de logística operativa (OLC); Cuadro Verde de la OMC; Agricultura ecológica

Resumo: Este artigo descreve os problemas da Rússia como um estado com uma economia transformada relacionada com a segurança alimentar, a criação de infraestrutura regional de distribuição de assistência alimentar (FAD) para a população em necessidade. Este artigo apresenta um análise de instituições informais no campo da proteção social, as reações de comportamento nas ações do Estado para combater a pobreza, o design de mecanismos para combinar as relações de mercado e distribuição. Este artigo proporciona um programa alimentando com distribuição de medidas em termos de exercícios de influência baseados em nosso análise, a saber, no âmbito do apoio estatal - garantias estatais de assistência alimentar - a formação de associações público-privadas para organizar o funcionamento da empresa nos complexos de infraestrutura. No campo da ciência e tecnologia - desenvolvimento da infraestrutura da indústria alimentar, suprimento tecnológico do processo de coção eliminando as perdas em certas etapas. No desenvolvimento de base de recursos alimentares - um aumento da produção agrícola, a capacidade de produção em as empresas de processo, a otimização do fluxo de alimentos em ciclo tecnológico. No mudanças na tecnologia do negócio - o centro de logística operativa (OLC) introdução à cadeia alimentar que permitirá a produtores para aumentar o volume de produtos vendíveis através de redes comerciais em sintonia com os requisitos tecnológicos.

Keywords: Proteção social; Infraestrutura de assistência alimentar; Centro de logística operativa (OLC); Quadro Verde da OMC; Agropecuária ecológica

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support – outreached state guarantees in food assistance – public-private partnership formation to organize enterprise operation in the infrastructure complexes. In the field of science and technology – food industry infrastructure development, technological supply of the cooking process by eliminating losses at certain stages. In food resource base development – an increase in agricultural production, production capacity at the process enterprises, food flow optimization in technological cycle. In changing sale technology – operational-logistic center (OLC) introduction to food chain that will allow producers to increase the volume of saleable products over trade networks in tune with technological requirements

1. Introduction
The Russian Federation, as well as other countries with transformed economy that entered the World Trade Organization later than others, began to develop a food assistance distribution (FAD) system (Sedik, Lerman, & Uzun, 2013, pp. 500-527; Komekbayeva et al., 2016, pp. 2227-2237; Abdulkadyrova et al., 5320-5330). While macro-economic state budget proportions have been formed the government faced the problem of limited public support of real economy in line with WTO rules. Currently, there is performed an "integration" of a new institute of development into the existing framework of the economy. FAD infrastructure provides certain segments of the population that are in need with free access to a healthy diet.

The food security problem has developed due to soil erosion making it impossible to have products in required amount (Stukach, 2013, pp. 106-109; Tazhmakin, & Stukach, 1994, pp. 178-186) and underprivileged people that do not have the proper amount of financial resources to provide themselves with food (Temporary Assistance for Needy Families, 2004).

Contribution to science is that the article provides: 1) described specifics and path of FAD system dynamics in countries with transformed economy; 2) revealed socio-economic essence of informal institution impact on the vector of farmers’ motivation to use soil conservation technologies in agriculture; 3) a comprehensive solution within the framework of state support, natural factors of production protection and restoration by introducing organic farming techniques to provide ecologically friendly production and resource provision in the region.

2. Views on Childhood: A Review
In the literature, there is often a formal statistical description of regional food infrastructure (Temporary Assistance for Needy Families, 2004; Annual Statistical Supplement to the Social Security Bulletin, 2005; Stukach, 2015, pp. 23-29). In this case, a numerical analysis of various indicators of the food sector is made. Certain literature on this issue is devoted to economic efficiency analysis of the food sector. In fact, this is kind of a line of reasoning on economic efficiency of the industry (Korobeynikova, 2016; Peterson, 2000, pp. 517-526). Finally, we can note the tendency of some authors to consider the social significance and the role of food security and production in this field (Romanenko, 2008, p. 66; Montgomery, 1961, p. 7). In this case, the role of public authorities and institutions is outlined as important to ensure food security.

It is worth noting that each of these areas of food security analysis describes and interprets the value of this sector from both an economic and a social side. The common ground between them is hard to find. This makes the process more complicated – food industry cannot be considered as only an economic or social problem. Economic criteria and indicators form the basis of its performance and development. At the same time, its importance for national security and social well-being.

In Russia, the country's food supply and capacity-building be declared by the Doctrine of food security adopted by Presidential Decree. It defines a set of official views on the goals, objectives and main directions of the state policy in the field of food security. It determines the scale of output and import of agricultural products, raw materials and food in the sphere of production and national competitiveness, along with other areas. It provides taxpayer backings, land performance used in agriculture and food sales by catering and trade organizations.
Economic access to food is an opportunity to purchase food products at prevailing prices in the amount, which is not less than the fixed norm of rational consumption provided by revenue level (Annual Statistical Supplement to the Social Security Bulletin, 2005; Hidrobo et al., 2014; Hidrobo et al., 2014, p. 144-156). Physical accessibility of food is determined by distribution infrastructure development in which all areas of the country and the region are provided by the possibility to purchase food products or to cater.

The Doctrine is focused on measures aimed at reducing poverty. There is an aim to provide priority support of vulnerable segments of the population who do not have finance to provide themselves with healthy diet. The major target is to provide with healthy diet the following segments of population: pregnant and nursing women, infants, students of preschool and school age in social institutions (Tazhmakin, & Stukach, 1994, p. 178-186). The Food Security Doctrine of the Russian Federation is the basis for regulatory documents. It is particularly important for FAD system because of food costs in Russia are about 30-32% on average and more than 55-60% in groups with low wages.

In this study, we used a comprehensive approach to the problem, as it combines both economic and sociological methods. This allowed us to consider the problem on the part of its most important manifestations.

The purpose of this article is to gain new theoretical knowledge about regional infrastructure development of food assistance distribution (FAD).

2.1 Food Assistance Programs’ Development in Russia

We have studied the land use of the Central, North Kazakhstan and southern forest-steppe natural zones of Omsk Region (Russia), where the soil is subjected to wind erosion. The studies were conducted in 1992-1994 and in 2005-2009 at 342 landholdings. The questionnaire consisted of three sections: commercial farm unit description and types of activities; personal characterization (age, background, occupation, experience rate, level of knowledge about soil conservation measures, their economic consequences, psychological attitude to their use etc.); factors’ allocation affecting the application of soil conservation measures, awareness of their necessity, profitability etc. The similar method was used in the early 90-ies of the last century (Hooks, Napier, & Carter, 1987, p. 309-324). We have concluded that "... decision-making related to technologies in agriculture depends on macro-social factors (factors beyond the control of the Entity, such as demographic situation), micro-social factors (poverty, farmer's desire to use land resources to make profit, concern about survival) and state policy" (Camboni, & Napier, 1992, p. 112-130). We confirmed the effectiveness of these statements in farming in the countries with transforming economy. We present empirical data and analytical calculations for Omsk Region that was one of the territories with the "pilot" project of 2014 on testing FAD mechanisms. The authors of this article took part in the project as developers and coordinators under the Regional Ministry of Agriculture and studied the experience of other regions of Russia. After the Russian Federation entered the World Trade Organization in 2012, there raised the need to underline the state support by meeting the WTO requirements. The Government adopted the Concept of Measures to Support Domestic Producers and Processors of Agricultural Products based on internal food assistance mechanisms within the WTO Green Box (The State of Food and Agriculture, 2015, p. 172). The concept provides an idea of outreached state guarantees in food assistance. Its implementation is carried out in two stages. The first stage (2014-2015) covers creation and adoption of regulatory legal acts, FAD control system formation, operational-logic infrastructure development, process monitoring, clarification of activities, main indicators and criteria of State Agricultural Development Program and other state programs.

The second stage (2016-2020) covers FAD system improvement, programs’ development and adoption, their implementation, control and efficiency assessment. The executive authorities within their power and authority under adopted budget commitments will implement the concept. According to Russian Federal State Statistics Service, there may be about 32 million people, who would need food assistance (19 million – 13% – of the population with the revenue below
poverty line). According to related government services, the total amount of food must be about 20% of the volume of consumption in the country to protect these segments.

The Russian Government implements "pilot" projects based on FAD mechanisms to assess the effectiveness of measures to support native producers and processors of agricultural products. The Republic of Buryatia and Mordovia, Omsk, Saratov and Ulyanovsk regions took action on implementing "pilot" projects to test inner FAD mechanisms in 2013-2015.

There were made calculations for the Omsk Region implementing the "pilot" project to assess the FAD scale. According to statistics, the population in Omsk and the Omsk Region was 1974 thousand people in 01.01.2014, 1 417 thousand people – in cities and 557 thousand people in rural areas. Golden agers and veterans of the Great Patriotic War – 868 thousand people of the total number; pregnant women, nursing mothers and children under the age of three – 295 thousand people; single mothers (fathers) with children – 27 thousand people; persons with disabilities – more than 3 thousand people. In addition, there are more than 1 thousand large and poor families in the region.

We have been formed a database on the number of vulnerable segments of the population, calculated the volume of food supplies for catering establishments – potential elements of FAD program. Regional Government Ministries perform the calculations in tons: bread products – 11.846; potato – 10.755; vegetables and vine crops – 15.173; fruit and berries – 7.290; meat and meat food – 6.497; milk and dairy products – 15.595; eggs, thousand pieces – 1.097.; fish and fish products – 142; sugar and confectionery – 2.911; vegetable oil and other fats – 663. The next step was to determine the FAD volumes to include them in the regional program.

Table 1 shows the actual volume of the main types of food supplies in the system of social catering by FAD program in the region for 2014, on the categories of consumers. There is a gap between the potential and actual volumes included in the program. The FAD program does not include data on the enterprises of real economy, which could provide their employees with food in the framework of public-private partnerships in public catering system, as well as develop the region's FAD infrastructure.

Table 1. Main types of food supplies in the system of social catering by FAD program in the region for 2014, on the categories of consumers, thousand tons

<table>
<thead>
<tr>
<th>Product types</th>
<th>Consumer categories</th>
<th>Patients in medical institutions, on hospital treatment</th>
<th>Students of general educational institutions and government-run educational institution</th>
<th>Golden age members and people with disabilities</th>
<th>Children with disabilities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and meat food</td>
<td></td>
<td>1.65</td>
<td>2.47</td>
<td>0.38</td>
<td>0.01</td>
<td>4.51</td>
</tr>
<tr>
<td>Fish and fish products</td>
<td></td>
<td>0.82</td>
<td>0.80</td>
<td>0.28</td>
<td>0.01</td>
<td>1.91</td>
</tr>
<tr>
<td>Milk and dairy products</td>
<td></td>
<td>2.21</td>
<td>5.90</td>
<td>0.63</td>
<td>0.05</td>
<td>9.01</td>
</tr>
<tr>
<td>Vegetables (except potatoes)</td>
<td></td>
<td>0.58</td>
<td>6.90</td>
<td>0.85</td>
<td>0.03</td>
<td>8.35</td>
</tr>
<tr>
<td>Fruit</td>
<td></td>
<td>0.09</td>
<td>1.89</td>
<td>0.34</td>
<td>0.01</td>
<td>2.33</td>
</tr>
</tbody>
</table>

The amount and sources of finance were determined at the next stage (Table 2). Since it is a pilot project, there were made certain adjustments on the sources and purposes of financing during the implementation.
<table>
<thead>
<tr>
<th>Food assistance mechanism</th>
<th>Provided with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidies to local budgets for hot meals in municipal general educational institutions</td>
<td>61 666</td>
</tr>
<tr>
<td>(ready-to-eat food provision)</td>
<td>144 708</td>
</tr>
<tr>
<td></td>
<td>59 103</td>
</tr>
<tr>
<td>Organization of hot meals for students of government-run educational institutions</td>
<td>141 538</td>
</tr>
<tr>
<td></td>
<td>226 423</td>
</tr>
<tr>
<td></td>
<td>282 851</td>
</tr>
<tr>
<td>Food costs in state residential social care institutions of the Ministry of Labour</td>
<td>47 151</td>
</tr>
<tr>
<td>and Social Development of the Omsk Region</td>
<td>67 546</td>
</tr>
<tr>
<td></td>
<td>72 637</td>
</tr>
<tr>
<td>Food costs of national health service institutions</td>
<td>71 763</td>
</tr>
<tr>
<td></td>
<td>175 253</td>
</tr>
<tr>
<td></td>
<td>191 407</td>
</tr>
<tr>
<td>Children catering in day camps</td>
<td>123 800</td>
</tr>
<tr>
<td></td>
<td>117 524</td>
</tr>
<tr>
<td></td>
<td>122 280</td>
</tr>
<tr>
<td>Targeted food assistance to certain categories of citizens (food (milk) purchase for</td>
<td>2</td>
</tr>
<tr>
<td>employees working in harmful working conditions)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Targeted food assistance to certain categories of citizens (social assistance to</td>
<td>84 695</td>
</tr>
<tr>
<td>pregnant women, nursing mothers and children under the age of three in providing</td>
<td>410000</td>
</tr>
<tr>
<td>adequate nutrition)</td>
<td>50 000</td>
</tr>
<tr>
<td>Agricultural subsidies (except for private farmers) to recover building, rebuilding and</td>
<td></td>
</tr>
<tr>
<td>modernization costs spend on facilities (including operational-logistic centers) for</td>
<td>5 278</td>
</tr>
<tr>
<td>plant product collecting and storage</td>
<td>7 562</td>
</tr>
<tr>
<td></td>
<td>4 000</td>
</tr>
<tr>
<td>Extra-budgetary funds</td>
<td>500 000</td>
</tr>
<tr>
<td></td>
<td>2000000</td>
</tr>
<tr>
<td></td>
<td>2500 000</td>
</tr>
</tbody>
</table>

Currently, all financial obligations on the listed areas of FAD mechanism development are implemented. In forming the Concept of FAD system development, we took into account the bounds. On the one hand – the lack of resources; on the other hand – the state support is limited in supply amounts due to undertaken international obligations. Problem solving by market-based instruments relying on the fact that the lacked resources could be imported will lead to a decline in local production and welfare. Product purchasing for social needs by intermediaries and agents does not allow to control it quality, as well as to regulate the price. Public catering system, based on industrial semi-finished production volumes related to FAD, has important advantages: low cost, sales scale, high purchasing power, stock management, low labor costs,
flexibility in planning food preparation, mechanization and automation, product quality control, efficient use of production capacity. In this situation, the purchase of agricultural products from native producers for public catering is more valid within the WTO Green Box and operational-logistic center (OLC).

The program fund is adapted to the one that is already functioning with branch reserve unchanged. The main program objectives for crop production are to develop logistics, to modernize crop production, to develop potato and vegetable production and processing. The program instruments are subsidies for agricultural producers to reimburse outlaid expenses involved in: 1) building, rebuilding, modernization of facilities (including OLC) for plant product collecting and storage; 2) equipment procurement.

The main program objectives for livestock farming are: 1) to increase and modernize production capacities in milk production and processing; 2) to increase and modernize production capacities in meat production and processing. The program instruments are for agricultural producers to reimburse outlaid expenses involved in: 1) machinery and equipment procurement for milk and meat production, storage and processing; 2) building, rebuilding, modernization of facilities for milk production and primary processing, as well as slaughtering and meat processing.

Agricultural organizations and farmers (main producers) have reserves to reduce storage costs and increase their profit from the end cost. The inefficient intermediate sellers are eliminated. The state ensures food security and agriculture development. The end-user gets quality products at affordable prices. The study of catering management in countries and regions with the current food, money and information flow regulation system led to the conclusion that the engineering-production process is carried out in specialized facilities located at private territory near the transport links with buildings and equipment. Such a OLC must be located within the metropolis near the centers of product consumption to ensure material distribution from producer to consumer. The enterprise provides timely, rhythmic material resource distribution between technological sections and work sites in line with output plans or customer orders.

The production area is a complex designed to produce and process raw materials and food, to fill and package the final product with necessary equipment. The customer represented by the Regional Ministry of Agriculture and Food and project developers in assessing external and internal environment of OLC and other institutions involved in the project was focused on the expected performance manifested in various spheres of activity. The advantage is that there is now an opportunity to create an integrated system of suppliers, whose role is to centralize product selection, delivery, quality and safety control, purchase from local farmers and enterprises-processors with the possibility of local control. The control is possible by means of laboratory and instrumental methods of catering on the part of highly skilled specialists, technologists and sanitary inspectors. New technologies will reduce production and product sales losses. High-tech equipment and special systems for storage, cost accounting and control will be now available. Economic effect – stable social order to local farmers and product processors. There are created state support mechanism for entrepreneurs involved in FAD project implementation that encourages them to increase production volumes. Agricultural organizations, farmers and the public sector have the opportunity to enter the trade network with the products of local production. Social effect – full and high quality children catering in preschool and educational institutions; guaranteed and quality catering of vulnerable segments of the population; subsidies for underserved parents.

FAD system trade structure. In recent years, there have been changes in the whole retailment system. Product distribution (producer-consumer) system structure has changed due to trade network enter to consumer market. For example, the trade network in the Omsk Region is developing with priority rates in comparison with average indicators in Russia. Retail trade network contains on average above 40% of the total number of food products, beverages and tobacco products over the past three years. In this case, the state needs an active purchase policy for state and public demands. Self-governing bodies create environment for co-financing on the part of catering system business structure of their employees by involving small farms and
private land owners in FAD system. The public catering system is an effective instrument to regulate agricultural market. It creates proper environment to protect food prices in purchasing interventions.

The situation showed that there are barriers on the way of local products to the network shelves. Regional authorities and local governments could resolve the economic conflict between trade networks and local producers. The economic situation in the region shows that there are contradictions in economic interests of trade networks and local producers. We propose to "introduce" certain institutes on interest congruence and joint capacity use on the part of trade networks and local producers into the system of agri-food cluster market infrastructure.

The study of full-healthy diet provision of vulnerable segments of the population is impossible without studying the trends in technology and resource development for ecologically clean products. In market economy, a significant part of scientific and technical potential in agriculture is focused on growing volumes of food supply. This is achieved by increasing cultural operations, increasing rates of chemical fertilizers, producing food with genetically modified organisms (GMO) – plant, animal or microorganisms. Under such conditions, healthy food for pregnant and nursing women, children, students and healthy diet in social institutions must be affordable (Principles of the Russian Federation State Policy in the Field of Nutrition until 2020, 2010). There must be environmentally friendly products made by organic farming technology to provide these segments with public catering.

There must be a socio-economic coordination mechanism of providing all segments of the population with food within FAD infrastructure. "The first area is the landowner’s motivation to preserve the land for future generations. This can be achieved by profitable farming. The second area is the difference in the income of farmers with unsuitable lands and of market agents conducting intensive farming. Purpose-oriented programs of state support must cover it. The third area covers the general government that shall improve the practice of legal regulation and anticipate socio-economic effect of poverty on environment. The state is required to monitor the prerequisites of profitable farming, to finance soil protection measures; to adapt price, subsidy and trade policies in agriculture; to control the consumption of fertilizers, pesticides, soil fertility and phreatic water state. The fourth are involves research priorities and focus on creating cost-effective and environmentally valid technologies; continuing education in the private sector, effective system of agricultural information services" (Peterson, 2002, p. 431-439).

2.2 Representation of Foreign Experience in Food Assistance Distribution

Research results provide an opportunity to implement FAD infrastructure as a pilot project at the level of the Russian region. Provided classification of spheres of interests (state support, scientific-technological policy, resource base development, trade structure changing, logistics potential development of the region) allowed considering all the vectors of FAD system development.

In Russia, the issue of good nutrition is considered in the context of national health (Stukach, 2013, p. 106-109). The Government has adopted various kinds of programs and activities and developed the concept of creating FAD system on national basis (Principles of the Russian Federation State Policy in the Field of Nutrition until 2020, 2010).

In world practice, pilot projects implementing certain model are adopted in dealing with new food security challenges. José Graziano da Silva, FAO Director-General noted the importance of pilot programs that along with close monitoring and careful assessment "... may contribute to a political dialogue on the issues of national support in funding social assistance" (FAO Statistical Yearbooks - World food and agriculture, 2015). He claims that the gained over the last two decades shows that the fight against hunger, food insecurity and malnutrition could be successful. The key elements are political commitment, partnerships, adequate financing and overall measures (Kerimova, 2005, p. 3-9).

Hidrobo M., Hoddinott J., Peterman, A. etc. have discovered that consumers' perception depends on assistance option (in-kind, cash, certificates) (Hidrobo et al., 2014). Cash assistance option provides a wider range of products than the in-kind one. The increase in food consuming is less
noticeable in large households than in smaller ones. We found that CT-OVC program impact that provided fixed cash allowance in Kenya over two years was different depending on household size. We found that CT-OVC program had no visible impact on food consumption after four years of operation due to lower purchasing power after inflation (Asfaw et al., 2014, p. 1172-1196). However, the behavioral changes caused by consuming large amounts of food products became permanent.

FAD programs are common not only in developing countries. The United States has sixteen food programs, which can be divided into four main groups (Nunn, & Qian, 2014, p. 1630-1666):

1. Support for poor golden age members, smoothing of social contradictions;
2. Providing food assistance to pregnant women, mothers, schoolchildren and preschoolers;
3. Providing educational programs to raise social awareness about the optimal choice of nutritious diet;
4. FAD programs related to certain families or regions after natural disasters.

School meals are a common form of social protection. Available evidence show that many school meal programs increase food consumption by schoolchildren. The School Meal Program in the Philippines increased daily per capita consumption of calories by children of primary school age by 300 calories (Hooks, Napier, & Carter, 1987, pp. 309-324). Wherein, their parents have not reduced their diet at home. The increase in food consumption is less noticeable with quarterly disbursements than with daily ones or that with the intervals up to 10 days.

Evans D. and Popova A. are concerned that poor households can spend part of received allowance to buy alcohol, tobacco products and other products of this group (Stukach, 2013, p. 106-109). According to 44 processing operations conducted in 19 studies on the impact of both unconditioned and conditioned allowances, their authors found that financial allowances, with rare exceptions, did not increase the consumption of alcohol and tobacco products. Food assistance even helped to reduce purchase costs.

According to FAO «... currently, about 33% of global soil resources have degraded due to erosion, compaction and salinization, removal of organic matter and nutrients, acidification, pollution and other processes related to unstable land management. According to the above authors, if there will be no new approaches, the total area of arable and fertile land per capita in 2050 will form only a quarter of suitable land dated by 1960" (FAO Statistical Yearbooks - World food and agriculture, 2015). In "The example of global soil restoration", professor D. Montgomery on the 6th World Congress on Conservation Agriculture (June 21-25, 2014 in Winnipeg, Manitoba, Canada) provided an overview of the history of humankind on land use and outlined the need "... to reverse land degradation as one of the most underestimated environmental crises of our day" (Wilson, 1998).

Soil preservation to provide food security and stable future is an urgent need. This is particularly important in current environment – more than 805 million people face hunger and malnutrition. Population growth will require increased food production by about 60% over the next 35 years. At the same time, food production depends on the soil. Thus, the soil shall be productive. It can be argued that FAD problem in the country or in the region cannot be solved without taking into account the potential environmental factors, such as land and their proper state.

The issue of land use under depletion related to economic activity of economic entities and under natural phenomena, wind and water erosion, is common in many countries and regions (People's Republic of China, Commonwealth of Australia, the Republic of Kazakhstan, Russian Federation – Volga Region, Siberia, Caucasus etc.).

It is proved that decision-making related to technologies in agriculture depends on macro-social factors (factors beyond the control of the Entity, such as demographic situation), micro-social factors (poverty, farmer's desire to use land resources to make profit, concern about survival) and state policy. The research also confirmed that 80% of farmers do not worry about soil preservation for future generations, are not aware of danger of soil erosion and do not apply technologies of conservation farming (Hidrobo et al., pp. 144-156). Landowners’ motivation to
preserve soil and raise fertility is in the study of behavioral reactions. In general, the methodological aspects of the issue are being resolved within the institutional economics theory. Environment analysis shows that private-farm support is not correlated properly with social protection programs that provide preferential provision of resources or centralized purchase of output yield to meet the government-funded needs. Such assistance is the basis for production improvement; it enhances rural area development. In this case, agriculture public expenditures and social protection expenditures provide the multiplier effect. FAD system development is promoted by social significance and dropped limits in producer support (Peterson, 2000, p. 517-526).

Thus, we propose to create a FAD system that will take into account not only current operation factors in science, but also behavioral reactions to the state policy in this sphere. This research result assessment and comparison with research results of other authors grounded our conclusion that our proposed approach makes it possible to obtain positive results and balanced change in the social sphere.

3. Conclusion
FAD infrastructure in Russia is a fundamentally new development institution. After the Russian Federation entered the World Trade Organization, there raised the need to underline the state support by meeting the WTO requirements. In Russia, the concept adopted by the Government measures to support domestic producers and processors of agricultural products based on the internal mechanisms of food aid under the "green box" of the WTO. In Russia, the Government has adopted the Concept of Measures to Support Domestic Producers and Processors of Agricultural Products based on internal food assistance mechanisms within the WTO Green Box. In the Omsk Region, there is implemented a pilot project to create a FAD system infrastructure. Participation in the project is based on the interaction between regional administrations, administrative center and business entities in trade sector. The available capacities are taken into account: sales area, co-operation with banks, customer base, OLC capability, general infrastructure. Development institutions have a particular role represented by public associations of producers and trade organizations.

We propose the following actions: firstly, to motivate landowners to preserve the land for future generations. The study of the issue shows that land protection is a priority at profitable farms. Secondly, purpose-oriented programs of state support must cover the difference in the income of farmers with unsuitable lands and of market agents conducting intensive farming. Thirdly, the general government shall improve the practice of legal regulation and anticipate socio-economic effect of poverty on environment. The state is required to monitor the prerequisites of profitable farming, to finance soil protection measures; to adapt price, subsidy and trade policies in agriculture; to control the consumption of fertilizers, pesticides, soil fertility and phreatic water state. Fourthly, there must be research priorities and focus on creating cost-effective and environmentally valid technologies; continuing education in the private sector, effective system of agricultural information services. The Department of Urban Economic Policy under local administrative authority shall create a coordinating unit to reduce contradictions between trade networks, processors and agricultural producers in the region. This is achieved by agreements in using distribution infrastructure capacity of trade networks and available capacity of wholesale operations and retail trading.

References


