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The Social Responsibility of Business and Food Security Assurance in Russia

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Abstract

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In the present paper, the authors consider food security as a complex process of interaction between a number of actors, i.e. food consumers, agro-industrial producers, the state, and other actors. Under present-day conditions, world practice indicates that ensuring food security primarily relies on an innovative agribusiness model through the organization of value creation chains. The authors point to the fact that the Russian economy tends to exhibit a complicated and contradictory process of creating value chains that enable the establishment of socially responsible partnership business relations in the food production process offering ethical food prices to Russian consumers.

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Keywords: Food security; social responsibility of business; value creation chain.

1. Introduction

Food security assurance represents one of crucial lines in terms of safeguarding public welfare in the national economy. J. St. Mill defined security as the comprehensive protection the society grants to its members considering it as a determinant in the way of gaining factor productivity (Mill, 2007).

Practical interest in the analysis of food security stems from the aggravated problem of starvation in a number of developing countries, and its topicality for the majority of the world nations, i.e. nearly 842 million people worldwide suffer from chronic hunger, whilst the world experiences no food deficiency, since they do not have enough funds to afford the needed set of food; in order to satisfy the increased food demand as the result of the population upsurge by the year of 2050 up to 9.6 billion people (FAO, 2014). The conceptual framework of the food security assurance program was developed



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by the Food and Agriculture Organization of the United Nations (FAO) to read as follows (FAO, 2015):

- a) Food security assurance necessarily requires the steady development of the country in the integrity of its political and socioeconomic systems;
- b) As part of the food security program, governments shall ensure physical, social, and economic availability of the required amount of safe and nutritious food for the population of the country to live an active and healthy life;
- c) Provision of safe food for the population can be exercised through “optimal state and private investments into the equitable and steady enhancement of food systems, development of rural areas and human resources...”;
- d) The decisive role is assigned to the natural factor(water and land resources); and
- e) Provision of food to meet the existing needs of the population is practiced based on the national production (availability of comparative advantage) and the import of foodstuffs in the needed quantity (Kurbanova, 2013).

The objective of this scientific research is to analyze the form in which business practices its social responsibility in the process of ensuring food security of Russia, i.e. the value creation chain.

To attain the above objective, it is intended to accomplish the following tasks:

- Define food security as a complicated social and economic notion;
- Analyze the innovative agribusiness model;
- Identify the specifics of establishing value creation chains peculiar to the Russian agro-industry; and
- Consider ethical pricing as a food security assurance factor.

The accomplishment of the said objective and tasks dictated the structure of the present paper. The introduction highlights the necessity of research into food security relying on the documentation of the Food and Agriculture Organization of the United Nations. Next, the paper proceeds as a review of available literature on the subject under discussion as well as the research data and methodology. Chapter V presents the results of investigating the theory and practice of food security assurance. The paper ends with conclusions and the list of references.

2. Literature Review

The methodological fundamentals of food security were developed in studies carried out by domestic (S.G Afanasiev, D.F. Vermel, V.A. Dadalko, E.N. Krylatykh, V.V. Miloserdov, E.G. Rumyantseva, E.V. Serova, I.V. Starikova, I.G. Ushachyev, et al.) and foreign (D. Antle, E. Barber, P. Glazauer, M. Kenia, H. Cruze, J. Konway, A. Sen, M. Tracey, et al.) researchers. Scientific publications due to I. Khramova, N. Karlova, D.B. Epstein, et al. address factors and hazards of food security; experts of the Izborsky Club, the Russian Academy of National Economy and RF President State Service presented methodologies for determining the level of food security assurance. Various aspects of the agro-industrial development as an economic foundation of food security are theoretically substantiated in research papers authored by Russian and foreign scientists, namely O.S. Belokrylova,

S. Barret, V.V. Garkavy, A.G. Zeldner, R. Eastwood, V. V. Kuznetsov, M. Lipton, V.N. Papelo, N. P. Radugin, I. Yu. Soldatova, V. I. Trukhachyev, I. G. Ushachyev, A. A. Shutkov, et al.

On the other hand, scientific research works fail to give sufficient consideration of those mechanisms that are employed to ensure the interrelation between aggregate food demand (physical, social, and economic availability of food) and aggregate food supply (safe food provision relying on the innovative agribusiness model), and the mechanism of ethical pricing as a form of the social responsibility of agribusiness (agribusiness actors). For purposes of our research, food security is regarded as a system of interaction between agribusiness actors, food consumers, and the state on the basis of creating effectual value chains (through the agency of ethical pricing) with a view to ensuring the physical, social, and economic availability of safe and nutritious foodstuffs based on sustainable provision of food.

3. Data and Methodology

The analysis of food security assurance theory and practice employed the data provided by FAO, and the Federal State Statistics Service (Rosstat). The paper cites information presented in the documents of the Russian Federation Government, and the Russian Grain Union.

The scientific research involved the use of tools offered by the institutional theory. The reasons behind using these tools rest on the implication that it is impossible to investigate the structure of agribusiness without analyzing institutions of the national economic system. The employment of institutional design techniques enabled the comprehensive study of the contradictory process of establishing socially responsible partnership interactions between agribusiness actors in the Russian economy, in the food industry, and the corresponding institutions. The specified range of issues preconditioned the use of the systematic approach to study principal scientific and practical aspects inherent in the analysis of the subject under discussion. Using the systematic approach, it proved practicable to analyze interactions between actors of the innovative agribusiness model through the establishment of value creation chains and the practical implementation of food security as a complex economic system, and to demonstrate peculiarities and forms of the social responsibility of business. In addition, the research work involved the following methods:

- The method of structure-functional analysis lies on the basic principles that make it possible to determine the structure of entities and existing interactions between them, and to hierarchize functions exercised by all structural elements of the system;
- The use of the statistical method enables the obtainment of reliable information to analyze and interpret ongoing processes;
- The analytical method permits the assessment of the occurring quantitative and qualitative alterations;
- The descriptive and comparative methods of study allow for identifying peculiarities of the innovative agribusiness model being formed; and
- The factor analysis methods are used to determine the extent of influence various factors exert on the level of food safety assurance in Russia, both theoretically and practically.

The combined use of all of the above methods to investigate food security is deemed to be entirely novel.

4. Results

The Governments of various countries, including the Russian Federation Government, actively participate in the development of the food security concept. In 2010, Russia adopted the Russian Federation Food Security Doctrine, the foundations of which read as follows:

- a) Identify the ultimate level of national production in food resources;
- b) Specify national status of the agricultural economy;
- c) Make quality food physically and economically available;
- d) Render targeted aid to those whose income does not cover the consumption of the needed set of goods; and
- e) Assign national status to the rural economy (Government of Russian Federation , 2010).

Taking a favorable view of the adopted doctrine, the Russian economists, however, stated a number of drawbacks (Barsukova, 2012), i.e.: it failed to become an effectual element of the RF agricultural policy; the document places at the forefront food production not its availability; no estimation is given to the outlook for the export as a determinative trend of the Russian agribusiness; part of indicators used by FAO are not covered by the RF food security monitoring system, etc.

In the present-day context, food security starts to rely fundamentally on the innovative agribusiness model. Agribusiness representing a constituent part of the agro-industrial complex is understood as a complicated two-level structure:

1. Owing to the introduction of new technologies into the agricultural industry, the worker acquires skills and techniques of industrial labor using only those capabilities that do not contradict the nature of industrial labor but enhance it. This gives rise to the diffusion of agricultural and industrial labor inactivity of the same worker, and, hence, the formation of agro-industrial labor as the basis of agro-industrial production.

2. Alongside with that, we observe the development of integrated interactions between actors of agricultural and industrial production to process the initial agricultural product. The agricultural sector thus becomes more and more involved in the global economy system. As A. V. Chayanov puts it figuratively, this results in the emergence of social threads linking the household of Sidor Karpov lost in the Perm woods to London banks to ultimately make him feel the pulsation of the Royal Exchange.

In the world practice, the innovative agribusiness model is implemented through the establishment and enhancement of value creation chains. According to M. Porter, each and every company can be represented as a totality of various activities aimed at development, production, marketing, delivery, and service of its products. All these activities are combined to make up the value creation chain (Porter, 2005). The value creation chain reflects the history of the company's activities, strategies, and practical approaches, and economic activities of its internal units.

In his research into the value creation chain, M. Porter states that each category of activities can be subdivided into several discreet types. This process can go down to the lowest levels to identify a huge number of most target-specific activities as long as these activities are discreet (Porter, 2005). The

rapid development of the modern global community calls for continuous enhancement of the “chains”. K. Kaplinsky, G. Jeffery, and other researchers find it essential to account for three principal constituents of the value creation chain analysis:

- Chain entry berries and gained revenues;
- Chain management; and
- Chain efficiency (Kaplinsky & Morris, 2003).

The innovative agribusiness model is based on the agro-industrial production. It comprises a diversity of various business patterns constituting the framework for the formation of competitive environment that combines advantages of both small and large business, and represents a prerequisite for the efficient use of economic resources, i.e. farm enterprises (small family farms and large farms, informal food sector, cooperatives, agribusiness holding companies, and transnational corporations). The FAO experts regard the small family farm as a constitutive business form in the agro-industrial system since, first, this form prevails in the world economy: over 90 per cent of 570 million farms occupy less than 90 per cent of land resources, the largest investor in the agricultural sector – over 80 per cent of food on a global scale (FAO, 2014). Second, the family farm most fully exhibits peculiarities of the rural economy and the potentials (subject to state support) for the introduction of innovations:

- Agricultural labor features a high degree of individualization, that is not fully attainable in the conditions of hired labor in a large company;
- The majority of rural population treats agricultural production not only as business but also as a certain way of life adopted from one generation to another that forms the peculiar social capital displaying the high level of mutual confidence and trust: “Under these conditions, it is simply beneficial to keep agreements. In such environment, measurable costs incurred in the settlement of deals are very low due to the dense network of social cooperation” (Nort, 1997);
- Resilience of this organization form defined by A.V. Chayanov as “survivability” of peasant farms (Abalkin, 1989). The farmer is predominantly motivated by his family welfare, therefore, under unfavorable conditions he has his own right to decide on intensity and input of his labor, i.e. as A.V. Chayanov puts it figuratively, his self-exploitation;
- Empirical research has shown that in most practices the agricultural output per unit area in the small farms is higher than that in large farms (Eastwood, Lipton & Newell, 2010)/
- Investments are more socially and economically oriented since, as a rule, small farms sell their products to the well-known and highly competitive market (they are intrinsically inclined to innovations so as to reduce costs, improve quality, and change the product range, and flexible in terms of price-cutting – even possibly to go below their costs); they can establish informal relationship with consumers of their products (considering purchasing power of the market, they judge from actual demand for their product, and are willing to reduce the price).

Thus, high capability to adopt changes in the external environment, orientation towards satisfying the dynamic requirements in the local market, and sustainability allow us to regard the small family farm as the basis and determinant for not only innovative but also community-oriented development of the agro-industrial complex, subject to state support.

The mixed nature inherent in the agro-industrial complex predetermines the differences between:

- a) Purposes of its actors, i.e. the family farm primarily seeks to ensure the family well-being and secondarily to raise profit, whereas the transnational corporation is aimed at maximizing its gains;
- b) Standards of behavior, i.e. market institutions come in combination with informal economy institutions of family farms (e.g. network cooperativeness);
- c) Employed technologies. The existing differences, on the one hand, exacerbate risks in the agricultural industry, however, on the other hand, this enables mutual beneficiation of cultures as a condition for innovative development.

Production of food and increase in its cost (agricultural value chains) result in close cooperation of actors involved in the agro-industrial production (farms, cooperatives, etc.) with companies dealing with the second stage of the agro-industrial complex (food processing) and other agro-industrial sectors (retail and wholesale trades, infrastructure branches and services providing process equipment to the agricultural industry). Actualizing their interests, actors of the agribusiness send their push and demand to other sectors of the agro-industrial complex, hence predetermining the innovative way of their development to ensure food reproduction on an enlarged scale. These sectors, including the state, become the key link between farmers and markets, farmers and ultimate consumers, precedent and subsequent operations, and are extremely significant as regards effective communication of market innovative incentives to family farms, hence ensuring food security in the national economy.

The need of the agricultural sector in the implementation of innovations necessitates establishing long-term mutually beneficial relations with the institutions of the scientific educational complex (i.e. universities, scientific research institutes, and social networks providing the platform for informal interaction of researchers from various universities and institutes). The system aimed at generating and distributing knowledge and technologies in the field of the rural economy is indispensably required to ensure the sustainable development of both agriculture and economy as a whole. At the same time, qualitative changes gradually occur in the relationship between scientists, processors, and users of new technologies and knowledge; they coalesce to form new (hybrid) institutions with specific functions (technological clusters, industrial parks, etc.). The said coalition also involves training of personnel (including innovation managers) to organize and administer the agribusiness.

The significant role in the innovative agribusiness model should be assigned to the innovative infrastructure module represented by various intermediaries including nonprofit professional expertise foundations to create the special environment with broad network communications enabling the intercourse of creative concept authors and prospective purchasers.

The specific character of the innovative agribusiness model consists in that the state becomes the key actor of the innovative model establishing the system of “the dos and don’ts” in the economy, coordinating and encouraging innovative processes. This especial innovative role of the state is predicated by the following circumstances: social and strategic importance of food; strong dependence of the agriculture on the natural environment; limited diversification of the agricultural product; high competitiveness in the supply of the agricultural products; low price elasticity of the demand for the agricultural product in combination with high demand elasticity under the conditions of low income; the mediated ultimate consumer feedback (through the food marketing system of oligopolistic

structures); and spatial dispersion and low availability of communications impeding the coordination and monitoring of actions to constrain supply (Vlachvei & Notta, 2015). The state implements social schemes intended to make education, public health services and culture available to the rural population as well as vulnerable population support programs, etc.; it backs up fundamental and applied sciences in the agriculture, and pursues scientific and technical innovation programs.

The Russian Grain Union points out that, to gain competitive edge both internally and externally, it is necessary to reduce costs (throughout the entire chain – from production to marketing), enhance the quality of the agricultural products, and simultaneously sustain the required level of profitability securing investments into the expanded production (Russian Grain Union, 2010). To attain these goals, it is essential to establish long-term relations of participants in the value chain.

The Russian practice demonstrates that large agro-business holdings cover the entire chain of the agricultural product movements from the producer to the consumer. Such chains are managed by agricultural producers, and retail networks. The value creation chains gradually form social responsibility of participants, i.e. it helps to determine the common interest based on individual preferences of participants in the chain, evaluate the place and role of food consumers, develop the code of conduct for producers, trading companies, etc., and entry-withdrawal procedures. The greatest challenge is presented by issues related to improvement in the quality of food products and price evaluation.

Farm enterprises have to operate in more complicated and contradictory environment than large agro-industrial holding companies do. They frequently find themselves alone in the face of banks, processing and trading companies. In this connection, managers of farm enterprises are aware of the need to create value chains based on the vertical or horizontal integration. However, simply being aware of this fact is not enough, it is necessary to raise funds and establish partnership relations. This necessity has to be equally recognized by food processors, transportation companies, and trading networks.

The agricultural producers and ultimate consumers especially concern about changes in retail prices for food products. Prices generally tend to move upward differentially for different food items. Figure 1 shows the retail price structure in the form of a graph constructed based on the data provided by the Federal State Statistic Service (Rosstat).

The retail price structure shows that the production of certain food items, i.e. beef, pork, poultry, bread, milk, and butter, exhibits high production costs alongside with low profit. Nevertheless, the said products constitute the basis of food security assurance. The cost management in value chains proves to be contradictory. Specifically, the Grain Union representatives point to the fact that the existing price disparity between industry and agriculture can find the unprejudiced explanation in external economic reasons, i.e. the consolidation level of enterprises representing different industries, the rate of capital turnover, the duration of production cycle, etc. Consequently, one of the primary state objectives is to mitigate the effect of the said factor. At the same time, many imbalances of economy are preconditioned by state decisions through the system of exemptions to the industries that produce resources for the village (e.g. the gas price for the production of mineral fertilizers, the assignment of

fee category 2 to grains to be transported by rail, etc.) (Russian Grain Union, 2010). The price disparity is noted by all food producers.

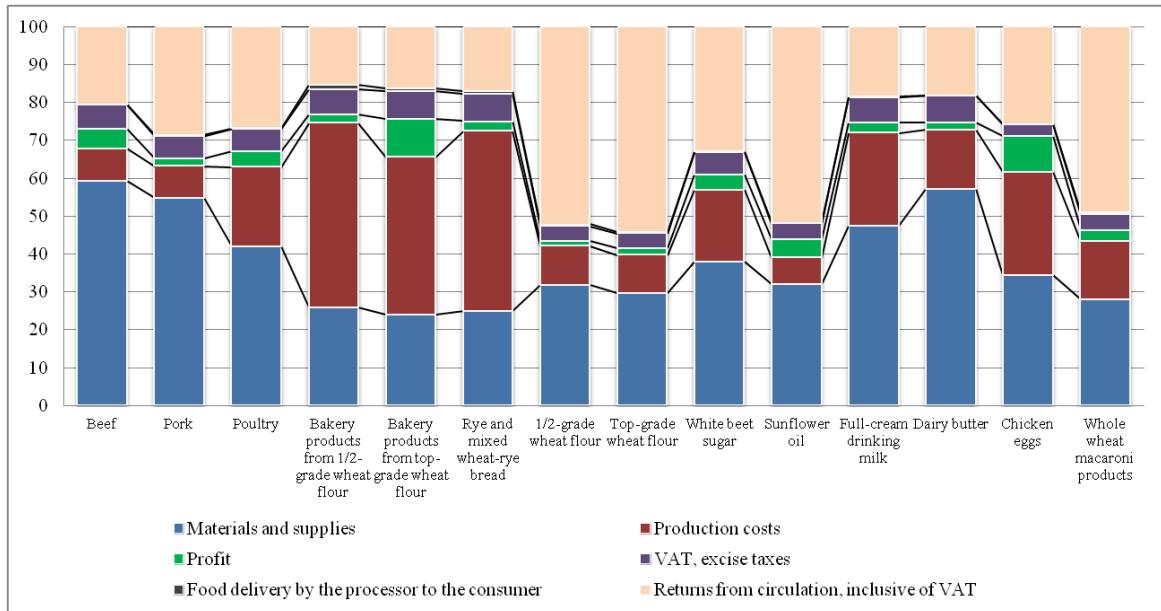


Fig. 1 Structure of Retail Prices for Socially Important Food Products, as of late 2013

The low profitability of production makes it virtually impracticable to assure food security relying on the innovative agribusiness model. The data shown in Table 1 back up our conclusion.

Table 1. Profitability of Agricultural Organizations

Year	Profitability of Agricultural Organizations
2000	2.3
2001	4.4
2002	-4.6
2003	-1.9
2004	5.3
2005	2.1
2006	2.6
2007	7.9
2008	2.2
2009	-3.2
2010	-5.4
2011	-0.4
2012	1.4
2013	-5.2

Compiled by: Epstein (2014)

However, participants in the socially important food value chain have to act under the condition of being regulated by the state. This makes business play in a socially responsible way. Business, by itself, actively creates regulators of its activities through the establishment of business associations.

Food security assurance strongly relies on trade, particularly federal and local trading networks. The development of trading capital in the Russian economy fluctuates depending on economic performance. However, the role and significance of this sector is constantly increasing. Trading networks can redistribute profit within the established value chains to benefit from the situation, decide on the quality and quantity of products supplied by agricultural producers, and restrict supplies of farm products, etc. Figure 1 shows the large share of the distribution chain in the structure of prices for flour, pasta, and sunflower oil. During the period of late 2014 to early 2015, there has been a continuous

increase in prices for socially important products. Inspections made by the Rospotrebnadzor (RF Consumption Supervision Service) revealed the creep in prices. The Russian business in this situation demonstrated a low level of social responsibility whilst expenses for meals constitute a considerable part of household expenditures. Based on the Rosstat data, in 2013 this value ran to 33.2 per cent (Federal State Statistic Service, 2015).

The state supervision and consumer discontent forced the large trade business represented by the Retailing Companies Association (ACORT) to make the decision to freeze prices for socially important food items for a two-month period. This measure is transitional. Henceforth, the state will have to resolve the price increase issue for this group of products. In this context, ethical pricing turns out to be of critical importance.

Thus, food security assurance in Russia involves the implementation of the innovative agribusiness model through value creation chains. The agro-industrial production is intended to satisfy the needs of households, factored in their preferences and income level. In between these actors, there exist other links of the chain that influence the physical, social, and economic availability of the required amount of safe and nutritious food. Large vertically-integrated holding companies which have their own internal value chains and create external chains with partners shall carry out their activities on the basis of social responsibility. Improvement in the effectiveness of these chains will enable the price management with due account for interests of consumers and value chain participants.

Gradually farm households either become involved in the existing value creation chains or establish partnership relations on their own; this makes it possible to secure long-term relations in the agribusiness and thus contribute to innovative activities.

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References

- Mill, J.St. (2007). *Principles of Political Economy with some of their Applications to Social Philosophy*: Translated from the English language. Bibliography referenced by M.I. Tugan-Baranovsky. M.: Eksmo. 1040
- FAO (2014). *Current Condition of Food and Agriculture. Innovations in Family Farms*. Rome. Food and Agriculture Organization of the United Nations. Available at: <http://www.fao.org/publications/sofa/2014/ru> (access date: April 23, 2015).
- FAO (2015). *According to the materials of Food and Agriculture Organization of the United Nations*. Rome. Available at: <http://www.fao.org>. (access date: April 20, 2015).
- Kurbanova, G. (2013). Economist, FAO UN, Regional Office for Europe and Central Asia. Round Table “Development of the Eurasian Integration and Trade so as to Assure Agriculture Sustainability and Food Security”. Moscow. Available at: http://www.eurasiancommission.org/ru/act/prom_i_agroprom/dep_agroprom/SiteAssets/Kurbanova%20Review%20food%20security%20in%20eurasian%20region%20Sep%206.pdf (access date: April 20, 2015).
- Government of Russian Federation (2010). *Russian Federation Sustainable Agriculture and Rural Development Concept for the period through 2020*. Decree of November 30, 2010. No.2136. Available at: <http://www.mcx.ru/documents/document/show/14914.77.htm> (access date: April 23, 2015).
- Barsukova, S.U. (2012). Russian Federation Food Security Doctrine: Expert Evaluation. *TERRA ECONOMICUS*. 10, 4, 37-56
- Food Security in Russia: Monitoring, Trends, and Hazards. (2014). Available at: http://www.ranepa.ru/news/item/download/2148_3457100313aa5f2cf9488b29087e302.html (access date: April 19, 2015).
- Porter, M. (2005). Competitive Edge: Way to Achieve High Efficiency and Keep it Sustainable. Translated from the English. M: Alpina Business Books. 715 p.

- Kaplinsky, R. & Morris M. (2003) *A Handbook for Value Chain Research*. URL: <http://www.srp-guinee.org/download/valuechain-handbook.pdf> (access date: December 07, 2010).
- FAO (2014). *What Do We Really Know about the Number and Distribution of Farms and Family Farms in the World?* Background paper for The State of Food and Agriculture. Rome. Food and Agriculture Organization of the United Nations. URL: <http://www.fao.org/docrep/019/i3729e/i3729e.pdf/> (access date: April 23, 2015).
- Nort, D. (1997). *Institutions, Institutional Changes and Economic Performance*. M.: Economic Book Foundation "Nachala". 180 p.
- Abalkin L.I.(1989). *Peasant Economy: Selectas* / Editorial: L.I. Abalkin (chrm.) [et al.]. M.: Economics.
- Eastwood, R., Lipton, M. & Newell, A. (2010). Farm Size. In P. Pingali and R. Evenson, eds. *Handbook of Agricultural Economics*, Vol. 4, 3323- 3397. Amsterdam, Elsevier.
- Barrett, C.B., Bellemare, M.F. & Hou, J.Y. (2010). *Reconsidering Conventional Explanations of the Inverse Productivity-Size Relationship*. *World Development*. 38(1). 88-97.
- Vlachvei A. & Notta O. (2015). Greek Food Manufacturing Firms' Social Media Efforts: Evidence from Facebook. *International Conference on Strategic Innovative Marketing*, IC-SIM, September 1-4, 2014. Madrid, Spain. Procedia - Social and Behavioral Sciences.175. 308 -313.
- Olson M. (1985). Space, Agriculture and Organization. *American Journal of Agricultural Economics*. 67(5). 928-937.
- Russian Grain Union (2010). *Mid-Term Grain Market Development Concepts in Russia*. URL: <http://grun.ru/work/conception/> (access date: April 24, 2015).
- Epstein D.B. (2014), Two Principal Food Security Hazards. *Nikon Readings*. 19. <http://cyberleninka.ru/article/n/dve-bazovye-ugrozy-prodovolstvennoy-bezopasnosti> (access date: April 26, 2015).
- Federal State Statistic Service (2014). Final Consumption Expenditures of Households of Different Socio-Economic Categories in 2013 (according to the data acquired as the result of the selective household budget survey). *Russian Statistical Annuary*. URL: http://www.gks.ru/bgd/regl/b14_13/IssWWW.exe/Stg/d01/06-34.htm (access date: April 26, 2015).