



Food security against the background of unsustainably developing Russian economy: Price aspect

[Irina Petinenko](#), [Natalia Redchikova](#), [Natalia Veretennikova](#), [Mikhail Chikov](#), and [Pyotr Shchetinin](#)

Citation: [AIP Conference Proceedings](#) **1772**, 050003 (2016); doi: 10.1063/1.4964573

View online: <http://dx.doi.org/10.1063/1.4964573>

View Table of Contents: <http://scitation.aip.org/content/aip/proceeding/aipcp/1772?ver=pdfcov>

Published by the [AIP Publishing](#)

Articles you may be interested in

[Temporal aspects of voicing in Russian and English](#)

J. Acoust. Soc. Am. **119**, 3422 (2006); 10.1121/1.4786849

[What price security?](#)

Phys. Today **36**, 42 (1983); 10.1063/1.2915493

[Securing medical devices against cyberattacks](#)

Phys. Today

[Food price increases drive shift in biofuel sources](#)

Phys. Today

[Food prices driven up by global warming, study shows](#)

Phys. Today

Food Security against the Background of Unsustainably Developing Russian Economy: Price Aspect

Irina Petinenko^a, Natalia Redchikova^b, Natalia Veretennikova^c, Mikhail Chikov^d, Pyotr Shchetinin^e

Tomsk State University, 36 Lenina Avenue, Tomsk 634050, Russian Federation

^a)corresponding author: irina.petinenko@yandex.ru
^b)natako@yandex.ru
^c)nveret@yadex.ru
^d)chikovmv@mail.ru
^e)wosp@yandex.ru

Abstract. The paper considers food security from the perspective of the development of Russia's economy in the form of a mixed economic model. Prices and incomes are an overriding concern in this process. The authors analyze the intricate nature of price in terms of consumer-producer interactions. Consideration is being given to views of reputed economists on price that involve different aspects of its nature. Features peculiar to the generation of the contemporary consumer's aggregate income and purchasing behavior at different periods of time, i.e. from 1991 to 1999 and from 2000 to 2016, are shown. It ought to be noted that efforts towards food security are being made against the background of high inflation, the complicated system of end consumer incomes (e.g. money income, income in kind, and shadow income), and the existing mentality inherent in the nation.

INTRODUCTION

Rapidly developing as it is, the present-day world still faces a set of problems that are in the focus of attention of virtually all the global community. One of them is concerned with ensuring worldwide food security. The XX century made it evident that food security represents a complicated socio-economic phenomenon that keeps evolving, time- and space-wise. When ensuring food security, all actors (state, community membership, business enterprise, and individual) pursue their own interests. At all times, unity and clash of these interests ultimately result in a certain level of economic and physical availability of foodstuffs. Throughout its entire history, the mankind has been seeking to get the sufficient reserve of food. No human being can grow healthy without satisfying their physiological need for food. Up to now, people have though failed to secure the continuous availability of food, e.g. in 2015, the number of the underfed across the globe amounted to 794.6 million people (10.9 per cent of the total world population) [1].

From the analysis of such parameters as coverage, specific interactions of actors, practical measures for implementing the objectives in view, and the results obtained, contemporary researchers treat food security as a multi-level phenomenon. They distinguish between three levels: global, regional, and national. The global level evaluates available stocks and the potential for securing enough food for the world population [2]. The Food and Agriculture Organization (FAO) of the United Nations suggests that food security should be regarded as "a situation characterized by a continuous physical, social and economic access of all people to sufficient, safe and nutritious foodstuffs needed to keep a balanced diet, satisfy dietary habits and lead an active and healthy life" [3].

Nevertheless, each state develops its own food security program. In 2010, Russia adopted the Russian Federation Food Security Doctrine wherein food security reads as "such an economic situation where the Russian Federation is self-sufficient in food, and foodstuffs that conform to the requirements set forth by the relevant RF Technical Regulation legislation in force, in amounts consistent with the established sound standards of food consumption needed to live an active and healthy life, are made available for any citizen" [4].

Food security includes the following four components:

- self-sufficiency in food;
- physical availability of food for the population of the country;
- economic availability of food for the population of the country in amounts that fall within the established reasonable standards of consumption; and
- safety of food consumption.

The above list demonstrates that the food security policy adopted in the RF differs from the approach taken by FAO mainly in the fact that it declares self-sufficiency or, put it differently, independence in food as a keystone of the national system.

The Doctrine [4] gives a definition to all the components it is made up of. Self-sufficiency in food shall be understood as the sustainable domestic production of essential foods in quantities not going below the established threshold values. The physical availability of food implies such a development level of the distribution infrastructure that makes it possible for the population of each and every settlement within the country to keep a healthy diet and buy enough foodstuffs, the quantity and choice of which meet the established reasonable standards of food consumption. The economic availability of food refers to the possibility of procuring foodstuffs at effective prices in quantities and assortment consistent with the established reasonable standards of consumption that is enabled by the appropriate level of household income. The safety of food for life and health of consumers means that it complies with the requirements of the applicable Technical Regulations.

It should be noted that, in the process of the mixed economy formation, roles of economic actors in the assurance of food security change drastically with time. For example, until 1992, the Russian economy was characterized by the leading and, in a sense, exclusive role of the state governing every aspect of activities by enterprises, communities, population all of which were expected to execute the state's will. Limited international links necessitated self-sufficiency at a level of the national economy's capabilities. In many ways, these capabilities were dependent not merely upon the commodity-money relations but also upon the development of the subsistence economy where enterprises and households have their own food production farms, and, this being the case, self-production and consumption of food products were influenced by the state.

As a consequence of the reforms that took place in 1990s, an individual, his household, his business started to actually participate in ensuring food security. The development of the food market gave rise to monetary relations where individual households took part in the production of food as commodity. Such parameters as costs, price, quality, quantity started to be criteria for evaluating the assurance of secure food supply.

Thus, the functions of the Russian economy actors underwent drastic changes that can be outlined as follows:

- the state starts to take account of global food security problems, it participates in the provision of food security on a regional level (e.g. the Customs Union, the Eurasian Economic Union, BRICS countries), it formally establishes the food security practices within the Russian Federation;
- there occurs a wide variety of enterprises directly participating in the production and marketing of food, e.g. large agricultural holdings, cooperative societies, farming households, food industry enterprises, outlets, retail networks, etc.;
- the individual and his family gradually gain a key role in ensuring food security, from the viewpoint of demand for food and supply of food (i.e. the development of small businesses in the country and in town).
- specifically, the above changes are predicated upon such variables as consumer income and preferences, resource potential of producers, quantity and quality of food products, and price patterns in the food market at all its levels (international, national, and local).

The aforesaid predetermines the objective of the present research that investigate the place and role of prices in the food securing process in Russia that runs concurrently with the formation and development of mixed economy at the turn of the century.

METHODS AND MATERIALS

The general methodological tools employed in the study of monetary relations rest upon classical works by Aristotle, W. Petty, A. Smith, D. Ricardo, M. Weber, J. Mill, A. Marshall, C. Menger, E. Böhm-Bawerk, K. Marx, et al. Classical authors of economic thought formulated the basics of price and pricing theory.

Present-day research approaches to the social and economic processes take up and elaborate upon fundamental concepts offered by the classics and hence come as their logical extension. A number of researchers representing the institutional approach in the XX–XXI centuries, namely J. Buchanan, J. Galbraith, R. Coase, F. Knight, R. Nelson, D. North, M. Olson, K. Polanyi, S. Winter, B. Ohlin, O. Williamson, J. Hodgson, and T. Eggertsson, tackled the pricing issues from various perspectives, particularly by way of

developing the theory of firm, transactions costs, contracts, and profit. As part of their research work, they analyzed the role of the state, the family, and large companies in the uncertain conditions of market transactions and economic environment.

Among the Russian scientists most strongly relying on the neo-institutional theory in their analysis of contemporary Russian economy are S.B. Avdasheva, V.S. Avtonomov, A.A. Ausan, R.I. Kapelyushnikov, Ya.I. Kuzminov, V.I. Maevsky, V.A. Mau, R.M. Nureev, A.N. Oleynik, V.M. Polterovich, V.V. Radaev, V.L. Tambovtsev, A.E. Shastitko, et al.

The aspect of price remains at the forefront of research efforts by the western economists since it is of much relevance to enhancing the well-being of the individual, the firm, and the nation. A special emphasis is presently being put on the interrelated problems of consumer behavior, price-quality relationship, savings on costs and the like which have emerged full-blown recently. The related research papers are authored by Th. Nagle, D. Daly, K. Zawada, T. Cram, M. Marn, E. Roegner, F. Hayek, R. Holden, et al. The problem of costs forming the basis of price and their changing under the conditions of uncertainty was researched by A. Wileman, J. Shim, J. Siegel, D. Doyle, R. Dolan, H. Simon, et al.

The Russian scientific workers keep contributing to the study of price-related issues as is evident from serious papers authored by V.V. Gerasimenko, I.V. Gladkikh, M. Yu. Lev, I.V. Lipsits, A.N. Lorin, S.M. Nikitin, V.M. Tarasevich, A.N. Tsatsulin, et al.

The related scientific literature does not offer a clear and unambiguous definition of price. Price represents an old, even to say, ancient institution. It dates so far back that nowadays it is practically impossible to exactly determine when and how price came into being. Researchers only make some notes tracing it back to the emergence of natural economy in the development of the primitive society. The mankind always took much interest in studying this phenomenon since human life depends heavily on the level and dynamics of prices.

To depend upon the research objectives, actual practice and application, price was defined differently. Outermost definitions treat price as a simple or complicated phenomenon. In fact, since the behavior of exchange participants in the market is under the strong and expeditious influence of price, this leaves no room for the long and profound discussion of what composes the price. The mankind always had some idea of constituents determining the price and those elements that make up the price structure. This apparent effect of price on every party thus gives place to the opinion that price is clear and fairly plain by nature.

However, a thorough insight into the socio-economic system overturns the above-stated opinion. The apparent simplicity is deceptive; in actual fact, it conceals a multi-aspect and controversial phenomenon. What is price? What is it made up of? These questions have occupied acquisitive minds for many centuries. The most distinguished scholars have unceasingly searched after answers. Grasping the very essence of price turned out to be anything but simple. Social economic sciences have failed to arrive at agreement of opinion on the subject matter of price as yet. Discussions are still underway, and they tend to heat up when the world economy has tough times as exemplified by today's situation of the global financial crisis. To this end, it is expedient to cite what Yu. M. Osipov says in regard to the price as we fully share his statement: "It is impossible to think of anything more ordinary and though amazing and "sophisticated" than the price and the pricing mechanism. Never and nowhere anyone will be able to explain why this or that open price comes to be of this particular value and not of any different one, notwithstanding the phenomenon of price in itself is strikingly simple. One can outline the circumstances that condition and influence the price, describe, although at a mere approximation, limits of the price dynamics (i.e. its implicit spread), take a try to foresee probable changes in price, even make the right guess at price movements, but one definitely cannot tell exactly aright why the price has come to be as it is and not a different one. Attempts to tie the price to some shaping factor... did not and could not provide a satisfactory answer to the question of prerequisites for the formation and value of price. Price represents a phenomenon that is not only multi-factor in origin; it is a kind of self-originating, and this cannot be described other than mysterious. In a sense, price seems to be formed self-dependently, on the back of its own "reckoning". The truly amazing external simplicity that is on the face of it hides even more amazing internal complexity, and this complexity nothing else but escapes a curious analyst but does not escape and, in a way, comes as a gift to an economic actor. Price is really and truly a phenomenal phenomenon of economic life" [5].

Theoreticians and practitioners in the economic science analyzed prices from various perspectives and came up with different definitions of price which are used by the present-day researchers. The bare listing of definitions given to price demonstrates the complexity of this phenomenon and confirms the necessity for its further study engaging a whole system of social and economic sciences. Price received definitions gradually, subject to the development of the economic theory and practice. Specifically, Aristotle treated price as the relationship of producer and consumer, and he also defined price in terms of coins [6]. Such classics as A. Smith and D. Ricardo when studying the content of price made special reference to production costs; as they noted, the price of goods is dependent on labor input needed to produce the goods. Price functions in the market as a relation between seller and buyer [7, 8]. K. Marx took up the study initiated by classics, he defined price as the money name of labor embodied in commodity, as socially necessary costs of goods manufactured and sold in

money terms [9]. Marginalists put emphasis on defining price as the monetary-expressed value of sales unit expressed in monetary terms. A. Marshall, in his turn, regards the market price as a result of the crossing of demand price governed by marginal utility and supply price governed by marginal costs. This approach gained a decisive role both for the Cambridge School he founded and for a great many of neo-classics of the late XIX and early XX centuries [10].

Institutionalists have made much headway in giving a definition of price. In the opinion of the authors representing this school, economy goes beyond the market solely; the existing mechanism of resource allocation involves institutions which build the market and function through the market. This leads to a broader understanding of price which is thought of as:

- a form of agreement between consumer and producer;
- a form of implementing the partnership and contractual relations between consumer and producer;
- a form of exercising rights to own resources and incomes;
- a form for actualizing the power of an individual (business entity, industry, state) in the socio-economic system;
- an information push for actors of the socio-economic system;
- a tool for economic forecasting and planning of the social and economic behavior of transactors;
- a standard resulting from the conscious and rational choice made by consumers and producers, and a regulator of their interaction [11–16].

In the inquiry into the essence of price, it is necessary to determine the place and role of the individual in the system of monetary relations. In fact, he can act in two ways, i.e. as a consumer and as a producer. From the very first day of his existence, the individual has been serving these functions under circumstances of the uncertain environment that is continuously developing. In the period of early XX to late XXI, researchers turned close attention to changes in the involvement of the individual into the production process, quality of consumption, realization of tangible products, and use of leisure time.

As a consumer the individual is keen to most fully satisfy his needs through participating in the social division of labor. As for the production process itself, he takes interest in labor quantity, quality, and the result. Needless to say, this definition is rather conditional.

In theory and practice, many researchers regard price as the relationship between buyer and seller. The seller therewith can be represented by producers and intermediaries. The buyer function is served by firms, both intermediate consumers and ultimate consumers. We can see that price represents a complicated phenomenon that involves a whole system of interrelations. However, from our viewpoint, such understanding constrains the definition of price when it is analyzed in the purchase and sale system, i.e. directly in the market where the buyer and the seller meet to bring forth demand and supply and their equilibrium when it comes to the evaluation of product quality and price. Of course, no conclusion about the content of price can be drawn without conducting this research. L. Teveno says that “exchange participants are conventionally thought to include only buyers and sellers whereas the role of producers and consumers seems to be of the same, if not of greater, significance. Balancing consumer and producer expectations in regard of the goods and services being exchanged proves to be by far more difficult than mechanically correlating supply and demand. With that, each party has its prerogative rights. Consumers give the final verdict on the quality of goods, whether they are worthy of purchase or not. Producers have the right to determine parameters for providing goods and services. These two prerogatives are fundamental for reaching agreement on the quality of goods in the market” [17].

The production process determines quality, quantity and price of the product, and its subsequent distribution to consumers is governed by these parameters. The market can alter the product’s parameters, but it cannot create them. Accordingly, price needs to be defined as the relationship between consumer and producer, and all other relationships (e.g. “consumer-intermediary”, “producer-intermediary”, “intermediary-intermediary”) come as secondary and dependent. The chain of relationships can differ in complexity, to depend upon the type of commodity.

Both consumer and producer have interests of their own, and they seek to actualize these interests in their activities. In the definition of the interests, one can see the common and the different. The common refers to securing the vital activity of both producer and consumer which is exercised through meeting the existing requirements using a certain total of resources. This comes in common in regard of price as well. The process rests on the need that has to be met. Already in remote antiquity Aristotle said that “everything should be measured by one thing. In very truth, such a measure is the need which binds everything together as, should people have no needs or should their needs differ, there will be either no or another exchange...” [6].

The discrepancy observed in theoretical approaches to defining the price and evaluating its place in the socio-economic system of Russia nightlights the necessity of its analysis. For purposes of our study, price is considered as a complex phenomenon which is essentially based on the relationship between consumer and producer. The consumer and intermediary, producer and intermediary, and intermediary and intermediary relationships are held as secondary. In our reckoning, the aforesaid definition allows for a new fashion of

analyzing the place and role of prices in the food securing process using a variety of methods to include the dialectical, historical, analysis and synthesis, comparison, statistical, source information analysis and factorial analysis methods. Methodological tools employed in the research rest upon analyzing and synthesizing theories of firm, price, pricing, and the evolution of the role of the individual and the family in society.

RESULTS AND DISCUSSION

In their research works, the FAO experts determine the place and role of prices in ensuring food security. The continuous monitoring of prices for primary food products, to include meat, dairy and grain products, vegetable oil, and sugar, allows for determining the influence that prices exert on the production and consumption of food. Developing countries, with their economy in transition, show the inflation spiral of food prices, and this trend is of particular concern for the world community. Based on price rises observed in 2008 as a consequence of global financial crisis, the FAO experts submitted their analysis of how high prices for food affect food security. It should be noted that the analysis considers the said relationship from the position of both consumer (demand and its behavior) and producer (supply and its behavior). The principal actors respond to any upward or downward movement of the price and, as this takes place, the relation of the actors brings food prices to a new level. The state plays a special role in this process. The FAO experts note that “the implementation of appropriate measures for eliminating the impact of skyrocketing food prices on community and economy, where it be political measures, investment decisions, or force-majeure interventions, requires the thorough understanding of driving forces that have brought about price rises. Those driving forces are numerous, complicated, and internally connected with both demand and supply factors” [18]. Demand-wise, the named factors specifically include the pattern of consumption and demand for biological fuel; supply-wise, emphasis is put on the stock level and market volatility that implies, in particular, oil price changes and downturn in production. High food prices are said to stem from the fragile equilibrium of food supply and demand.

These two facts demonstrate that taking a dual approach to ensuring food security is a key to not only eliminating the threat of food underconsumption caused by the increased food prices but actualizing the offered opportunities as well. Rising prices for food have the effect of reducing real returns and extending the spread of food insecurity and malnutrition among the poor in consequence of a decrease in quantity and quality of food consumed. This being said, increased prices for food open a certain scope of opportunities as well. In the long term, high food prices can prove beneficial for the agriculture (including small farmers), but only provided that the vital public goods are secured. Advantages offered to small farmers hence have the potential of giving a boost to both economic and rural development. A good few of farm households could obtain quick and notable gains whereas other could get their benefits in the longer view, on condition that high prices allow for an increase in production and employment.

In the FAO’s opinion, the state, communities of interest, firms, and the population ought to pool efforts, as part of the aforesaid dual approach, to eliminate the downward effect of high food prices on the food security level. Accordingly, such an approach should involve: 1) taking measures enabling the rural sector, particularly small farmers, to respond to high prices, and 2) creating thoroughly thought-out systems of safety and social protection for those groups of population which are most likely to suffer from economic insecurity and vulnerability [18].

For the past twenty-five years, Russia’s economy has been developing against the background of high inflation. The information of the Federal State Statistics Service (Rosstat) shows the following (Table 1) [19]:

- in 1990s, prices were rising extremely rapidly, especially at the beginning of the period (by 26-26.20 % in 1992);
- in 2000s, the inflation pressure went down considerably, though it demonstrated a tendency towards fluctuating, especially in the years 2000 to 2004, 2007, 2008, 2010, 2014, and 2015, when the rate of inflation was measured in double figures.

TABLE 1. Consumer Prices Indices for Food Products in Russia (December to December of previous year; percent)

Year	Indices	Year	Indices
1991	236,10	2004	112,29
1992	2626,20	2005	109,57
1993	904,90	2006	108,67
1994	314,13	2007	115,56
1995	223,36	2008	116,45
1996	117,72	2009	106,08
1997	109,10	2010	112,89
1998	196,00	2011	103,87
1999	135,88	2012	107,48
2000	117,89	2013	107,32
2001	117,14	2014	115,43
2002	110,99	2015	114,00
2003	110,18	2016	102,72*

*April, 2016 to December, 2015

The price influence on food security is evaluated differently for every time period, as they each were under the action of both common and specific factors. Among other things, common factors include: transition to a new model of economy; increased openness of the Russian economy; changes in the nation's mentality and preferences; occurrence of agricultural holdings, farming enterprises, and clusters; growing interaction of domestic and foreign businesses in Russia; and a gradual increase in the quantity, diversification and quality of food products.

The pricing reform having been carried out in Russia since January 02, 1999 brought forth the system of prices that incorporates both state regulated prices and market prices. The food production was evaluated in terms of market prices which serve two inherent functions, i.e. they regulated supply and demand by way of equilibrium prices in the food market and they governed the resource and income allocation among the Russian economic actors through establishing a new model of their differentiation.

In 1990s, equilibrium prices were formed under conditions of the considerable food shortage. Transition to market prices outwardly demonstrated the endangered state of food security. In this connection, deflation and provision of food for the country's population heavily depended upon imports. As stated by the FAO experts, in response to high prices, national business ramped up the production of foodstuffs. There emerged small and medium firms; alongside with that, a number of the former Soviet Union enterprises were keeping on their operations. This period is marked by foreign business entering Russia's economy, bringing its civilized and standardized pricing rules.

Having been initially shocked by the introduced market prices, both consumers and producers gradually start behaving as rational economic actors, and there are two reasons behind this process: 1) the population always realized their activities under certain constraints in regard of income and quality and diversity of available food products; 2) during the entire history of Russia's economy, provision of food was based on the developed system of self-production, gathering, and self-consumption incidental to the Russian family households (peasant and summer farms). This allowed the family to live through the toughest times in the history of the Russian state. As regards food supply, the nation always showed independence, self-sufficiency, patience, restrained demand, etc.

2000's gave evidence that, even under conditions of the 2008-2009 global financial crisis and the 2014-2015 crisis, Russians still use these two characteristics of their activity. In the period of 2014 to 2015, events proved the make-up of the family budget to undergo certain changes that found expression in increased savings, reduced purchase of durable goods, along with increased food spending, rising self-production and gathering. The individual and the family made their contribution to the assurance of food security and control of inflation through their rational economic behavior.

In 2014, there occurred a special factor affecting food security, i.e. sanctions imposed against Russia by developed states. In return, The Russian state introduced response sanctions for a whole series of agricultural products, assuming that banned import food products would be provided by the Russian business as part of the import replacement program. It proved to be the case for some types of products. By way of example [20], the total output of fresh, chilled and frozen pork was 1,438 ths tons in 2014 and 1,624 ths tons in 2015; the production of poultry meat and by-products ran to 3,979 ths tons in 2014 and 4,320 ths tons in 2015; the cheese manufacture was on the order of 499 ths tons in 2014 and 581 ths tons in 2015.

In addition to prices, the activity of producer and, as a consequence, consumer is dependent upon incomes, i.e. their types, level, dynamics, and differentiation. In developed countries, the economic system reposes on money economy; therefore, incomes are predominantly expressed in monetary terms. The system of incomes is diverse that allows the individual and the family to make their aggregate income based on selected income types.

The theory and practice of today's economy gives consideration to:

1. Monetary incomes that include salary, entrepreneur's profit, social payments, etc. In rapidly developing countries tends to diversify their system of incomes. Russia has been implementing this process for the last thirty years, starting from 1986.
2. Nonmonetary, or natural, incomes that have been existing for a long, multi-century history of the mankind, though with a varying role in the aggregate income. In transitional economies and in developing countries, the share of natural income is relatively large, as against developed countries, and it is significantly dictated by the country's environmental (i.e. nature and climate) conditions, geographical position, history, and culture.

At present, the dedicated research is underway to determine the place and role of natural income in the Russian income system, and to characterize its types that include:

- agricultural income, i.e. income from in-kind production in crop growing and cattle breeding);
- handicraft income, e.g. construction and repair work, tailoring, etc.; and
- catching income, i.e. gathering, hunting, and fishing.

M.I. Tugan-Baranovsky, a reputed historian and economist, wrote that, for the time being, the connection between earnings and "bonds of land" is of economic necessity, that's why it is so persistent. As long as the salary of our factory worker is so tiny that it impossible for him to keep the family at the factory, his relationship with the village will nothing but go on. On the other hand, it cannot be doubted that this relationship, in its turn, is one of the reasons for the low level of salary paid to our worker; in the West, the fabricant pays the maintenance of the worker's family, whereas in our country, because of the relationship of the worker with the village, the fabricant compensates only a part of costs incurred in keeping the worker's family, the balance of costs being covered by the family farm work [21].

Speaking generally, the far sight shown by this remarkable researcher of the Russian factory and economy cannot but amaze, if you take a reflective look at his statement: "Apparently, there occurs the following closed circle: to increase a salary, it is necessary to get rid of "bonds of land", whereas terminating "bonds of land" necessitates an increase in salary. This contradiction though is not irresolvable. Like a great many of other contradictions intrinsic in the Russian life, it can and will be resolved in the course of further development of Russia's economy" [21]. The contradiction mentioned by M.I. Tugan-Baranovsky has not been resolved in Russia as yet, and the outlook for resolving it is very ambiguous. Thus, natural income remains one of significant types of income, especially in rural areas. The state intervention in the natural income process (e.g. the introduction of fees for fishing and use of woodland) draws the indignation of the population.

Thus, the Russian system of incomes exhibits peculiar features. First, mass consumer has a low monetary income in the way of labor remuneration; this has the potential for provoking producers to make products of poor quality and offer low prices. Second, the considerable differentiation of monetary income of consumers hampers the mass production of average-quality products and thus destabilizes the social relations in community. Third, as of now, the Russian economy still lacks the diversity of monetary incomes that gives no way for consumer to gain earnings in addition to his salary. Fourth, there remains the high level of natural and shadow incomes. The system of incomes, all in all, is far from being transparent that does not allow for evaluating the real wealth of the nation. In this context, experience and intuition of company managers and marketing specialists remain to be of high significance [22].

SUMMARY

Theoretical research into the food security problem as well as the practical solution to it calls for the due account of interests pursued by two principal actors, i.e. the producer and the ultimate consumer.

Both consumer and producer have interests of their own, and they seek to actualize these interests in their activities. At defining the said interests, one can see the common and the different. The common lies in securing the vital activity of both producer and consumer which is exercised through meeting the existing requirements using a certain total of resources. This comes in common in regard of price as well. The process reposes on the need that has to be met, in the instant case, physiological and growth needs that depend upon food consumption.

Surviving as an actor of the socio-economic system requires the continuous consumption of food which entails money relations. Having a certain set of resources, an individual decides upon the way to enter into the said relations; and this being the case, the individual always has a wide choice of roads to go down, subject to specific objectives and available resources, the latter being primarily represented by his income.

Nevertheless, consumer and producer are placed differently in the community, and this results in the individualization of interests. An end consumer seeks to support his life and the life of his family. With this very end in view, he sets his system of needs and decides upon specific ways of satisfying them.

When analyzing food security and price, it is essential to evaluate the behavior of producer straining after the acquisition of optimal returns so as to secure further functioning. The production of value involves a certain input of resources that have to be paid back.

Practically, when ensuring food security in the environment of high prices, the state has to develop the system of appropriate measures to regulate both consumer behavior through demand and producer behavior through supply. Price and income play a crucial role in this regulation as they represent those very factors that influence demand and supply. In this connection, one should keep in mind that the said influence may come as contradictory. Pay rise increases demand, though it can bring about an increase in prices for firms' products as well. Inflation-induced changes in prices may entail alterations in the structure of consumption and production. For instance, falling oil prices correlate with food prices in the world economy. However, in Russia we can observe reverse trends: low oil prices, on the one hand, and rising food prices, on the other. This invites a conclusion that prices here are additionally influenced by other factors, e.g. national currency rate, speculative interest of producers, especially natural monopolists, etc.

Establishing the effective mechanism for securing enough food principally relies on indispensable institutional transformations in the system of consumer-producer relations as well as in the second-level relations, e.g. "buyer-seller", "producer-seller", "seller-seller", based on the reciprocal cognizance of interests of each economic actor.

We believe the principle steps towards food security to be as follows: a) establishing an effective mechanism for defending rights of any entity; b) ensuring the conformity of legislative regulations with the content of price as a complex phenomenon, not only money-related; c) altering the institutional paradigm of the Russian Federation agricultural policy to provide for the innovative development of the rural sector; d) creating and developing agro-industrial clusters to function as the institutional structure enabling the efficient management of costs and prices in agribusiness.

REFERENCES

1. FAO, IFAD and WFP. 2015. The State of Food Insecurity in the World 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress. Rome, FAO, available at <http://www.fao.org/3/a4ef2d16-70a7-460a-a9ac-2a65a533269a/i4646e.pdf>.
2. L. Revenko, Parameters and Risks of Food Security: Facts and Theory, *International Processes*, **13**, 2 (2015), available at <http://intertrends.foreignpolicy.ru/issues/revenko>.
3. FAO, IFAD and WFP. 2013. The State of Food Insecurity in the World 2013. The multiple dimensions of food security. Rome, FAO, available at <http://www.fao.org/docrep/018/i3434e/i3434e.pdf>.
4. Food Security Doctrine of the Russian Federation. Presidential Decree of January 30, 2010, No. 120, available at <http://base.garant.ru/12172719/#ixzz49agGOi39>.
5. Yu. M. Osipov, *Foundations of the Economic Mechanism Theory* (MSU Press, Moscow, 1994), p. 101.
6. Aristotle, *Ethics* (AST Press, Moscow, 2002), 492 p.
7. A. Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations (separate chapters), The Anthology of Economy Classics, collected works in two volumes, vol. 1* (MP "EKONOV", Moscow 1991), pp. 79–396.
8. D. Ricardo, "On External" *Trade Principles of Political Economy and Taxation* (2009), available at http://gallery.economicus.ru/cgi-bin/frame_rightn_newlife.pl?type=in&links=/in/ricardo/works/ricardo_w1_7.txt&img=works.jpg&name=ricardo&list_file= (accessed June 08, 2013).
9. K. Marx, "The Process of Production of Capital" *Capital: A Critique of Political Economy* (Politizdat, Moscow, 1973), 907 p.
10. A. Marshall, *Principles of Economics, three volumes, vol. 2* (Progress, Moscow, 1983), 310 p.
11. R. I. Kapelyushnikov, *Economic Theory of Proprietary Rights (methodology, basic concepts, focus of issues)* (Moscow, 1990), available at http://libertarium.ru/l_lib_propkapel.
12. R. H. Coase, *The Nature of the Firm* (Delo, Moscow, 2001), pp. 33–52.
13. F. H. Knight, *Risk, Uncertainty, and Profit* (Delo, Moscow, 2003), 360 p.
14. D. North, *Understanding of the Process of Economic Change* (State University – Higher School of Economics, Moscow, 2010), 256 p.
15. A. N. Oleynik, *Institutional Economics* (INFRA-M, Moscow, 2000), 416 p.
16. O. E. Williamson, *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting* (Lenizdat, Saint Petersburg, 1996), 702 p.

17. L. Teveno, *Values, Coordination and Rationality: Economy of Agreements or the Age of Contingence of Economic, Social and Political Sciences, Institutional Economics* (INFRA-M, Moscow, 2005), pp.76–112.
18. FAO. 2008. The State of Food Insecurity in the World 2008. High food prices and food security – threats and opportunities. Rome, FAO, available at <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf>.
19. Federal State Statistic Service (2016). Consumer Prices Index for Products and Services, available at: http://www.gks.ru/free_doc/new_site/prices/potr/tab-potr1.htm.
20. Federal State Statistic Service (2016). The Production of Basic Import-Replacing Products in the Russian Federation, available at: http://www.gks.ru/free_doc/new_site/prices/potr/tab-potr1.htm.
21. M.I. Tugan-Baranovsky, *Selected Works, Russian Factory in the Past and Present: The Historical Development of the Russian Factory in the XIX Century* (Nauka, Moscow, 1997), pp. 434–435.
22. I. A. Petinenko, Economic Readings, proceedings of the regional scientific and technical conference dedicated to the 40th anniversary of the Faculty of Economics (Tomsk State University, Tomsk, 2004), VI, pp. 651–654.