Improving the Innovative Strategy of Interaction of Large Industrial Enterprises and Small Entrepreneurship in the Agro-industrial Sector

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This article aims to reveal main theoretical and methodological issues related to the specificity of the strategic innovation-oriented interaction of large and small business structures of the agrarian sector. As part of the presentation of this paper, the authors have obtained the following main conclusions: Secure and sustainable development of national economies and the international community as a whole is not possible without a constant evolution of the agro-industrial sector, which plays a key role in the formation of an adequate level of food security; effectiveness of development of the agrarian sector can be enhanced through the use of innovative solutions, both in terms of agricultural production, and in terms of interaction of large industrial enterprises and small entrepreneurship with each other; interaction of large industrial enterprises and small entrepreneurship of the agrarian sector is strategically-oriented solutions, aimed at meeting the interests and needs of the cooperating subjects, as well as maximizing economic and other benefits in proportion to a contribution of each partner; improving the innovative strategy of interaction of large industrial enterprises and small entrepreneurship in the agrarian sphere should include two directions: ongoing collaboration (meeting functioning needs) and strategic partnerships (meeting development needs).

Key words: Cooperation, teamwork, strategy, small entrepreneurship, large industrial enterprises, agrarian sphere.

In modern conditions the following two key trends manifest as never before (Zuev, 2012):

1) Desire of countries and states to raise the level of national security, including food security at the macroeconomic and global level.
2) Intensification of cooperation of all the institutional business segments (small, middle, large enterprises) in order to maximize economic and other benefits at the microeconomic level.

The desire of countries and states to raise the level of national security is very relevant in the light of an increasing number of terrorist threats,
more and more complicated access to natural resources, the need to continuously improve the quality of life of the population. And in terms of improving the level and quality of life in world regions food safety and food security plays a key role (Dudin, et al., 2014). The importance of the agro-industrial sector for secure sustainable development is undeniable. But at the same time it should be borne in mind that over the past decade strategic transformations have been observed in the field of food security and agro-industrial sector (Mathe, 2013):

a) The structure of supply and demand has changed amid growing demands for quality, food safety and compliance with the concept of “healthy lifestyle”,

b) The specificity of interaction of economic entities in the agro-industrial sector has changed from the utmost unfair co-competition to strategic partnership,

c) Requirements to environmental safety of growing, processing of agricultural raw materials and food production have increased,

d) Influence of the knowledge-intensive approach and scientific and technical optimization factors of economic entities activity in the agro-industrial sector intensified and complicated.

Thus, on the one hand, we can trace erasing of interaction barriers between institutional segments of the agro-industrial market, but on the other hand, aspects of the interaction of economic entities in the agro-industrial markets are not always characterized by efficiency, intensity and maximization of economic benefits (Sekhampu, 2013). There are several objective reasons for that (Balabanovand Borisenko, 2002):

a) First of all, the agro-industrial sector is characterized by high capital intensity, low cost effectiveness, insufficient investment attractiveness for strategic and institutional investors,

b) Second, attractiveness of the agro-industrial sector in terms of demand at the labour market is low, which reduces the intellectual and strategic potential of economic entities development in the area,

c) Third, the scientific basis for the development of agro-industrial sector for a long time was focused on creating significant amounts of food of insufficient quantity, or food that can potentially harm human health,

d) Fourth, in many regions of the world economic entities in the agrarian sector were not focused on the transition from extensive type of development to intensive development.

The above reasons incorporate a list of key issues in the activities of economic entities in the agro-industrial sector, the problem is especially acute for the small business segment, which is the most susceptible to threats of external environment and is not characterized by sufficiently sustainable development especially in countries with transitive economies (e.g. Russia, China, India, Brazil). Improvement of strategic innovative interaction with large industrial and manufacturing enterprises in this sphere and related fields can be regarded as one of the main directions of activity optimization of small enterprises in the agro-industrial sector. Modern small and large enterprises of the agro-industrial sector develop in accordance with three major trends: customer focus, specialization on core competencies, growing penetration of information technology into business (Semenov, 2011).

It is the “collaborate to compete” (Ackoff, 1999) principle, which is fundamental for successful business in today’s dynamic markets. It determines significant changes in approaches to organize and manage a business. These changes are primarily related to the emergence of new forms of competition based on strategic collaboration of any economic entities (Kanter, 1994), including those operating in the agro-industrial sector. This thesis allows us to say that small enterprises and large industrial enterprises should cooperate more intensively in order to maximize economic benefits, improve competitiveness, produce benefits synergy.

**Methodology**

In the methodical plan this article aggregates main provisions of strategic management, traditional and modern concepts of inter-firm interaction, the specificity of managing small, medium and large economic entities. The use of previously developed directions in the field of strategic interaction of small entrepreneurial firms and large industrial enterprises allowed the
authors to propose schematization of innovative interaction strategies of these subjects taking into account the specificity of evolution of the agrarian sector. Methodological solutions, proposed in this article, take into account the peculiarities of functioning and development of economic entities of the agrarian industry and agriculture, but at the same time they are universal because they can be adapted to other areas and industries of the real sector of economy at the global and national levels.

RESULTS

From the practical point of view, interaction of small business with other economic entities may be performed in several main ways. In particular, leading European and American industrial enterprises actively cooperate with others, including small firms in the following key areas (see Figure 1 below).

Traditionally, economic entities cooperate most actively in marketing and sales (sales organization of finished products). In addition, large industrial enterprises prefer to fulfill such areas of cooperation as “research and development”, as well as manufacturing business processes, independently. As a rule, production issues, as well as conducting research and development is a significant problem for small business and require the use of any form of interaction and cooperation.

It is also worth noting that over the past two decades, the specificity of interaction between different economic entities, including those carrying out its activities in the agro-industrial sector has somewhat evolved. In particular, prior to 2000s interaction of economic entities was aimed at ensuring ongoing functioning (Figure 2).

Within the framework of interaction of economic entities, including industrial enterprises, and small agro-industrial firms, aimed at meeting current needs of functioning, cooperation of interests is carried out in terms of sales activities of supply, advisory services, product promotion. In this case, this entails inter-firm operating cooperation (Ansoff, 1999), i.e. cooperation, carried out on the basis of market-hierarchical mechanisms, such as contracting, supply and marketing cooperation, vertical and horizontal integration according to a type of holding relations (Cafaggi, 2011). In the framework of cooperation aimed at ensuring long-term development of industrial enterprises, interacting with small firms as well, cooperation of interests is carried out by means adaptive and multivariate mechanisms. Such mechanisms of interaction between two or more economic entities include networking (Katkalo, 2004), strategic alliances, long-term contraction.

Market-hierarchical forms of interaction between large enterprises and other economic entities, including small firms, operating in the agro-industrial sector, are characterized by a combination of centralization and decentralization (with dominance of the first), presence of certain manifestations of inequality of interacting entities (subordination), as well as any too high or too weak dependence of interacting entities. In the forms of interaction between large enterprises and

Fig. 1. Areas of cooperation of large industrial enterprises of Europe and the United States with other economic entities (Trendsetter Barometer’12)
other economic entities of small entrepreneurship segment, which are based on the predominance of hierarchy in relationships, adaptability of interacting economic entities to a change of the market macro- or global environment is low (Robbins and Coulter, 2013). Relations in the market-hierarchical forms of interaction of large industrial enterprises and small entrepreneurship are built primarily on short-term contracts, which can also mean higher risks of not executing contractual obligations. At the same time it is quite difficult to obtain redress in the form of lost profits due to limited legal nature of a contract for services. Interaction of large industrial enterprises and small entrepreneurship firms, which is built on the use of vertical or horizontal integration, is based on long-term contracts, but in this case economic entities, subordinated to the main structure, have limited autonomy, and bureaucratic coordination processes can inhibit development of such subordinate entities.

In its turn, modern forms of interaction of large industrial enterprises and small entrepreneurship are based on polycentricity, adaptivity and multi-dimensionality of inter-firm relations of these economic entities (Gosudarev, 2006; Tekutyev, 2011). We can single out the following forms of interaction between enterprises and small firms:

a) Networks (business/commercial, scientific and technical, research and production, etc.) and strategic alliances (including clusters), which combine a lot of participants carrying out their activities, both in commercial and non-commercial areas (Ivanov, 2006; Semina and Sandu, 2013);

b) Long-term functional and process contraction of two or more economic entities, based on mutual benefit through specialization (leasing, outsourcing, co-competition, public-private partnership).

Modern adaptive forms of strategic interaction of large industrial enterprises and their counterparts (small entrepreneurship, which operates in the agro-industrial sector) are characterized by sufficiently equal relationships, which can be characterized as a partnership in most cases. Given sufficiently high dependence on partners’ actions, in adaptive forms of interaction these partners almost always have a common goal, which is not the case in traditional forms of cooperation between two or more enterprises of various institutional segments.

Organizational, economic and legal bases for modern adaptive forms of interaction between large industrial enterprises and small entrepreneurship is a long-term contract, which does not envisage limit coercion, but is based on the idea of preserving mutual benefits of partnership. This means that all parties, involved in the long-term contraction, receive proportionally equal rights and proportionally equal responsibilities, execution of which in case of force majeure circumstances can be either distributed

![Interaction aimed at ensuring ongoing functioning
Interaction aimed at long-term development](image)

**Fig. 2.** The specificity of interaction of economic entities of the real sector of the economy (in terms of meeting the needs of functioning and development) (Trendsetter Barometer”12)
among other participants (doubles) or diversified through the use of traditional market-hierarchical forms.

Accordingly, modern forms of strategic interaction of large industrial enterprises and small entrepreneurship in the agro-industrial sector are not only characterized by high adaptability to changing external macroeconomic or global conditions, but also by the presence of organizational and economic mechanisms that ensure sustainable operation and development of all the interacting parties.

We consider it necessary to note that despite the change of paradigm in theory and methodology of strategic interaction of modern economic entities, and the dominant idea of necessary pre-emptive use of adaptive forms of their interaction, the traditional market-hierarchical forms would be relevant for a long time. This is due to the fact that modern forms of adaptive interaction of large industrial enterprises and small entrepreneurship in the agro-industrial sector are strategically important for sustainable development of these economic entities. At the same time, it is not economically feasible and rational to conclude long-term contracts in the management aspects of ongoing functioning (for example, meeting current general business needs) of large industrial enterprises and small firms (Ishikawa, 1985; Deming, 2011). That is why, when speaking of modern forms of economic entities cooperation interests, we consider it important to offer an integrated approach to improving strategic interaction of large industrial enterprises and small entrepreneurship in the agro-industrial sector, which will be a particular innovative strategy.

Discussion. Interaction of large industrial enterprises and small firms of the agro-industrial sector requires strategic improvement, and this is an indisputable fact. From a modern point of view, the strategy is a systemic vision of sustainable development of an economic entity in the long term. At the same time it is common practice to set development targets not in precise quantitative or monetary terms, but indicatively in order to have a possibility to adaptively reform plans and directions of economic entity evolution under changing external and internal trends (Dudin, et al., 2013).

The innovative strategy of interaction of large industrial enterprises and small entrepreneurship is complex solutions for current and long-term interests cooperation of these entities in order to meet functioning and
development needs of each partner, aimed at obtaining and sharing benefits of interaction in proportion to a contribution of the partner. Given that external environmental changes occur more actively and intensively, and the internal environment of enterprises and small firms do not always adapt to changes quickly enough, we can say that strategies of interaction are aimed at foreseeing all possible changes and integration of interests of the parties to address risks and increase cooperation benefits. Possession of strategic stability of inter-firm linkages, participation of large industrial enterprises and small entrepreneurship in technological, cognitive transfers is not less important than possession of material and technical base, human, financial and other resources. In turn, improvement of the innovative strategy of interaction of large industrial enterprises and small firms should be based on several key principles:

a) Wholeness of strategic interaction of large industrial enterprises and small entrepreneurship, dynamic diversification of two-dimensional and multi-dimensional inter-firm linkages;

b) Presence of economic and social feasibility of strategic interaction of large industrial enterprises and small entrepreneurship;

c) Taking into account economic and social interests of all cooperating entities in proportion;

d) Reduction (removal) of entry barriers of cooperative agglomerate;

e) Convergence of strategic and operational interests of interacting large industrial enterprises and small entrepreneurship.

So, the first principle is wholeness of strategic cooperation and diversification of inter-firm linkages. The bottom line is that large industrial enterprises and small entrepreneurship entities of the agro-industrial sector should be focused on development of the cooperation that would best meet needs of functioning and development of these entities. Accordingly, there should not be statically limited interaction, but on the contrary, a dynamically changing system of relations between cooperating entities. The strategy of interaction of large industrial enterprises and small entrepreneurship entities of the agro-industrial sector should evolve with the growth and development of cooperating entities, therefore, such strategic interaction does not only provide sustainable development of these entities, but is also a system, the development of which in its turn depends on the quality of growth of each cooperating entity.

The second principle is based on the fact that strategic interaction of large industrial enterprises and small entrepreneurship in the agro-industrial sector should be economically and socially feasible. This means that an entry for each cooperating entity in the agglomeration of strategic interaction must generate direct and indirect economic benefits for every large enterprise or a small firm. Which in its turn is expressed through the increase in efficiency and effectiveness of each interacting large industrial enterprise and small enterprise of the agro-industrial sector. As the agro-industrial sector sector plays a significant role in ensuring national security and food security, the economic feasibility of strategic interaction of large industrial enterprises and small entrepreneurship in this sector should be supplemented by social feasibility as well. At the same time, in our opinion, the social feasibility of strategic interaction must include positive social effects in the form of:

a) Increase in a number of created jobs, including high-tech jobs both in the field of industrial production and of agriculture;

b) Reduction of anthropogenic impact on the environment and the natural system of regions where large industrial enterprises and small entrepreneurship of the agro-industrial sector are present;

c) Reduction of environmental risks, mediated by activity of large industrial enterprises and small enterprises of the agro-industrial sector.

The next, the third principle is to take into account interests of all cooperating entities in proportion (large industrial enterprises and small business of the agro-industrial sector). Both in scientific and journalistic literature we can quite often come across the idea that the current strategy of interaction between enterprises, firms or companies should be based on the principles of striving for networking and equal treatment for all partners of the network.

On the one hand, it is true, as inter-firm cooperation combines interests of a set of large industrial enterprises, small firms and their
contractors. Consequently, interests of such diverse entities will also be different, and their contribution to an inter-firm strategic interaction organization will also be different. Therefore, we can conclude that benefits of interaction will be different for each cooperating entity. That is why, in our opinion, it is the most correct to speak not of equality of interests of all entities within the framework of implementing the strategy of interaction, but of proportionality of their satisfaction according to the individual contribution of each cooperating subject. Note also that networking of the interaction strategy also cannot be absolute, there will always be a certain hierarchy of cooperating entities – centralized / decentralized to one degree or another. Hence we can say that it is necessary to form balance proportional bases of partnership or cooperation of large industrial enterprises and small entrepreneurship entities in the agro-industrial sector.

The fourth principle of the interaction strategy of large industrial enterprises and small entrepreneurship in the agrarian sector is aimed at reducing or eliminating irrational barriers of the cooperative agglomerate. Generally, for agro-industrial business or its various integrative forms, a desire to create different barriers is common, as rising competition forces to seek ways and methods of protecting formed competitive advantages from being copied.

But on the other hand, economic entities, including large industrial enterprises, as well as their counterparts (small entrepreneurship entities) cannot function and develop in complete isolation. Therefore, barriers of a cooperative agglomerate take place in the practice of implementing the interaction strategy, however, these barriers must be rational, including those aimed at preservation and protection against copying of cooperative competitive advantages and competitive advantages of each cooperating entity. Besides, rational barriers of cooperative agglomerate should be focused on reducing the probability of insider attacks, which can be organized through the entry of unscrupulous contractors into the agglomerate. Therefore, within the framework of the interaction strategy, the cooperative agglomerate of large industrial enterprises and small entrepreneurship entities of the agro-industrial sector must be rationally limited, i.e. competitive interests, the functioning and development interests of industrial enterprises and their counterparts, already included in the agglomerate, should be a priority when making a decision concerning extension of the structure and system of inter-firm cooperation.

The last fifth principle is that operating and strategic interests of interacting large industrial enterprises and small enterprises of the agro-industrial sector should be in the dynamics of convergence. It is worth noting that convergence of strategic and operational interests of cooperating entities does not mean pursuit of a unified goal for all. For all interacting entities key milestones can be determined. These milestones are improving efficiency, effectiveness, quality of functioning and development of each individual large industrial enterprise and small entrepreneurship entity.

Thus, to sum up the above said, in the practical aspect improvement of the innovation strategy of interaction of large industrial enterprises and small entrepreneurship entities in the agrarian sector should include two key areas (see. Figure 3 below).

Small firms of the agro-industrial sector and large industrial enterprises can implement both ongoing cooperation and strategic partnership. It is absolutely clear that current cooperation will include traditional areas of cooperation between industrial enterprises and small entrepreneurship entities:

- Supply. Within the framework of this area, small firms can be suppliers of agricultural raw materials and other resources, needed to big business for food production;
- a) Sales. Within the framework of this area, large enterprises can supply intermediate products and finished products to small firms for further sale;
- b) Marketing, including branding. Within the framework of this area, large industrial enterprises can assist small firms to promote raw materials, products and other services to the agro-industrial market;
- c) Production. Within the framework of this area, small firms and large enterprises can pass parts of production processes to each other and in addition supply basic production assets and their maintenance;
d) Within other areas (finance, human resources, logistics) large industrial enterprises and small firms can provide mutual services to each other both on a contract basis and on the basis of outsourcing.

Ongoing cooperation of large industrial enterprises and small entrepreneurship entities in the agrarian sector is aimed to create production-sales chains of finished products movement from producer to consumer

Strategic partnership should be implemented towards mutually beneficial high-tech development both by large industrial enterprises and small entrepreneurship entities in the agrarian sector.

It is well known that small firms have considerable potential for innovation, however, they can not realize this potential because they do not have a good scientific and technical basis for creating and testing innovative ideas. In their turn, large industrial enterprises, which are focused on cost optimization, can test prototypes (e.g., new hybrids of plants or their cultivation techniques) based on small firms. Consequently, strategic partnership of large industrial enterprises and small entrepreneurship in the agrarian sector is aimed at creating high value added product (formation of entrepreneurial rent).

The use of both ongoing cooperation and strategic partnership allows cooperating economic entities of the agrarian sector to maximize economic benefits and distribute them in proportion to own contribution to the cooperation.

CONCLUSIONS

Summarizing the above, it should be noted that the strategic interaction of large industrial enterprises and small entrepreneurship in the agrarian sector should be innovation-oriented. Innovations and timely upgrading of the agro-industrial sector is not only a condition for meeting physical needs of the society in food, but also a condition for stable and secure national socio-economic development. The importance of agro-industrial sector for sustainable and secure national socio-economic development is unquestionable. But at the same time it should be understood that in order to achieve this goal, effective and efficient interaction between large enterprises and small entrepreneurship is very important. Cooperation of large and small businesses allows not only creating optimal process of merchandising, but also allows forming a high-tech platform for development of the agrarian sector.

This in its turn means maximization of useful effects and economic benefits that will be redistributed between interacting entities. New products and services, created as a result of interaction, allow best meeting social and personal needs. In this article we examined general issues of improving the innovative interaction strategy of large industrial enterprises and small entrepreneurship in the agrarian sector. Later, we will focus on specific examples and types of this interaction using economic substantiation of expediency of particular approaches to organizing inter-firm cooperation of large and small business of the agro-industrial sector.

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