

FOOD BUSINESS AND FOOD SECURITY CHALLENGES IN RESEARCH

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Introduction

The practice of successful emerging economies like China and Brazil shows that deep structural changes in agricultural and food industry lead to higher incomes and welfare. These changes, in turn, raise the requirements to food product quality. Thus, the global demand for high-quality and safe food products is increasing significantly. In order to meet the new quality requirements, globally minimum quality standards are rising and private standards emerge. Along with a quality, the prices for agriculture and food products are growing also. Growing prices and increasing world population increases the problem of food security that is a condition related to the supply of food, and individuals' access to it.

Today, even in a prosperous country like the United States there are many people living in food insecure. According to Coleman-Jensen et al. (2014) 14.3% of American households are food insecure at least some time during the year, including 5.6 %t with very low food security, meaning that the food intake of one or more household members was reduced and their eating patterns were disrupted at times during the year because the household lacked money and other resources for food. In other countries, especially developing or poor ones, the situation with food security is even worse.

The challenges of rising food prices, ensuring food quality and food security could be solved with the means of food business, government programs and new technologies. But how to overcome these challenges? What is the state and prospects of food business?

We have tried to find the answers to these and some other questions concerning food business and food security by studying papers presented in this journal.

Groups of Research

All JAMI's publications related to food business and food security can be roughly divided into following groups:

- 1) investments in agrifood business;
- 2) food security issues;
- 3) state and prospects for food industries, i.e. bakeries, dairies or meat-processing etc.;
- 4) competition and management issues for agrifood business;
- 5) wine business research.

Below the study presents the results of research publications in accordance with the above classification.

The Results of Research

Investments in Agrifood Business

Osypchuk and Teslenko (2015) have briefly revealed the role of corn in the

agricultural sector of Ukraine. This paper indicates that the corn integrity has a huge impact on its quality and the former, in its turn, depends on the quality of post-harvest processing, namely drying operation. The authors disclose the nature of two-stage drying technology that reduces fractures. The results of calculation of the economic and investment indexes for implementation of new technology are shown.

Kuznetsov and Soldatova (2012) justified that one of the main objectives for the agricultural sector is to create a market for innovation and investment, to address the issue of self-financing and increase the competitiveness of the Russian agricultural sector. Authors highlight a particular importance of the state budget and administrative support for investment, e.g. federal and regional, external economic support measures.

Belaya and Hanf (2012) analysed the influence of foreign direct investments (FDI) on the Russian agrifood business. Authors outlined the features of Russian agrifood business describing the current situation. They discuss about the FDI in Russian agrifood business. Paper elaborates on the influence of FDI into Russian agrifood business at different stages (agricultural producers, food processing, food retailing including fast food sector). The future prospects and outlook on the development of the Russian food sector are discussed.

Hilmansson and Dinh (2013) found that Export Credit Agencies (ECAs) played an important role in cushioning the downturn in cross border trade to emerging market economies during the economic and financial crisis that started in the fall 2008. In addition to facilitating trade during times of crisis, ECAs can also help companies in emerging countries access long term funding and at lower interest rate than they could access locally. This can also help companies modernize their processing lines, especially those engaged in capital intensive activities, and enable economies in transition increase the value added of their industries. This study discusses the role of ECAs in facilitating cross border trade to emerging markets as well as the economic rationale for the existence of such agencies. Authors also demonstrate how selected risk mitigation instruments of ECAs, namely: (i) buyer credit guarantee, (ii) supplier credit guarantees and (iii) export loans have been applied in practice to facilitate investment and innovations in the food sector. Finally cases are presented that highlight how companies have used the service of ECAs, for example, to obtain better terms, including longer term loans and/or lower interest rates.

Hanf et al. (2014) found that there is an interrelationship between the competitive strategy of the retailer, the core competencies, the direction of internationalization, and the extent and nature of adjustment. The strategy defines the core competencies and business model that the retailer develops, which in turn determines the country selection of the retailer. The business model also impacts the adjustment to the individual markets. Since the strategy is their main advantage, they try to replicate it without extensive modification. Resource-based retailers, who compete with prices, try to export their business model without major modification while their market-based rivals adjust more to the special conditions, as it is their core competency. Authors' theoretical elaborations are enriched by the interviews, which they conducted with managers of international retailers and retail experts in Hungary.

Slyusarenko (2013) reveals the aspects need to strengthen foreign relations as a precondition for economic development of agricultural enterprises of Ukraine and the formation of the investment processes in them. Author proposes the drastic measures to solve the problems of agricultural sector and increase the investment attractiveness of

the agricultural enterprises.

Food Security Issues

Buzni (2012) shows a necessity of the marketing approach to the ensuring food security. Paper reveals the role of marketing of innovations in the strategy of priority development.

Mohanty (2012) describes the possible resource selection, and the value creation within the supply chain to balance the market demand with the production of the food processing industry. It highlights the need for distribution network, supplier value creation, quality packaging, and cost reduction within the supply chain by proper selection process, implementation and effect of new technology in food processing, and quality management, in a business-to-business context. The paper presents a case study based on interviews and research.

State and Prospects of Food Industries

Sushko (2012) analyses the different aspects of fish-processing industry. Author developed the infrastructure of industry and grounded the necessary terms for effective functioning of the fish industry.

van Rooyen and Esterhuizen (2012) analyse the changing business environment that faced the South African agribusiness sector during the first decade of the 2000 millennium – before the “big economic meltdown” period. The analysis focuses on competitive performance and is conducted through measures such as “Relative Trade Advantage”, the “Porter Diamond” analysis and the participation of executives and agribusiness leaders in an “Executive Survey”. This study shown that the business environment for the sector is constrained marginally positive, but with an increasingly negative trend since 2004.

Figurek (2015) highlights an importance of food industry for the development of primary agricultural production. Author analyses financial results of the food industry enterprises of the Republic of Srpska (as one of the entities of Bosnia and Herzegovina) for a six-year period from 2007 to 2012.

Among the papers of this group there are several studies devoted to the problems and prospects of various food industries in Ukraine.

So, Pavlov et al. (2012) analyse the problem of livestock-breeding in Ukraine by comparing positive and negative factors that predict the potential volume of soft clear products in the future. Skalozub (2012) analyses the fruit and vegetable processing industry in Ukraine and shows an importance, trends and general review of this industry.

Chernetskaya (2013) considers the basic economic problems of bakery industry. Author analysed the statistical data of bakery industry of Ukraine and offered the ways to overcome the problems of this industry. Goncharuk and Kotis (2013) present the results of a studying the key factors that determine the prospects for economic development of the bakeries in Ukraine. Authors identified five groups of such factors and specified the possible ways for development of the bakeries.

Goncharuk and Pogorelova (2012) present the key factors and reserves of efficiency growth for meat companies in Ukraine. In accordance with the identified increasing returns to scale, authors suggest the ways to improve performance through internal and external benchmarking, clustering and other forms of association of meat

producers.

Mironiuk and Yakovenko (2012) studied the particularities of oil and fat industry in Ukraine and its current state: production of oil by the regions and the manufacturer; the dynamic of oil prices for 2010-2011. Special attention is paid to the export of sunflower seeds and oil.

Nitsenko (2014) considers the sunflower oil and sugar companies on the basis of application of the methodology of concentration. As a benchmark the level of the relevant products in bulk and in relative terms was used. The concentration of companies is by attracting investment and credit resources directed to an acquisition of competing firms and a construction of its own production infrastructure.

Kulakovskaya and Golovachenko (2012) analyse a current state of the world market of pet foods. Authors appraise a marketing potential of the basic pet food producers at the Ukrainian market.

Market and Management Issues for Agrifood Business

van Rooyen, J. (2014) evaluated the human capital and skills needs of the South African agribusiness industry in order to gain an improved understanding of the perceived drivers and shapers of the industry, identify ways in which the education system can be improved and to be able to contrast the fresh produce sector in with other agribusiness companies. The author found that students will have to be equipped with multiple skills sets in order to be able to cope in an industry that characterised by uncertainty and volatility and driven by changes in technology, long term relationships global value chains, information sharing and consumer behaviour.

Gamma (2013) proves the need for vertical integration of milk processing plants with raw milk producers. Paper presents the analysis' results of the environment external influence on the competitiveness of dairy enterprises. Author proposed recommendations to provide the effective functioning of the main process units' dairy industry by creating a dairy's vertical, which on an equal basis could combine agricultural enterprises and individual households as producers of milk and dairy processing plants of its industrial infrastructure.

Molla, M. (2013) considers the dynamics of fixed assets and their depreciation, as well as capital investments in the dairy industry of Ukraine. Author analysed the milk-processing enterprises of the Odessa and Nikolaev regions by the level of production capacity and viability. The results allow asserting that the further development of milk-processing enterprises, ensuring their competitiveness, is possible providing condition of implementation of the strategy of milk-processing enterprises modernization.

Shchekhorskiy and Pashchenko (2012) suggested the definition of such concept as "enterprises stability". Authors built a system to estimate the dairy development's stability

Mironiuk and Yatskanich (2013) disclose the essence of a quality management system on the grain processing enterprises and its importance in the current market conditions. Authors suggest introducing the new system with international standards ISO 9000:2007 and Total quality management.

Martyniuk (2015) considers the main paradigms of initiation and formation of territorial and production complexes related to the southern region of Ukraine. Author has substantiated precisely this territorial and geographic scaling. The proposed

concept of the application of the theory of sustainable movement of non-autonomous systems in dissipative structures is especially noteworthy. The dissipative structures are comprised of the main factors of the sustainable development concept, i.e. economic, social, and ecologic first-order micro-models, which are presented in the form of fractals being influenced by bifurcation points, i.e. innovative attractors. Firstly, such a model creates an opportunity of influence and regulation in the process of qualitative phase transition. Secondly, it tends to self-organize with an additional synergetic effect. Thirdly, it is multi-version, since exogenous as well as endogenous factors are used as interferences.

Shkuratova (2012) studied the problems of innovation management in the enterprise. Author identified R&D issues arising in innovation and suggested the ways to decide them in the food industry.

Shutov (2012) studied the essence of economic risk and grounds the main elements of risk management for a food enterprise. Author developed the guidelines for risk assessment, optimal economic-mathematical model for risk minimization using computer, and the main elements of risk management system.

Lal (2012) studies consumers' attitude towards food, subjective norms and intentions affecting food behaviour. Both primary and secondary data has been used for the study. Primary data from a sample of 362 consumers was collected using a modified questionnaire based on theory of planned behaviour (TPB). The examination of estimated coefficients indicated that, the basic structure of the TPB model holds true. Author tested the hypotheses by applying structural equation modelling technique for validation of proposed model. The model returned good fit.

Wine Business Research

Among the journal papers there are several studies of various aspects of winemaking in different countries (Germany, Armenia, and Ukraine).

Hanf (2014) presents "Pay What You Want" that is a pricing strategy where buyers pay any desired amount for a given commodity, sometimes including zero. Giving the buyers freedom to pay what they want can be very successful in some situations, because it eliminates many disadvantages of conventional pricing, e.g. the fear of whether a product is worth a given set price and the related risk of disappointment. In Germany most often wine tastings are for free despite of the associated costs. However, visitors often feel obliged to buy some bottles of wine even though they are not in favor of this wine. Hence, dissatisfaction might occur. The other strategies have to be developed in order to cover the costs while reducing the risk of dissatisfaction. In this context Hanf (2014) discusses the possibility to introduce "Pay-What-You-Want" pricing in the German wine business. The author first provides a literature overview and combines his findings with existing examples.

Hanf and Marquardt (2012) describe the development of Armenian wine and brandy business and discuss how foreign investors influence on this development.

Hanf et al. (2013) introduce and transfer own model of network success on co-operatives. Authors elaborated the managerial implications in general and by providing some insights on German wine co-operatives by presenting some expert interviews as well as some empirical results.

Oleynik (2012) suggests the stages and components of the formation of competitive business strategies for wine growing and wine-making industry. Author

defines certain areas of strategic development and ways of implementing competitive strategies, and chooses a strategy that enables wine company to achieve competitive advantages and improve its competitiveness.

Samofatova and Gerus (2012) analyse the current condition of the winemaking industry in Ukraine. Authors reveal the most important factors of influence on an investment attractiveness of wine business.

The studies described above are only a part of the published material, which is dedicated to the problems of food industry and food security. However, a brief overview gives an insight into the variety of existing challenges faced by food business on the path to high quality standards and effective development. Hence, it provides a basis to continue informing our readers about the topical issues in applied management and investments.

Conclusions

Based on research studies in the field of food business and food security, we can draw the following conclusions:

- the key groups of studies related to the food business and food security were allocated, namely: investments in agrifood business, food security issues, state and prospects of food industries, competition and management issues for agrifood business, wine business research;

- for the key groups a brief overview of studies published in recent years was held.

The results of this review may be useful for scholars, officials, managers and investors, who interested in developing food industry and improving a food security.

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Abstract

The paper distinguishes the basic research types related to food business and food security: investments in agrifood business, food security issues, state and prospects of food industries, competition and management issues for agrifood business, wine business research. For each type author held a brief overview of studies published over the last years.

Keywords: business, management, food security, agrifood, investments