Economic Potential and Development Prospects of Small Businesses in Rural Areas

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Abstract:

The article examines the role of small business in the development of rural areas by the example of bakery production. Moreover, it demonstrates the need for the interaction of small bakery businesses with large enterprises of the industry and grain processors.

The article reveals the development trends of small bakery production in rural areas. The conditions for the participation of small bakery businesses in rural areas in the development of the production of functional and specialized bread are substantiated.

The article proposes the directions and mechanisms of support for small bakery production at the level of rural territories. The development of modern methods of redistribution of bakery production in proportion to the living population, measures of state support for small bakery production and expansion of the range of bread products that contribute to improving the health of the population of Russia, is the theme of this study.

The object of the research is the development of small bakery production as a condition for improving the quality of life of the population in rural areas. The subject of the research is production and management relations that ensure the development of small bakery production and its impact on the quality of life of the population in rural areas.

Keywords: Small business, territorial distribution, development mechanisms, production of functional and specialized bread, small bakery production, public-private partnership.

JEL Classification: Q10, O13, R11, L66.

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1. Introduction

Bread and bakery products are consumed by different segments of the population, regardless of income. Innovative changes in the industry contribute to the emergence of new foods, as well as features of usual foods, which include bread and bakery products (Akhmetshin et al., 2018a). However, the therapeutic and prophylactic bread in Russia did not receive wide distribution, although the incidence rate in this country has only increased over the years.

The rural population of Russia, especially remote settlements, is generally deprived of the opportunity to eat fresh bread daily, because in recent years, in many villages, the bakery production has been closed, products are delivered from large bakeries 3-4 times a week. Large baking enterprises are not interested in the development of bread production near consumers, and the state and local governments are not paying enough attention to the development of small rural businesses, including bakery, which leads to its reduction and, as a result – to a reduction in the quality of life of the rural population. The lack of modern methods of redistributing bakery production in proportion to the living population, imperfect measures of state support for small bakery production and extending the range of bread products that contribute to improving the health of the Russian population, all this contributed to the choice of the research topic.

2. Methods

The aim of the research is the theoretical foundation and elaboration of directions for the development of small bakery production in rural areas. The object of the research is the development of small bakery production as a condition for improving the quality of life of the population in rural areas. The subject of the research is production and management relations that ensure the development of small bakery production and its impact on the quality of life of the population in rural areas. The bakery production of the rural territories of the Altai Territory, as one of the most significant agrarian regions of Russia, was considered an object of observation.

The basis of the study was the works by the classics and modern foreign and Russian strategic planning economists, who also work in the field of the development of economic and social potential (Bryson and Einsweiler, 1988; Gordon, 1993; Miller and Dess, 1996). The initial base of the study was the scientific works of the Siberian Research Institute of Agricultural Economics, All-Russian Research Institute of Agricultural Economics, State Research Institute of the Baking Industry, Altai State Technical University and other scientific and educational institutions of the country, as well as regulatory and legal documents of federal and regional authorities on the development of rural areas and small and medium-sized businesses, and the author's own works.

3. Results
In this article, the authors obtained the following scientific results:

1) Based on a systematic approach, a theoretical substantiation of the structure of the internal and external environment of small bakery production in rural areas is given, the principles of its development are summarized and supplemented, where the most significant of them is the development of links between small bakery production entities and large bakery enterprises, food industry entities, municipal governments, non-state organizational structures ensuring their development; and the expansion of forms and methods of their state and municipal support.

2) The use of the factor approach and abstract logical analysis helped to reveal the socio-economic preconditions for the development of small bakery production in rural areas and the main groups of factors affecting the demand and supply of bread and bakery products – natural, territorial, socio-demographic, organizational and economic. Each group comprises its own subgroups.

3) The high social significance of small bakery businesses in rural areas as producers of vital products, employers and a source of replenishment of local budgets was justified. The article identified forms and methods of government regulation – the legal field and target-oriented planning. It has been proved that small bakery production is not able to independently solve the problems of crediting, providing production facilities, producing functional bread, introducing the HACCP system, which predetermines the need for interaction between businesses located primarily in rural areas with the milling industry, large bakeries, and district authorities.

4) The article provides an analysis of the main factors determining the development trends of small bakery production in rural areas – the structure of the rural population by the income level, education, demography, and unemployment (Korableva et al., 2017). These factors are perceived as a consumer market and personnel potential for creating one’s own business (Ling and Yumashev, 2018). It is proved that the most promising in terms of personnel potential are the territories with the minimum level of employment, such as the Burlinsky, Krutikhinsky, Nemetsky, Novichikhinsky, Rodinsky, and Tselinny Districts of the Altai Territory, and districts that have the potential of an industrial property suitable for organizing bakery – the Kalmansky, Mamontovsky, and Novichikhinsky Districts.

5) It is revealed that the food industries, which are the main suppliers of raw materials for bakery production, are the milling and dairy processing ones, along with yeast production, production of vegetable oil and biopharmaceutical raw materials.

6) The role of rural areas in the development of small bakery production is justified, considering the mechanism of public-private partnership. The article offered a mechanism that promotes the engagement of the population in the district program for the development of small bakery production and along with a set of measures to reduce the financial burden on small business during development.
during the implementation of the district program and state support for small bakery businesses at the regional level.

4. Discussion

Small bakery production is an economic activity in the field of baking, carried out by small and micro-business entities. Its institutional structure includes private business entities, such as private limited companies and individual entrepreneurship, working either completely independently or in an organized structure. Also, there may be units of entities of other industries or fields of activity, for instance, agricultural and grain processing enterprises, consumer cooperation systems, etc. located in rural areas. They are distinguished by maximum proximity to the consumer, a flexible response to changes in demand and the absence of the need for substantial start-up capital during creation and modernization (Wolter et al., 2018), which firstly allows them to meet the demand of low-income groups of the population, on the one hand forming low solvency as a consumer of related products industries, low competitiveness and instability, on the other hand, technological mobility in changing market conditions (Ryabova, 2004).

Modern small bakery businesses in rural areas are often isolated from each other, even in the territory of one municipal district. They only divide the sales markets among themselves and frequently in the territory of the regional center. Their number in rural settlements is extremely limited; there is practically no competition among them, and free market niches are occupied by large and medium-sized bread producers. Therefore, the reserves of their development lie in their interaction with the subjects of the external environment (Korableva et al., 2018). The main raw materials in bakery products are flour of different varieties and various grain processing wastes, including bran, and food additives, such as sugar, salt, yeast, dairy products, etc.; therefore, bread baking is an integral part of the food industry and the final link in the system of grain products subcomplex. Thus, the effectiveness of its management largely depends on the level of their development in the region (Ilina, 2015; Pavlov et al., 2016; Usenko et al., 2018).

Being small businesses entities, small baking enterprises, as shown by studies conducted in other sectors of the economy, have several problems:

✓ a low level of initial capital accumulation;
✓ lack of interest of banks in cooperation with them;
✓ shortage of working capital (mainly cash), forming a low payment discipline;
✓ high rental rate, forming the largest share of the costs;
✓ excessive wear and tear of equipment;
✓ a small amount of third-party investments in such enterprises, including specialized agencies for supporting small business (for example, support funds);
low awareness among the population about the activities of small business support institutions (Gorelova, 2012; Zinich, 2011; Kostrova, 2001; Stukach, 2008).

During the study, based on the analysis of the literature (Danilova, 2013; Pershukevich and Schetinina, 2012), four subgroups of factors determining the development of small bakery production in rural areas were identified:

1) Macroeconomic, such as the purchasing power of the ruble, the credit policy of the Central Bank of the Russian Federation, the regulation of export-import operations in the agri-food market, socio-demographic indicators. In addition, the size, density and demographic structure of the population, its income level and the investment potential of the rural business and the rural population (Takhumova et al., 2018).

2) Microeconomic, including the structure of the economy of a rural area, the specifics of its agricultural production, the sensitivity of the results of production activities to climatic and biological factors, the seasonality of production activities in crop production, technical and technological development and territorial distribution of agricultural production (Zakharchenko et al., 2018).

3) Infrastructure, such as the availability and degree of remoteness from infrastructure facilities located in the district center, federal and regional roads and railways, the state of roads within a rural area, banking activity in the municipal area and availability of credit resources, availability of municipal district institutions providing information and consulting support (Kurbanova et al., 2018; Akhmetshin et al., 2018b; Sharafutdinov et al., 2018).

4) Administrative – the functions of the district and municipal governments in addressing the challenges of small business development and food supply of the population, the existence of a regional program for the development of small bakery production in rural areas and the share of the district budget, directed to its implementation.

According to the authors’ opinion, the development mechanism of small bakery businesses in a rural territory implies the observance of the following principles (Antsiferov, 2015):

1) improvement of its structure through the creation of new businesses;
2) consideration of resettlement specifics of the rural area population and the structure of its economy in the placement of new businesses and their maximum approach to the population of remote settlements;
3) considering the needs and effective demand of the population in determining the range of bread and bakery products produced;
4) improving the structure of production, technology, and management in small bakeries;
5) development of a set of their linkages and interactions with large baking enterprises, entities of the grain processing industry, state and municipal authorities, non-state structures ensuring their development;
6) expansion in forms and methods of state and municipal support of small bakery production entities (Kolesnikov et al., 2018).

The Altai Territory is in the south-east of Western Siberia, on the border of continental Asia, 3419 km from Moscow. The territory of the region is 168,000 square kilometers, it occupies 24th place in the Russian Federation and 10th place in the Siberian Federal District. In the north, the region borders with the Novosibirsk Region, in the east with the Kemerovo Region, the southeast border lies with the Republic of Altai, in the southwest and west – the state border with the Republic of Kazakhstan, which is 843.6 km long (Sycheva and Ovchinnikov, 2016).

The agro-industrial specialization of the Altai Territory significantly influences the dynamics of the main indicators of the socio-economic development of the region. In the structure of gross regional product, the share of industry, agriculture, and trade significantly prevails. These activities form over 62% of total GRP. The leading economic activities in the industry are the production of food products, engineering products (carriages, boilers, diesel engines, and agricultural machinery), the production of coke, rubber and plastic products, and chemical production (Sycheva et al., 2016).

Considering the agrarian specialization and structure of settlement in the region, the main factors ensuring the sustainable balanced socio-economic development of the Altai Territory are the growth in agricultural production and the increase in the standard of living of people living in rural areas (Stukach and Klimenko, 2008). Functional bread in the village is necessary, first, for the prevention of diseases. The most common diseases in the Altai Territory are diseases of the digestive system – 27.71% and circulatory systems diseases – 23.36% (Table 1). Prevention of precisely these diseases necessitates the production of food supplementation for bread (Shkarednaya et al., 2017).

Table 1. The most common diseases of the population of the Altai Territory*

<table>
<thead>
<tr>
<th>Name of the disease</th>
<th>Identified cases</th>
<th>Identified in 2016</th>
<th>In % of the total population of studied diseases (for 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the musculoskeletal system</td>
<td>180,037</td>
<td>42,512</td>
<td>20.43</td>
</tr>
<tr>
<td>Diseases of the nervous system</td>
<td>49,407</td>
<td>11,756</td>
<td>5.65</td>
</tr>
<tr>
<td>Diseases of the digestive organs</td>
<td>194,761</td>
<td>57,662</td>
<td>27.71</td>
</tr>
<tr>
<td>Heart diseases</td>
<td>79,805</td>
<td>8,484</td>
<td>4.08</td>
</tr>
<tr>
<td>Diseases of the circulatory system</td>
<td>424,056</td>
<td>48,595</td>
<td>23.36</td>
</tr>
<tr>
<td>Endocrine diseases</td>
<td>144,028</td>
<td>20,527</td>
<td>9.87</td>
</tr>
<tr>
<td>Hypertension</td>
<td>200,676</td>
<td>15,242</td>
<td>7.33</td>
</tr>
</tbody>
</table>
The population of the Altai Territory and the population of rural areas prefer to buy wheat bread (Figure). The consumption rate of functional and specialized bread is just 1.3% of the total; these types of bread are mostly consumed in the cities. Only 7 types of functional and specialized bread are produced in the region: dietary (50.0%), diabetic (0.4%), salt-free (0.3%), iodized (5.7%), with low protein content (0.9%), with a high content of dietary fiber (10%), vitaminized (32.5%) (Figure 1) (Pershukevich and Schetinina, 2012).

Figure 1. The structure of bread and bakery products sold in the Altai Territory

At the same time, in rural areas, there is an extremely low level of development of bakery production. According to the calculations, out of 59 rural municipal areas of the Altai Territory, only in the Rodinsky District the level of provision of the population of rural areas with local bread reaches 1.5% of the total consumption, in 11 districts it is in the range of 0.6-0.7%, in 44 it is from 0.15 to 0, and in 4 districts – it is barely reaching 0.01%. In three districts, this indicator is generally absent in official statistics.

From January 2016 until March 2016, the authors conducted a survey in 12 districts of Altai Territory, which showed that 28 people out of 260 responders experience a shortage of bread, while 36 people (13.8%) buy bread once a week, 64 people (24%) buy bread 2 times a week. The problem of shortage of bread until the next purchase is relevant for the population of all remote settlements from the district center, most families constantly eat stale bread. State support for the development of the production of functional therapeutic and prophylactic bread in the region should have a program-project approach and be inclusive. Therefore, the implementation of this project should be based on the state order, the mechanism of public procurement and co-financing.
The process should consist of five basic steps.

The first stage involves the simultaneous solution of two tasks:

✓ development and bringing to the stage of industrial production of dietary additives for flour mixes by Closed Joint-Stock Company Evalar in case of a state order (funds from the federal and regional budgets, which corresponds to the regional program for the development of healthy food), interested private investors, and above all – large baking enterprises;

✓ the creation of new or modernization of the production of existing small baking enterprises in rural areas, when calculating the number of mini-bakeries to partially replace the social bread functional. To select the areas of priority placement of new small baking enterprises, the authors elaborated the criterion of "the number of remote settlements per one rural council" (2 or more settlements per 1 rural council have one-fourth of rural territories and 23.2% of the rural population live there). It is there that it is proposed to create new bakery production primarily.

In total, 152 mini-bakeries are needed. At least one bakery should be created in areas with identified characteristic diseases – Ust-Pristansky, Zmeinogorsky, Romanovsky, Rodinsky, Zalesovskiy, and Novichikhinsky. The total number of mini-bakeries urgently needed by the rural areas of the region will be 159-160. With the cost of equipment for one mini-bakery amounting to 600,000 rubles (as of 2014), the total amount of their purchase will be 96,000,000 rubles. Subject to co-financing, the budget expenditures will amount to 48,000,000 rubles. At 2015 prices, this amount should be increased by 20%. As a result, budget expenditures for this item of expenditure will amount to 57,600,000 rubles.

At the second stage, when dietary supplements at Evalar enterprise will be tested and will be ready for industrial production, a competition will be announced to fulfill the state order for small enterprises in the biopharmaceutical cluster to produce certain types of dietary supplements. The examples of such enterprises are CJSC Balsam, PLC KIT, PLC Spektr-Balsam, PLC Altamar, PLC Egida, Altai Bouquet company, Doctor Kornilov Company, etc. Having invested their money in production, they will look for consumers of their products among the millers both in their region and beyond, since they will become owners of an exclusive high-tech competitive product.

At the third stage, enterprises of the milling industry, which took part in the state order to produce flour mixes for functional therapeutic and prophylactic bread, will be able to produce part of the products in the free market, in addition to the volume required to meet the needs of state institutions.

At the fourth stage, both existing and newly created small baking enterprises should become participants in tenders to produce functional bread for children's,
medical and government institutions (law enforcement agencies, the army, the Federal Penitentiary Service, etc.).

At the fifth stage, the small baking enterprises that took part in the program, having a stable sales market, will be able to expand their production and provide functional bread to local people, and with logistics, also to people from other territories and cities in the region, and will also enter the markets of other regions.

Calculations show that the creation of the system will have both economic and social effects – the number of employed will increase to 1.5 thousand people, which will entail an increase in incomes of the population and payments to district budgets, the consumption of functional bread will reduce the number of cases of diseases, leading to saving of the budget of the Territorial Health Insurance Fund (Antsiferov, 2016).

Therefore, to ensure their sustainability, they will need to expand markets. Bakeries will continue to supply social bread to the villages according to their own schedule. The second way to develop small bakery production in rural areas and implement its participation in the production of functional, therapeutic and prophylactic bread is the development of economic ties with grain processors. The food industry of the Altai Territory has almost all resources for the development of bakery production, and the region is surplus in the production of flour and milk powder (it consumes 17.1% and 30%, accordingly). Mostly high-grade flour goes into the production of bread (Table 2); therefore, millers are the main and financially stable segment of the economic area of a small bakery production.

Table 2. The structure of flour consumed by bakery enterprises of the Altai Territory in %

<table>
<thead>
<tr>
<th>Wheat flour extra class</th>
<th>2014</th>
<th>2016</th>
<th>2016 compared to 2014, ±</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat flour first grade</td>
<td>25.0</td>
<td>22.4</td>
<td>- 2.6</td>
</tr>
<tr>
<td>Rye flour</td>
<td>4.0</td>
<td>3.2</td>
<td>- 0.8</td>
</tr>
<tr>
<td>Whole-meal flour</td>
<td>3.0</td>
<td>3.1</td>
<td>+ 0.1</td>
</tr>
<tr>
<td>Flour from other crops</td>
<td>4.0</td>
<td>6.7</td>
<td>+ 2.7</td>
</tr>
</tbody>
</table>

The third of the most significant areas of development of economic relations of small bakery production in rural areas with the external environment is the interaction with each other, with similar businesses from other territories and cities within the professional association – the guild of bakers and confectioners, one of the main functions of which will be coverage of contractual relations between small bakeries and large ones (Akhmetshin et al., 2017). The main principles for ensuring mutually beneficial cooperation will be the following: the obligatory nature of formal contracts, including agreements of intentions; the publicity of the terms of contracts (these contracts should be available on the websites of the enterprises and on the website of the regional Guild).
5. Conclusion

The Altai Territory has an annual surplus of flour (5.5-5.6 times more than the needs of the region) and of dry milk (70% more), of animal serum and oil (80% more), which makes it possible to start an import substitution process in the field of the bakery production (increasing imports to other regions of the country). The biopharmaceutical industry of the region (32 entities) does not work for the needs of the bakery industry, which holds back the development of the production of therapeutic, prophylactic and functional bread and the health of the population. Until 2014, the prices for raw materials were available for bakery production and ensured its positive profitability.

Fifty percent of the baking industry in the Altai Territory is located in rural areas. Among them: 16 large bakeries, 96 agricultural producers, who are the only suppliers in 8 districts, 20 consumer cooperation entities, 8 shops at grain processing enterprises and 71 individual entrepreneurs. According to the author's method, the level of provision of the rural population with locally produced bread is from 0.01% to 1.5%. The lowest rates were observed in the territories close to large cities. These calculations are confirmed by the results of the survey conducted by the author.

The main characteristics of consumers of bread in rural areas include aging and decline in population and the number of children in particular; children are concentrated mainly in the regional centers, the elderly are in remote settlements; the rich population eats bread and spends more on food than the poor sector, providing the bakery industry with greater profits than the rest of the population; the average monthly salary in the village is much lower than in the city; the purchasing power of the pension has decreased over the last year by 4.5%; labor has become less dynamic; incidence has increased; areas with the most characteristic diseases were identified, which requires the production of therapeutic and prophylactic bread with appropriate medical additives (Vorotnikov et al., 2017). The population of the Altai Territory is provided with specialized bread by 1.3%.

There is a need for a planned-forecast approach to the development of the production of functional and specialized bread in the Altai Territory, since it is a territory with rich vegetation resources, a developed pharmaceutical industry and a significant proportion of rural areas with population prone to chronic diseases. The organizational and economic mechanism of state support to produce functional and specialized bread, based on state order for enterprises of the biopharmaceutical cluster, the milling industry and small bakery production, includes five stages of implementation. The socioeconomic effect of the creation of new small bakeries in rural areas will be an increase in employment by 0.3%. The provision of local settlements with high-quality locally produced bread will increase by 0.1% and by 15% and 25% in the whole region, in compliance with all the stipulated conditions. The interaction mechanism of small bakery businesses with the external environment – large baking enterprises, enterprises of the milling industry, and
similar businesses in their industry, is based on the production of a new exclusive product. It is necessary to improve the activities of the regional guild of bakers and confectioners, which will facilitate the entry and consolidation of small bakery businesses in the local market.

References:


Antsiferov, P.A. 2016. Enhancing the role of the regional guild of bakers for the development of small bakery production in rural areas. The role of business and government in the development of the agro-industrial complex: materials of the international scientific-practical conference. Barnaul, 149.


Kurbanova, E., Korableva, O., Kalimullina, O. 2018. Enhancing the effectiveness of asset management through development of license management system on the basis of SCCM 2012 program by microsoft company. Paper presented at the ICEIS 2018 -


The HACCP system at the enterprise is a guarantee of our security. From http://www.iksystems.ru/a472/


