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# The role of regional industry standardization in the regional product branding system

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**Abstract.** The need to improve regional industrial policies to increase competitiveness of local food products with proven quality and geographical identity has led to demand for new tools for creating and supporting regional product brands. In contrast to product brands, territorial product brands must be carriers of not only values of producers, sellers and consumers of goods, but utility for the region as a social and economic system as well. The study presents the rationale for integrating regional industry standardization into the product branding system as a tool for managing the quality of locally produced products that claim to become regional product brands and locomotives of an integrated brand in the region. The content and objects of regional standardization were determined based on the method of a targeted study of the region's population needs by offline survey method, as well as the possibilities and needs of the region by a comparative analysis of legal documents, scientific publications and analytical reports. Based on the systematization of key aspects of consumer perception of food products, regional utility and export potential of products, a model for integrating regional industry standardization into a regional product branding system is proposed. The integration model application will reduce the risks of inefficiency of regional industry standardization and the system of local producer's food products branding, developed and implemented as a part of the regional industrial policy.

## 1. Introduction

Territory branding recognized in different countries and in Russia as an important strategic tool of regional policy [1]. It actualizes the use of technologies relevant to regional development tasks that require large budgetary investments, therefore the search for optimal territorial branding tools is relevant worldwide [2].

Many practitioners strive to create brands with the help of symbolic and communicative tools, distanced from regional products. Meanwhile, to ensure the strategic goal of spatial development of territories, the urgent task of branding is to support local producers' goods, especially on local food markets [3]. This determines the necessity for a new approach to the integration of product branding technologies into the territory branding technology [4]. The territory brand acts as a multi-aspect tool for supporting local products due to awareness and reputation of the territory. Product brands, in turn,



serve as a tool for supporting regional policy through a territory brand promotion. The importance of integrating product and territorial branding technologies for food products is particularly relevant.

Today, food production in Russia plays an important role in the territories' development, since, on the one hand, it helps to solve social problems, since life, health and working efficiency of citizens directly depend on the quality and safety of food. And on the other hand, economic problems, such as involvement of the population in agribusiness, increasing employment in rural areas, increasing GRP, tax revenues to local budgets, ensuring import substitution of products, as well as increasing agricultural exports [5], are solved. In this way, differential support of local food producers through formation and promotion of product brands becomes an important task of spatial development of territories.

Modelling the mechanism of such support is the purpose of the present study. In addition, the hypothesis of the feasibility and effectiveness of regional standardization for creating and managing product brands as integral attributes of the territory's brand has been confirmed by the method of theoretical and empirical studies synthesis.

## 2. Materials and methods

The formation of a product brand that can become regional, with an emphasis on the place of production, should be based on trust, therefore, first of all, it should be based on the quality of products perceived by consumers [6]. This conclusion is also confirmed by the results of our survey of Krasnoyarsk Krai consumers: 38% of the respondents define the product quality as the main condition for its transformation into a brand.

At the same time, the domestic market is full of low-quality and falsified food products. The main reason for this is unfair work of manufacturers, determined by to the legal basis of their activities. This way, as a result of the transition from state standards to enterprise standards, initiated in 2002 by the Law "On Technical Regulation", unfair competition started prevailing on the market, since high-quality goods, due to the absence of clear quality guidelines, started losing to falsified ones in price and demand. Replacement of the mandatory certification of food products by Declaration of Conformity in 2010, motivated many manufacturers to abandon proper control of raw materials, technologies and finished products in terms of quality and safety, and they started using cheap raw materials that are not listed in the ingredient list.

The above conclusions prove the results of consumer goods quality and safety checks by the territorial state inspection authorities. In 2018, following the results of 68.1 thousand inspections, 117.66 thousand violations of the Customs Union technical regulations requirements were revealed. The result of food products quality monitoring in Krasnoyarsk Krai showed inconsistency with the regulatory documents' requirements from 43% in 2014 to 75% in 2018.

Thus, interactions between producers and consumers, regulated only by market laws, demonstrate their insolvency, and the most acceptable way out is to increase participation of the government agencies applying such "soft" tools as product branding of products with confirmed quality within the framework of standardization and voluntary certification.

Among the existing spatial levels of territorial branding, these are regions that have the maximum potential for creating and promoting product brands due to predominance of regional cooperation in the production and logistics chains. Moreover, to solve the problems of spatial development of regions, standardization of requirements for goods, taking into account the needs arising from the particular characteristics of their environmental conditions, is necessary.

The argument in favour of supporting regional product brands is consumer properties uniqueness, determined by the place of origin. Demand for such products in export markets produces additional effects of territory branding and increases its export potential. But this demand can be sustained only for goods characterized by stable compliance with the requirements formulated in regional standards, including regarding regional identity.

A targeted study of the needs of the region's population, as well as the opportunities and needs of the region as a socio-economic system were selected as the method of determining the content and objects of regional standardization and as a tool for creating and supporting local product brands.

### 3. Results and discussion

An analysis of the conditions and factors for managing local product brands shows that regional industry standards can ensure the quality of local products that meets the objectives of the regional development strategy. Regional standards are perceived as a normative document that establishes basic requirements for quality and safety of products, as well as distinctive features of the goods associated with the region. Efficiency of regional food standards in ensuring high quality of local producers' goods is possible, in the context of integration of regional industry standardization into a product branding system that allows to form government support tools for regional producers relevant to the industrial policy objectives. The proposed food products integration model illustrates the relationship of attributes and their mission objective (Figure 1).

Quality and safety, as well as other key characteristics of food products are prerequisites for their awareness and popularity among consumers. At the same time, the opportunity of becoming a regional brand is also influenced by a number of other aspects, in particular, regional utility and export potential, which were attributed to the criteria for selecting objects of regional standardization and state support, which differ even in one territorial district.

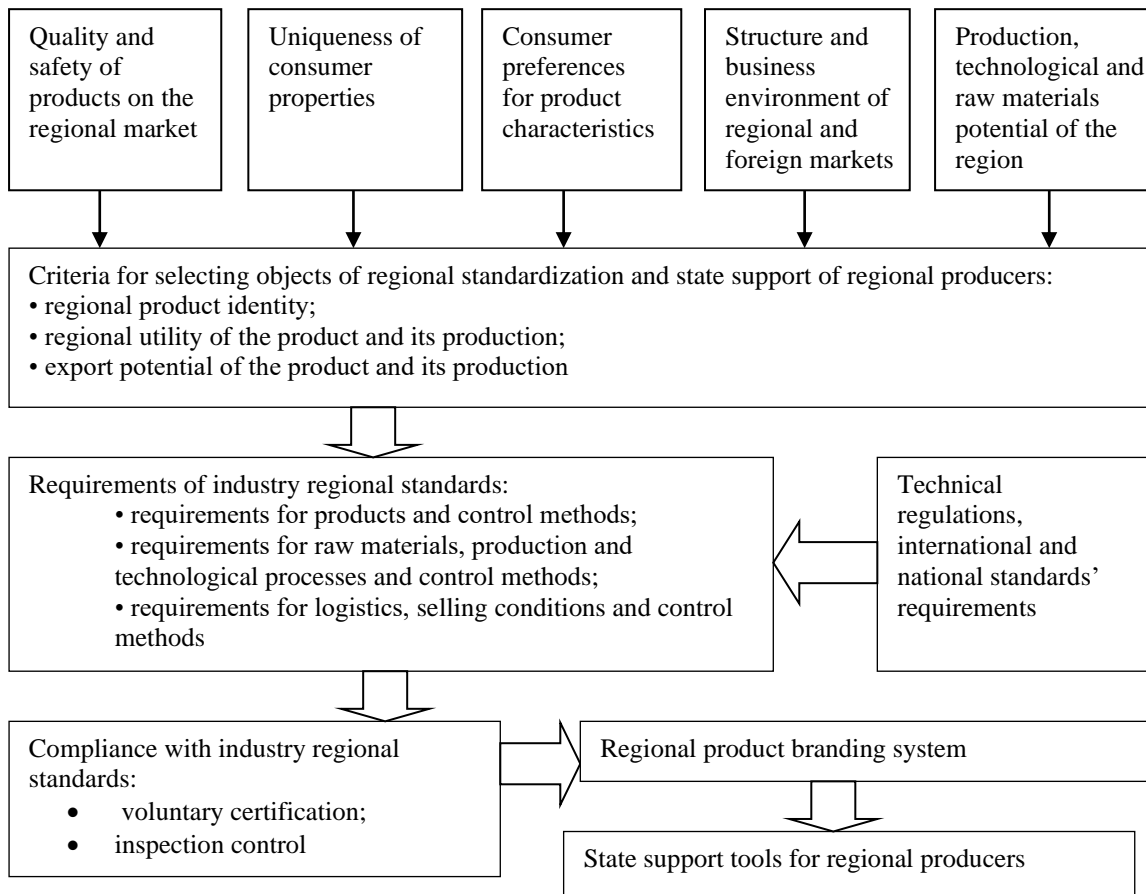
1. *Uniqueness of consumer properties, regional identity of products.* For instance, the water fund of the Yenisei Siberia is rich in sea, freshwater and lake fish, which has a full composition of proteins, microelements and polyunsaturated fatty acids. Therefore, both fish and processed fish products are highly potential for regional industry standardization. A significant area of the forest fund (more than 60 million hectare) and its saturation with berries, mushrooms, food and medicinal herbs rich in vitamins and microelements determine development of regional standards for unique products containing valuable wild-growing raw materials.

2. *Production, technological and raw materials potential of the region.* Despite high provision of Krasnoyarsk Krai with its own resources, the food products production per capita in 2018 compared with 2013 increased only by 20%, but amounts only 17.7 thousand roubles. Meanwhile, a comparative analysis showed that indicators of other regions of Siberian Federal District, for instance, Tomsk Oblast, double Krasnoyarsk indicators – 42% and 30.6 thousand roubles respectively, despite the fact that the number of food processing companies and the volume of investments in their fixed capital is 1.8 and 3 times less than in Krasnoyarsk Krai, respectively. Outperforming growth rates of the food industry in Tomsk Oblast are mostly explained by the innovative nature of development.

3. *Structure and business environment of regional and foreign markets.* Over the analyzed period in Krasnoyarsk Krai, the growth rate of production of the major livestock products was 99.3% for livestock and poultry and 99.7% for milk, and in Tomsk Oblast 115.9% and 101.8%, respectively. Characterizing the regional market, it can be noted that the share of local food products in Krasnoyarsk Krai in 2018 was about 21%, while in Tomsk Oblast it reached almost 47%. Consequently, Krasnoyarsk manufacturers' products need to be popularized among the population through product branding technologies based on improving and confirming quality within the framework of regional standardization.

4. *Consumer preferences for product characteristics.* To standardize quality requirements of a regional product brand, it is necessary to consider not only the requirements established by national standards, but characteristics of consumer perception of food products, as well [7]. The lack of research on the criteria that shape and measure the quality of products perceived by consumers leads to a decrease in efficiency of local producers support measures by local authorities [8]. Therefore, 12 product characteristics that reflect various aspects of quality perception by Krasnoyarsk Krai consumers [9] have been studied. The most frequently mentioned characteristics by consumers were: appearance, color, texture of a product – 59.8%, product freshness – 53.1%, shelf life – 41.6%, taste and smell – 37.1%, natural ingredients – 34, 9. Therefore, these characteristics should be reflected in

regional standards and in voluntary certification in terms of mandatory requirements for food products in order to receive state support, and become key characteristics in product brands formation.



**Figure 1.** A model for integrating regional industry standardization into a food product branding system.

5. *The level of quality and safety of products on the regional market.* To prevent turnover of poor-quality and hazardous to public health food products of local producers on the consumer market of Krasnoyarsk Krai, the Krasnoyarsk Centre of Standardization and Metrology actively monitors the quality of consumer goods. In this way, the monitoring of dairy products carried out in 2018 revealed labelling discrepancy in 17% of tested samples, discrepancies in organoleptic indicators – 30%, discrepancies in physical and chemical properties – 32%, discrepancies in microbiological indicators – 15%, and discrepancies in declared ingredients – 20%. Consequently, there is a necessity to introduce regional quality standards and support for responsible manufacturers by transforming their products into product brands in the product segments, where regulatory violations take place most often.

The considered aspects of regional utility and export potential of food products in the proposed model simultaneously determine the choice of regional industry standardization objects and product branding system, as well as provide a synergistic effect from their integration. In case of compliance with regional standards, confirmed by voluntary certification and subsequent inspection control, a local producer will be able to ask for support of regional authorities in promoting their product brand. Technologies and means of such support can be selected in the following areas:

- subsidizing the costs of voluntary certification to confirm the conformity of quality and territorial identity of products with the requirements of regional industry standards;
- promotion of a product as a symbol of the region at cultural, sports and economic forums of national and international levels;
- regulating interactions with logistics centres and retail chains;
- consulting support for introduction of a product on foreign markets;
- improving legal and regulatory framework for the activities of state regulatory bodies to combat sale of counterfeit products;
- monitoring regional commodity markets and scientific and technical information to the region's population about the quality and utility of local food brands.

The practice of monitoring consumer goods quality in Krasnoyarsk Krai has shown that widespread media coverage of the results of comparative assessments of product quality using laboratory methods, expert assessments and consumer testing significantly influences consumer preferences and enhance technological discipline of producers.

#### 4. Conclusions

The study has confirmed the need to use product branding as a tool for territory branding. High social and economic importance of food production for Krasnoyarsk Krai is determined both by the raw material and production potential, and the fact that 70% of the municipal formations of the region specialize in food industry. However, the existing orientation of the industrial policy of the region only to a quantitative increase in local production and reduction in the cost of manufactured products is accompanied by risks of reducing its competitiveness. The lack of vectors for improving quality and ensuring regional identity of local products leads to low efficiency of the implemented industrial policy. In addition, even improving the quality of regional products without its systematic popularization among the population with branding tools does not guarantee an increase of local producers' competitiveness [10].

The developed model of regional industry standardization, integrated into the product branding system, will give an opportunity to implement market principles for supporting local producers and mitigate the existing inefficiency risks due to: flexible response to the dynamic needs of the market and population; rational management of consumer preferences (based, in contrast to deceptive advertising, on the scientific and technical informing of the population about the objectively proven quality of products); careful use of the unique resource potential of the region; intensification of regional entities interactions that promote business and emotional involvement in the economic and social life of the territory, as well as increased demand for local products.

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