Sustainable Development of Rural Territories in the Conditions of Territorial-Production Localization: Methodological Aspect

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Abstract. Sustainable development of rural territories in the conditions of territorial-production localization: methodological aspect. The issues of sustainable development of territories are given great attention. However, in most of the works, general statements of problems, concepts and principles prevail: an analysis of the sustainable development of territories, a comparative analysis of the development of various socio-economic systems in the regions and other general problems of the country's social and economic development. The insufficient depth of elaboration of conceptual provisions limits the practical value based on the recommendations existing in theories, aimed mainly at the sphere of macroeconomic regulation. This makes it necessary to further study the issues of sustainable development of rural territories. One of the promising areas is production and territorial localization. The local market is a market of a municipality of a region of the Russian Federation or part thereof, representing an economic system based on the principles of limited resources, characterized by the predominance of locally produced goods, unified logistics and a zone of price influence. Development is a process of qualitative and quantitative changes that enhance and improve the current state of the system, i.e. the process of transition from the old, simple to the new, more complex, higher, quantitative and qualitative state of the system. The concept of "development" is closely related to "management." When these concepts are correlated, the relation of the part to the whole is traced. The assessment of the level of development and location of local markets in rural areas was carried out on the basis of the adjusted XYZ analysis, which allowed us to predict development prospects.

1. Introduction

Economic development is closely linked to economic growth. The main difference between economic growth is the quantitative measurement of the increase in production and sales of goods, works, services. Economic development includes not only the process of expansion, narrowing the scale of production, but also the changes taking place in the sphere of economic relations governing the issues of ensuring property rights and management. The study of the conditions that allow the development of the territory is devoted to the works of Zhid Sh., Rist Sh [1], U. Petty, [2] A. Smith, [3] D.J. M. Keynes [4]. The
study of conditions and the search for sources that contribute to the sustainable development of the territory of a country, region, allows rational use of economic laws in the formation and functioning of local territories, which, in turn, allows us to talk about the conditions for the development and formation of a certain economic system, which affects the functioning of local territories.

2. Materials and methods
The theoretical and methodological basis of the study amounted to works of domestic and foreign scientists on problems of agricultural production; development of land relations; research and recommendations of the Russian Academy of agricultural sciences of the Russian Federation, laws, presidential decrees and orders of the Government of the Russian Federation, normative-legal acts of the constituent entities of the Russian Federation, the EU regulation on the development of ecological agriculture, IFOAM standards. Methodological framework served as a systemic approach allowing ensuring comprehensiveness and focus. Also used were analytical, abstract-logical, settlement and constructive, economics and statistics, economic-mathematical, monographic research methods.

3. Results
It is advisable to combine the indicators of socio-economic development into aggregated factors to assess their impact on the principles of the location of transboundary local territories and markets in the region. We interpreted these factors influencing the placement as a set of emergent effects. Among the emergent effects were included: economic, political (state), ideological, informational, social, socio-cultural and educational factors.

![Figure 1. Scheme of formation of a set of emergent effects for transboundary local territories and markets in the conditions of the region's development [9].](image-url)

The indicated factors can affect each other, forming 3 effects:
1. synergy effect - enhanced action
2. effect of antagonism - weakening of interaction
3. adaptability effect - a simple summation of the final results without any noticeable effect on each other.

The analysis of the location of local territories and markets is carried out using a generalizing coefficient of localization. The localization coefficient of the i-th local market in the r-th local territory (Kir) can be calculated using the following formula:
\[ Kir = \frac{q_{ir}}{q_r} \frac{q_i}{Q} \]  

where:
- \( q_{ir} \) is the volume of sales of the \( i \)-th local market in the \( r \)-th local territory
- \( q_i \) is the total volume of sales of the \( i \)-th local market in the region
- \( Q_r \) - volume of products sold in the \( r \)-th local territory
- \( Q \) - volume of sales in the region

If the value of the localization coefficient is more than 1, then the concentration of the \( i \)-th local market in the \( r \)-th local territory exceeds the average specific weight in the structure of production in the region. In accordance with this, you can rank local markets by the following criteria:

- Kir 3 - \( i \)-th local market with a high level of localization in the \( r \)-th local territory
- Kir 13 - \( i \)-th local market with an average level of localization in the \( r \)-th local territory
- Kir 1 - \( i \)-th local market with an average level of localization in the \( r \)-th local territory

Evaluation of the principles of placing local markets in rural areas is carried out on the basis of the adjusted XYZ analysis. The values for the XYZ analysis should be divided into the following categories:

- **Category X** - local markets in which the sale of products is stable with minimal changes in their consumption and a high degree of formation of forecast indicators. The coefficient of variation can take a value from 0 to 10%.
- **Category Y** - local markets in which product sales have predictable trends with tangible seasonal changes and with an average degree of probability of their forecasting. The coefficient of variation can take on a value from 10 to 25%.
- **Category Z** - local markets in which product sales are irregular, it is difficult to determine the trend, the low degree of formation of forecast indicators. The coefficient of variation can take a value of more than 25%. (Table 1).

### Table 1. The calculation of the coefficient of variation on the local tourism market in the Altai Territory, 2016-2918. average [10].

| Indicators | realize for population Tourist permit, number | Cost of realize for population Tourist permit, mln.rub. | Number Tourist,population |
|------------|---------------------------------------------|-----------------------------------------------------|---------------------------|
| coefficientStandard deviation | 7056,30 | 539,26 | 11744,04 |
| Standard deviation | 34305,8 | 1790,46 | 62361,6 |
| Arithmetic mean | 20,57% | 30,12% | 18,83% |
| The coefficient of variation | 23,17% |

The calculated arithmetic mean value for the local tourism market in the Altai Territory allows it to be classified as Y.

The calculated coefficient of variation in the local industrial production market with a value of 55.30% should be classified as Z. This means that in the represented local market the products are sold irregularly and there are no trends. The coefficient of variation is twice the minimum value of the indicator in this category. As a result, there are difficulties with planning and forecasting the sale of these products in the analyzed local market.

The second stage in conducting XYZ analysis is the grouping of local markets into categories (table 2).
Table 2. Grouping of the coefficient of variation by local markets [10].

| Category | Coefficient of variation | Local market (%) |
|----------|--------------------------|------------------|
| «X»      | 0<V<10%                  | tourist (23,17)  |
| «Y»      | 10%<V<25%                | agricultural (23,02) |
| «Z»      | V>25%                    | production (55,30) |

During the XYZ analysis, it was revealed that the local tourism and agricultural markets occupy the “Y” category. The local market and industrial production are in the category “Z”. As a result, significant transformations are required because these local markets are potential destinations for both cross-border territories and the Altai Territory.

The localization coefficient of the local market in the r-the local territory (Kir) will be calculated according to formula 1. Agriculture will be the first local market; the second is industrial production, and the third is tourism. Analysis of the 3rd local market is not possible, since this local market begins to develop in the local area.

The future functioning of rural areas is based on the concept of cross-border cooperation. The main tasks in this direction will be: reducing the differentiation of local territories, increasing the volume of exported products, the uniform functioning of local markets.

The logical scheme for the development of territories and markets provides for successive stages from determining the capabilities of local territories, markets to international demand for products (services), taking into account the Strategy for socio-economic development of the Altai Territory until 2035.

Substantiation of the concept of development of local territories and markets was carried out in several stages (Fig. 2).

At the initial stage, the volume and structure of local markets are justified: agriculture, industry and tourism. The volume of products (services) will be formed on the basis of an analysis of the needs of buyers from foreign countries.

At the second stage, segmentation of local territories is carried out taking into account the specialization and resource provision of the territory.

At the third stage, the development of new deposits is carried out, as well as the search for suitable fields for agricultural production and unique tourist places.

The fourth stage is the updating and reconstruction of infrastructure elements, especially in the part of the local tourism market.

At the fifth stage, the volumes of agricultural and industrial products, tourism services are formed in accordance with the requirements of foreign buyers.

At the final stage, the volume of production (provision) of products (services) is formed on the basis of the local location of markets in transboundary territories.
Figure 2. Algorithm of directions for the prospective development of local territories and markets [9,10].

Based on the calculations, the proposals on the development of local territories in the conditions of cross-border cooperation are justified, taking into account the location of local markets: tourism, agriculture, industry in the transboundary zone.

Of course, an important factor in the implementation of this kind of partnership is the initiative of business structures and the support of municipal authorities. Partnership in this direction will become unique, contributing to the simultaneous development of both local territories and dominant local markets.

Public-private partnership (hereinafter PPP), municipal-private partnership (hereinafter PPM) - an agreement for a certain period of time and on the basis of pooling resources and sharing risks between authorities and business structures, based on an agreement on PPP, an agreement on PPM [6, eleven].

In order to sustainable development of territories, it is proposed to introduce the following block - scheme (Fig. 3).

Figure 3. Block - scheme for creating MCHP by dominant local territories.
In the indicated context, the integration will be carried out on the basis of an agreement on MPP. The rationale for the application of this agreement is that the pooling of resources and the distribution of risks will be carried out at the municipal level.

4. Discussion
Monitoring and coordination by state authorities seems to be an expedient measure, which will allow municipal authorities to fulfill the function of not only accumulating resources, but also creating conditions for development for businesses operating within the framework of dominant local markets. Municipal authorities in this case act as an intermediary in the provision of resources that create significant conditions for business development.

5. Conclusion
In the Altai Territory there are promising directions for the development of local territories and markets. Due to the fact that not all local territories operate local markets, opportunities are created for the formation of partnerships. These relationships may be between more developed cross-border territories with local markets and less developed. Partnership can be carried out on the principles of EMP, which will create significant advantages for territories with developed local markets as well as underdeveloped.

With the interaction of municipal authorities and business structures and on the basis of the relationship of economic, political (state), ideological, informational, public, socio-cultural and educational institutions, the MCP is formed. The more effective the MCP is in the formation and functioning of dominant local markets in the territory, the higher the rate of sustainable economic growth.

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