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Strategic PR Guidelines for Marketing Planning to Ensure the Sustainable Development of Socio-Economic Systems

Iryna Martusenko[1], Inna Boychuk[2*], Nadiia Baluk[2], Lesia Sai[3], Tetiana Fursa[4]

[1] Department of Economics, Accounting and Taxation, Vinnytsia Educational and Scientific Institute of Economics, West Ukrainian National University, Vinnytsia 21000, Ukraine
[2] Department of Marketing, Lviv University of Trade and Economics, Lviv 79000, Ukraine
[3] Department of Management and International Business, Lviv Polytechnic National University, Lviv 79059, Ukraine
[4] Department of Management and Administration, West Ukrainian National University, Ternopil 46000, Ukraine

Corresponding Author Email: boychuk.edu@gmail.com

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ABSTRACT

The main purpose of the article is to determine the strategic public relations (PR) guidelines for marketing planning the sustainable development of the socio-economic system in the region. The research methodology provides for the use of modern methods of taxonomic analysis, linear trend and multivariate correlation and regression analysis. As a result, an integral indicator of sustainable development of the agricultural sector of a particular region was determined. Comparatively and estimated the level in the dynamics of the last few years. Modeling of indicators of sustainable development was carried out in order to determine the strategic orientation for planning for this region. The recommended strategic PR-landmark for enterprises of the region has been determined for the purpose of further sustainable development. The study is limited by not taking into account all possible indicators and focusing only on a specific area of activity and region.

1. INTRODUCTION

Planning to ensure the sustainable development of socio-economic systems in the region depends on many different factors, among which the leading place is occupied by their provision with various types of potentials. Since sustainable development implies a harmonious combination of economic, social and environmental components, it is necessary to analyze the economic, environmental and social development of the region in relation to agricultural enterprises.

The defining model of human development in modern conditions is the concept of sustainable development, which involves a harmonious combination of economic, social and environmental components. This is especially true for the development of agricultural socio-economic systems, which, due to the peculiarities of their economic activities, depend not only on economic, but also on social and environmental factors. However, the problems of the agricultural sector in the context of increasing its competitiveness and the desire of agricultural enterprises to maximize profits by any means do not contribute to their compliance with environmental principles and their sustainable development in general.

PR guidelines for planning the sustainable development of the agricultural socio-economic system are irreversible, targeted and regular qualitative and quantitative changes in the economic system, both positive and negative, under the influence of internal and external environmental factors in order to harmoniously develop the economic, marketing, environmental and social spheres.

The basic guidelines for PR orientation is to meet the needs of the population in various and high-quality services through the creation of an effective system for managing the service market that can stabilize and ensure its growth. At the same time, the goals and objectives determine the main composition of the guidelines and areas of marketing activity: the development of competition; formation of an information system of the services market; development of public service infrastructure; support for production, marketing and innovation activities of public service enterprises; credit, financial and investment support for agrarian socio-economic systems; scientific, methodological and personnel support for the development of the public service sector; improvement of economical methods of industry management; implementation of financial and economic support for enterprises providing social services to the population.

All this and much more adds to the relevance of the research topic we have chosen. That is why the main purpose of the article is to determine the strategic PR guidelines for marketing planning the sustainable development of the socio-economic system (on the example of the agrarian systems of a particular region) in the region.

The structure of the article involves the analysis of scientific literature, the presentation of the methodology and results of the study. This is followed by a discussion of the results on the example of comparing them with similar ones and the presentation of the main conclusions with further prospects for the study.

2. LITERATURE REVIEW

Examining the scientific literature, it should be noted that the attention to the problems of sustainable development of the rural sector on the part of government authorities, economists and the scientific community is predominantly theoretical and sometimes purposeful practical. Most scientists in their studies [1-3] assign a significant role to the periphery as an integral part of a holistic and balanced society, approaching this topic from geographic, demographic and economic perspectives. Poverty in rural areas and high unemployment, deteriorating demographic situation, reduction of the network of social infrastructure institutions in rural areas, which negatively affect the reproduction of labor resources, decline in production and high rates of migration have always been problems of rural development in different countries.

Dynamic structural transformations in the settlement network, demographic processes of different speeds and real downward trends of previous changes, economic and agrarian crises that continue to operate in the current conditions, prompted the emergence of new realities. Their objective assessment allows us to conclude that there is a further interpenetration of both the functions of agriculture in the production sphere of urban settlements, and the functions of industrial activity in rural settlements. In this regard, there is a dynamic “blurring” of intersectoral and administrative boundaries not only between the city and the countryside, but also intersectoral ones, which objectively creates ambiguity. It is possible to overcome such ambiguity only by rising to the highest level of consideration of the object - that is, to analyze not agriculture or the village, but the agro-socio-ecosystem or the rural sector [4-6]. We agree with this and that is why it is necessary to analyze the whole sector in a single region.

As noted by leading scientists in the scientific literature [7-10], ensuring the sustainable development of all components of the socio-economic system is important for any country today, especially in the context of European integration. Consumer attitudes towards natural resources, an attempt to achieve the highest economic effect, despite the damage done to the environment, and the lack of adequate funding for environmental protection measures have led to depletion, degradation, deterioration in the quality of natural resources, deterioration of health and living conditions of the population.

Some scientists [11-13] note that the level of agricultural development is insufficient to meet the needs of the population in quality food products, the production of many types of products is unprofitable or brings very low profits, agricultural producers do not have enough funds to ensure the proper development of the industry, the introduction of innovations to improve quality products, increasing production efficiency, reducing the harmful impact on the environment, there is often a discrepancy between the natural resource potential of certain territories and the amount of its use. And this does not allow you to change your PR strategy for these socio-economic systems.

Thus, knowing the proper scientific heritage from various scientific sources and literature, the question of forming strategic PR guidelines for planning to ensure the sustainable development of the socio-economic system through new, non-standard methodological approaches still remains open.

3. METHODOLOGY

Considering the methodology of the study, it should be noted that the main methods that we used during the study are the method of taxonomic analysis, the method of linear trend and the method of multivariate correlation and regression analysis.

One of the important methods of sustainable development of enterprises, including agricultural ones, is the method of multivariate comparisons, which is called taxonomic analysis. The essence of this method lies in the possibility of systematization and analysis of indicators characterizing, in this case, the development of enterprises. The planning depends on the indicators. Since the indicators of sustainable development of socio-economic systems are heterogeneous and multi-vector and are based on the use of various types of enterprises' potential, it is with the help of the taxonomic method that they can be integrated into a single result.

A general assessment of the sustainable development of agricultural enterprises in order to determine strategic guidelines is carried out on the basis of the study of many indicators of the efficiency of using all types of potentials of enterprises, which are quite often incomparable through different units of measurement. When calculating a taxonomic indicator, a data matrix is used, made up of standardized characters. Standardization allows you to get rid of the unit of measurement - both cost and natural. That is why this method is suitable for analyzing the development of enterprises. In addition, an important characteristic of the development of enterprises is the study of cyclicity, the definition of development phases, which is also possible when applying taxonomic analysis.

At the first stage of the taxonomic analysis of the sustainable development of enterprises, it is necessary to form an observation matrix, which will consist of various indicators that affect the planning of sustainable socio-economic systems. Let us consider the characteristics that characterize the development of agricultural companies in accordance with the efficiency of using different types of potentials. The main components that directly affect the PR-orientation of planning for the sustainable development of socio-economic systems are economic, including land, labor and material and technical; social and ecological.

Having formulated a matrix of observations from the selected indicators at the next stage, they need to be standardized in order to get rid of units of measurement. The standardization process is typical for many multivariate statistical methods and provides for the normalization of the initial data so that the indicators for measuring factors become dimensionless. In this case, standardization will occur by dividing each value of the indicator by its average value for a number of periods under study.

At the next stage of the taxonomic analysis of sustainable development, indicators should be differentiated into stimulants and destimulators according to the nature of the influence of each of them on the level of development of the object under study. Indicators that have a positive impact on the overall level of development of the object are called stimulators, opposite to destimulators.

The study of the characteristics of sustainable development of agricultural socio-economic systems provides a basis for effective planning.

The next step in determining the taxonomic indicator of the level of sustainable development of enterprises is to establish the distance between individual observations (periods) and the reference vector. This distance is calculated by formula (1):

$$C_{io}=\sqrt{\sum_{i=1}^{m}(z_{ij}-z_{oj})^2} \quad (1)$$

where, z_{ij} is the standardized value of the *j*-th indicator in time period *i*; z_{oj} - standardized value of the *i*-th indicator in the standard.

The resulting distance is the initial one for calculating the indicator of the level of development of enterprises, determined by the formula:

$$K_i=1-d_i \quad (2)$$

where, d_i is the indicator of the deviation of the enterprise's indicators for the *i*-th year from the standard.

To calculate it, it is necessary to make intermediate calculations of the indicators omitted for demonstration in the article in order to maintain the optimal text size.

Taxonomic analysis of the development of enterprises can acquire a value in the interval [0; 1] and at the same time have the following interpretation: enterprises in a given period have the higher the level of development, the closer the value of the generalizing indicator is to one. The gradation of the taxonomic indicator for determining the strategic PR-landmark for planning sustainable development is shown in Table 1.

Table 1. Gradation scale of a taxonomic indicator to determine the strategic PR-orientation of sustainable development planning

Level of sustainable development	Indicator value	Strategic guidelines
The highest level	1-0.8	Dominant strategy
High level	0.79-0.6	Aggressive strategy
Average level	0.59-0.4	Aggressive-passive strategy
Low level	0.39-0.2	Passive strategy
Critical Level	0.19-0	Anti-crisis strategy

One of the most popular forecasting models used in practice is a trend model - a regression model in which the dependent variable is the indicator we are studying, and the independent variable is the time or number of observation of this indicator. In other words, a trend is its mathematical description of a time trend. The linear trend is probably the simplest, most intuitive and most common of all trends. We have already referred to it several times earlier in this chapter. It describes a uniform change in the indicator over time. Its place in our study is to model the indicators of sustainable development of agricultural enterprises in the region we have chosen in order to form key strategic PR-planning guidelines.

4. RESULTS OF RESEARCH

To calculate the integral indicator of sustainable development of agricultural enterprises of the Masovian Voivodeship Region, on the basis of official statistics, a system of sustainable development indicators was formed, which includes 55 indicators of the development of the economic, environmental and social spheres of the region. Considering the versatile effect of the above indicators, we divided them into those that positively affect the general indicator (have a stimulating effect) and those that negatively affect, that is, where they are stimulants. The indicators of stimulants include the following indicators:

– number of agricultural enterprises (X1);
– gross agricultural output in comparative prices (X2);
- gross value added of agriculture, forestry and fisheries (X4);
- received profit (X5);
- profitability level (X6);
- labor productivity per 1 average annual worker (X7);
– average annual cost of fixed production assets (X8);
- capital productivity (X9);
- gross harvest of grain and leguminous crops (X10);
- the share of gross agricultural output in the total indicator (X11);
- the amount of investment in agriculture (X12);
– index of capital investments in agriculture (X13);
- the volume of exports of products (X14);
– indices of sales prices of agricultural products (X15);
- gross output per 100 hectare of agricultural land (X16);
- availability of tractors per 1000 hectare of arable land (X17);
– availability of energy capacities per 100 hectare of sown area (X18);
– rural population (X19);
- share of the rural population (X20);
- average annual number of employees employed in agricultural production (X21);
– average monthly nominal wages of workers employed in agriculture (X22);
- index of wage growth in agriculture (X23);
– index of real household income (X25);
- the share of enrollment of rural children in educational institutions based on the number of children of the corresponding age (X31);
- consumption of meat and meat products in rural areas per 1 person (X32);
- consumption of vegetables in rural areas per 1 person (X33);
- housing stock per one rural resident (X34);
- applied mineral fertilizers in nutrients (X43);
- share of the fertilized area with mineral fertilizers (X44);
- introduced into the soil of mineral fertilizers in nutrients per 1 ha of sown area (X45);
- total organic fertilizers applied (X46);
- share of the fertilized area with organic fertilizers (X47);
- organic fertilizers were applied on 1 hectare of sown area (X48);
- volume of circulating and re-sequential water supply (X50);
- capital investments and current expenditures on environmental protection (X54);
- indexes of costs for environmental protection (X55).

The indicators that have a destimulating effect include:
– share of agricultural production by households (X3);
- unemployment rate in rural areas (X24);
- consumer price index (X26);
- consumer price index for foodstuffs (X27);
– number of pensioners per 1000 population (X28);
- natural increase (decrease) of the population in rural areas (X29);
- share of household consumer spending (X30);
- sown area under agricultural crops in agricultural enterprises (X35);
- coefficient of plowed land (X36);
– area of disturbed agricultural land (X37);
- area of waste agricultural land (X38);

– reclamation of agricultural land (X39);
– expenses of plant protection products (X40);
– area where plant protection products were applied (X41);
– quantity of applied pesticides per 1 hectare (X42);
- water consumed for agricultural purposes (X49);
- emissions of carbon dioxin into the atmosphere (X51);
- emissions of pollutants into the atmospheric air from stationary sources of pollution (X52);
– waste generation (X53).

The indicators were selected from a large number of available scientific and practical lists and were agreed between all authors and those responsible for the sustainable development of the region chosen as the object of study in our article. In general, we can say that most of them are typical.

Based on the above indicators, we created a matrix of observations for conducting a taxonomic analysis of the sustainable development of agrarian socio-economic systems of the Masovian Voivodeship Region for the period 2015-2021 (Table 2).

Table 2. Matrix of observations for the analysis of sustainable development

Indicators	2015	2016	2017	2018	2019	2020	2021
X1	1827	1845	1856	1890	1870	1893	1926
X2	9096.0	10892.7	10577.1	11335.6	11102.8	10985.5	11372.8
X3	26.2	21.8	24.6	24.2	24.5	24.9	24.1
X4	4694	5672	5909	6895	8578	11919	12348
X5	671098.4	811215.5	1434329.0	1798384.0	761231.7	6054241.3	5553092.8
X6	18.3	18.2	27.1	24.7	10.5	49.4	42.3
X7	279.9	335.4	330.5	359.1	366.6	363.2	376.3
X8	2713368	2813474	3021227	3042913	3093826	3110550	3119837
X9	3.35	3.87	3.50	3.73	3.59	3.53	3.65
X10	25311	37619	33106	40685	36997	37455	40917
X11	6.3	6.2	6.3	5.9	5.9	6.1	5.9
X12	705508	948044	1043520	1042619	1164173	1636386	2729762
X13	126	134	110	100	112	141	167
X14	201801	359856	332508	269750	224714	158775	189748
X15	127.0	114.8	109.3	90.3	130.1	156.2	115.3
X16	913.4	1097.3	1072.9	1149.9	1127.2	1120.5	1151.3
X17	8	8	8	8	8	7	7
X18	190	192	203	198	184	228	235
X19	573.1	566.6	560.9	555.6	549.5	543.7	538.8
X20	44.2	44.0	43.9	43.7	43.6	43.4	43.0
X21	32493	32473	31999	31564	30282	30245	30224
X22	1608	1986	2384	2458	2661	3178	4128
X23	1.19	1.23	1.16	1.03	1.08	1.12	1.3
X24	9.94	10.12	9.89	8.94	10.20	9.77	10.36
X25	115.1	112.5	111.1	104.4	89.3	80.0	102.0
X26	109.0	103.5	99.5	100.3	124.2	143.8	112.7
X27	111.2	107.4	97.5	99.1	121.2	139.3	103.2
X28	334	335	336	336	341	339	338
X29	-6944	-6770	-5665	-6012	-5937	-6006	-6362
X30	85.9	77.1	75.8	81.2	79.6	63.4	66.9
X31	51	52	55	55	55	55	56
X32	3.7	4.7	4.0	4.2	4.6	5.1	5.3
X33	9.3	12.2	11.3	10.1	10.2	10.0	10.7
X34	31.5	31.8	32.6	33.1	33.9	34.2	34.7
X35	1199.2	1197.5	1205.4	1203.0	1200.4	1200.6	1195.0
X36	87.6	87.6	87.6	87.6	87.6	87.6	87.7
X37	3.478	3.478	3.478	3.478	3.478	3.478	3.478
X38	1.957	1.957	1.957	1.957	1.957	1.957	1.957
X39	0.01	0.01	0.0	0.0	0.0	0.0	0.0
X40	2.45	2.45	2.49	2.59	2.23	2.14	2.45
X41	2.67	2.93	2.94	3.07	2.59	2.59	2.67
X42	1.09	1.9	2.07	2.0	1.9	1.8	1.09
X43	772.4	857.2	1006.5	994.0	906.5	887.8	979.2
X44	79	82	86	87	87	87	91
X45	83	90	107	106	97	97	108
X46	1147.4	1152.1	1134.4	1038.9	1230.6	1076.0	1130.0
X47	4	4	4	3	5	5	5
X48	1.2	1.2	1.2	1.1	1.3	1.2	1.2
X49	5.04	5.78	8.88	8.59	10.59	10.94	10.05
X50	720	694	665	599	527	436	531
X51	4341.6	4288.2	3956.1	3787.3	3633.0	3524.6	2889.9
X52	61201	65593	69379	73058	66719	57457	52319
X53	1526667	17763	1895420	1029828	1041223	1179180	1219156
X54	98.1	147.5	181.7	185.6	223.5	260.3	266.4
X55	129.8	150.4	209.8	102.1	120.4	116.5	102.3

The data presented in Table 2 allow for a taxonomic analysis of the sustainable development of agrarian socio-economic systems in the selected region. They will become the basis for further calculations.

Reference points were calculated in the taxonomic analysis of the sustainable development of the agrarian socio-economic systems of the Masovian Voivodeship Region for the period 2015-2021. (Table 3).

Table 3. Calculation of reference points in the taxonomic analysis of sustainable development

Indicators	Points
X1	1.604
X2	0.726
X3	-1.921
X4	1.416
X5	1.546
X6	1.591
X7	0.967
X8	0.825
X9	1.588
X10	0.909
X11	1.149
X12	2.064
X13	1.757
X14	1.480
X15	1.750
X16	0.736
X17	0.586
X18	1.564
X19	1.428
X20	1.280
X21	1.108
X22	1.815
X23	1.545
X24	-2.046
X25	1.002
X26	-0.865
X27	-0.935
X28	-1.225
X29	-1.496
X30	-1.545
X31	0.996
X32	1.351
X33	1.731
X34	1.301
X35	-1.506
X36	-0.378
X37	-0.926
X38	-0.926
X39	-0.586
X40	-1.654
X41	-0.973
X42	-1.434
X43	1.080
X44	1.388
X45	1.028
X46	1.657
X47	0.945
X48	1.732
X49	-1.516
X50	1.197
X51	-1.779
X52	-1.587
X53	-0.995
X54	1.181
X55	2.035

Having carried out the standardization of the observation matrix, we received the coordinates of the point P0 = (1,604; 0,726; -1,921; 1.416; 1.546; 1.591; 0,967; 0,825; 1,588; 0,909; 1,149; ; 1.280; 1.108; 1.815; 1.545; -2.046; 1.002; -0.865; -0.935; -1.225; -1.496; - 1.545; 0.996; 1.351; 1.731; 1.301; -1.506; -0.326; -0.9 0.586; -1.654; - 0.973; -1.434; 1.080; 1.388; 1.028; 1.657; 0.945; 1.732; -1.516; 1.197; -1.779; - 1.587; -0.995; 1.181; 2.035).

Using the method of taxonomic analysis, the integral indicator of sustainable development of agrarian socio-economic systems of the Masovian Voivodeship Region for the period 2015-2021 was calculated, which is presented in Figure 1.

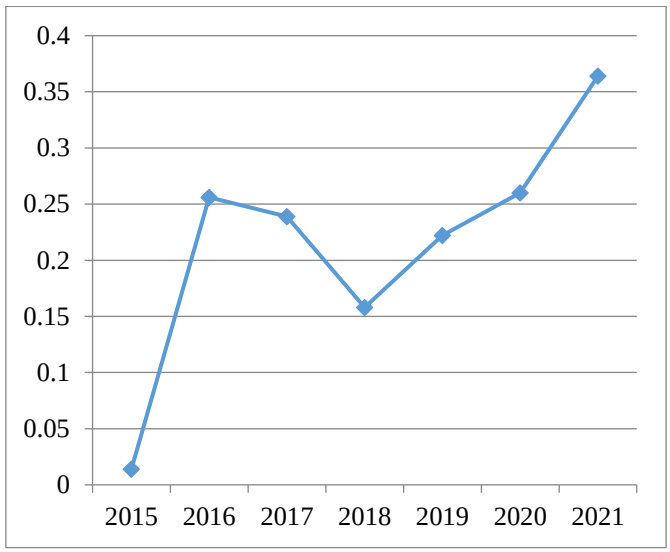

Figure 1. Dynamics of the integral indicator of sustainable development

Here Y-axis shows a scale of values for a better understanding of the limits of the results of our calculations. The data of the analysis performed show a positive trend in the sustainable development of the agrarian socio-economic systems of the Masovian Voivodeship Region. At the same time, it should be noted that the calculated indicators lag behind the ideal value (1), which indicates a general low level of sustainable development of the agrarian socio-economic systems of the Masovian Voivodeship Region.

The lowest indicators of sustainable development of the studied industry were obtained in 2015, then reached the level of 0.256 in 2016, but already in 2018 there is a decrease to 0.158. However, starting from 2019, these indicators show an upward trend and in 2021 their level was 0.364 (2.3 times more than in 2018). Integral indicators of sustainable development of agricultural enterprises in rural areas of the region in terms of its backbone components have multidirectional trends. Thus, private integral indicators of the economic and environmental development of the agrarian socio-economic systems of the Masovian Voivodeship Region are of an ascending nature, while the downward character of development is inherent in the social sphere.

Figure 2 shows the trend of change in the partial integral indicator of the economic development of the agrarian socio-economic systems of the Masovian Voivodeship Region.

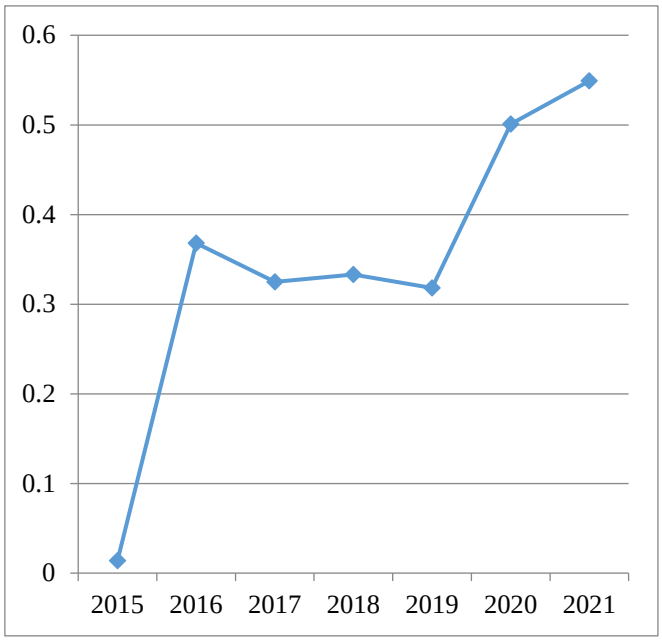

Figure 2. Dynamics of the partial integral indicator of economic development

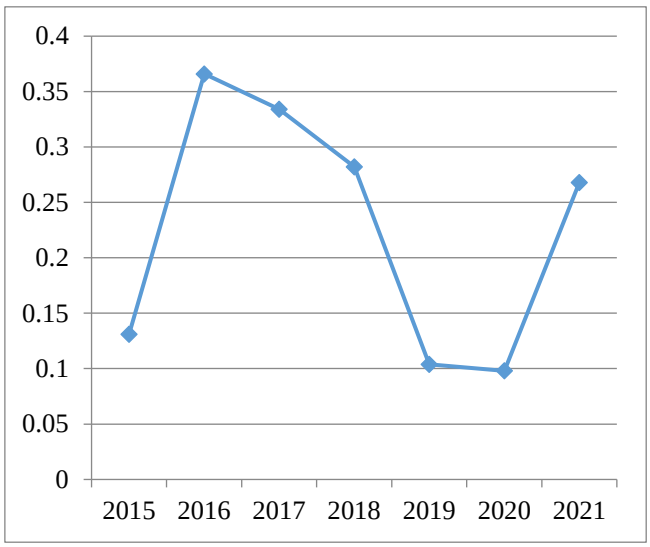

Figure 3. Dynamics of the partial integral indicator of social development

The results obtained allow us to conclude that the economic sphere makes the greatest contribution to the sustainable development of the agrarian socio-economic systems of the Masovian Voivodeship Region, since the obtained values are closest to one. During 2016-2018, in this region, the economic development indicator was almost at the same level (0.367-0.318) and some stagnation of the industry was observed. However, already in 2020, this indicator increased immediately by 58% and amounted to 0.501, and in 2021 - 0.549, respectively.

The positive dynamics of the economic development of the agrarian socio-economic systems of the Masovian Voivodeship Region was ensured by the growth of the main indicators of the activity of the agricultural enterprises of the region, namely the growth of gross output, the amount of profit received, the level of profitability, labor productivity, the amount of investment in marketing and PR.

In the social sphere, during the analyzed period, the greatest lag behind the ideal indicator is observed, and the partial integral indicator of the social development of the agrarian socio-economic systems of the Masovian Voivodeship Region has a general downward trend, despite the sharp increase in this coefficient in 2021 (Figure 3).

Thus, the values of the partial integral indicator of social development in 2019-2020 were more than 3.5 times less than in 2016. The main factors that led to the low level of social development in the region were the decline in the rural population, the growth of unemployment in the industry, the decline in real incomes and the conditions of consumption and living.

This indicator is negatively affected by a poorly developed social infrastructure, in which it is especially important to single out the provision of medical and educational services, which is bad for a PR strategy. That is why we can conclude that the level of sustainable development of the agrarian socio-economic systems of the Masovian Voivodeship Region directly depends on the development of the social sphere, which requires the development and implementation of appropriate social programs and development strategies. An upward trend is demonstrated by a partial integral indicator of the ecological development of the agrarian socio-economic systems of the Masovian Voivodeship Region (Figure 4).

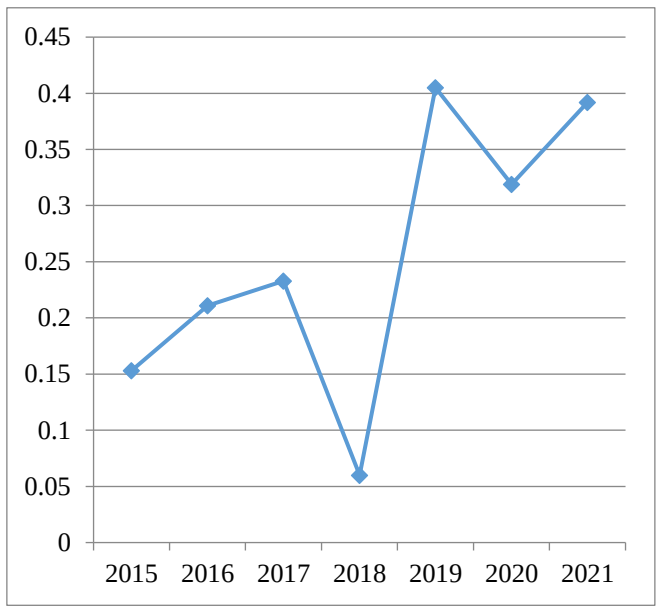

Figure 4. Dynamics of a partial integral indicator of ecological development

Based on the obtained integral indicators of sustainable development of agriculture using the linear trend method, we predicted the indicators of sustainable development of the agrarian socio-economic systems of the Masovian Voivodeship Region for the period up to 2025 (Table 4).

The above calculations allow us to conclude that the indicator of sustainable development of the agrarian socio-economic systems of the Masovian Voivodeship Region for the forecast year 2025 will grow to 0.588 (by 62%), which is a positive phenomenon. If we consider this growth in the context of individual areas, then the forecast indicators will be as follows:

- partial integral indicator of economic development – 1.010;
- partial integral indicator of social development - 0.099;
- partial integral indicator of ecological development – 0.648.

Table 4. Modeling indicators of sustainable development

Indicators	Actual value for 2021	Trend equation	Forecast (2025)
Integral indicator	0.364	y=0.0372x+0.0674	0.588
The partial integral indicator of economic development	0.549	y=0.0666x+0.0773	1.010
The partial integral indicator of social development	0.268	y=0.0127x+0.02769	0.099
The partial integral indicator of ecological development	0.392	y=0.0395x+0.0954	0.648

That is, the partial integral indicator of economic development (84%) and the partial integral indicator of environmental development (65%) will grow the most. If current trends continue, the partial integral indicator of social development will more than halve.

Forecasting provides better planning for sustainable development in the region. Thus, the best strategic PR guideline for the agrarian socio-economic systems of the Masovian Voivodeship Region is an aggressive-passive style, which allows a marketing company to enter new markets and attract customers from other regions.

5. DISCUSSIONS

When discussing the results of the study, you should compare the results with other similar ones. For example, some scientific strategic planning of sustainable development was considered through the prism of the use of crop biomass [14, 15]. In addition, the use of agricultural biomass (straw, residues, waste) also has a social effect, manifested in the diversification of the rural economy; creation of new organizational structures and jobs; development of rural areas; improving the health of the population; ensuring well-being and improving the quality of life of the rural population.

Other scientists [16, 17] note that the strategic orientation of sustainable development planning is possible if there is proper institutional support. They note that an important direction for the sustainable development of agricultural enterprises is the improvement of institutional support for economic, environmental and social potentials.

At the same time, other scientific studies [18-20] in the context of PR-orientation note that an important function is the development of social infrastructure and marketing orientation to the population and its state of health. This is understood as such a model of development, which is aimed at unlocking the potential of each person and creating conditions for the realization of all his intellectual, cultural, and creative possibilities.

However, discussing our results of the study, it should be noted that they have certain differences. First of all, we have improved the methodological tools for planning the sustainable development of agricultural enterprises through the introduction of the existing system of interrelated indicators that act as stimulators and destimulators of this development. Also, scientific and practical approaches to the implementation of taxonomic analysis, which are based on the calculation of the general integral indicator of sustainable development, have been further developed. We developed a predictive model for the sustainable development of agricultural enterprises in a particular region.

In general, our study has differences and they consist in a radically different methodological approach. Thus, the innovativeness and element of novelty of the obtained results suggest a methodical approach to determining the strategic guidelines for ensuring sustainable development on the example of a specific socio-economic system.

6. CONCLUSIONS

Summing up, it should be noted that it is necessary to realize that it is impossible to implement one of the components of sustainable development in isolation from others, it is necessary to achieve an optimal balance between the impact on natural resources and the economic effect obtained from their use and provide the population with high-quality, environmentally friendly food. It is necessary to introduce a differentiated land tax in accordance with the level of greening of agriculture, establish a system of fines for violation of land use norms, provide financial compensation to landowners and land users who take measures to restore and improve soil fertility, provide support for organic farming, and help increase the competitiveness of agricultural products. To implement the proposed measures, it is necessary to approve a strategy for sustainable development of agriculture on the state rooster.

We came to the conclusion that in order to identify the impact of multi-vector indicators on the level of sustainable development of agrarian formations and integrate them into a single indicator, we used such a type of scientific and practical research as taxonomic analysis. Its use made it possible to establish that the level of sustainable development of agricultural enterprises in the region during the analyzed period and to determine a strategic PR-orientation for it.

As a result, an integral indicator of sustainable development of the agricultural sector of a particular region was determined. Modeling of indicators of sustainable development was carried out in order to determine the strategic orientation for planning for this region. The innovativeness and element of novelty of the obtained results suggest a methodical approach to the definition of strategic guidelines for ensuring sustainable development on the example of a specific socio-economic system.

The results of the article can be used in the future in the work of regional sustainable development structures to determine the strategic orientation of their socio-economic systems.

Further research requires the question of studying the inter-regional sustainable development of the agro-industrial and agricultural sector in the context of marketing, economic and social aspects.

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