

Multiplicative contribution of agricultural tourism to the sustainable development of Russia

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Abstract. The article discusses in detail the direct and indirect contribution of tourism to the country's economy. Much attention is paid to indirect contributions to related industries. The author analyzes the history of development of the methodology for determining the multiplicative effect of tourism in related industries, and offers his own methodology for assessing the contribution of agricultural tourism to the sustainable development of Russia. The article highlights the difficulties in data collection and objectivity in the agricultural sector. Using a practical example, the author interprets data on the direct and indirect contribution of agrotourism to the Russian economy. At the end of the study, specific ways to solve the existing problem of assessing the contribution of agrotourism to the country's economy are proposed.

1. History of the development of tourism statistics in Russia

The development of the tourism industry leads to the need to assess its effectiveness. This direction received a great impetus in the 1920s. The Second World War interrupted the process of the development and unification of global statistical standards in the field of tourism, begun in 1920 by the League of Nations. After the end of the war, in 1950, the International Union of Official Tourism Organizations (IUOTO) defined and adjusted the conceptual apparatus for the unification of the phenomenon "tourism". The conceptual apparatus in the field of tourism was supplemented at the UN Conference on International Travel and Tourism (Rome, 1963). In the late 70s, tourism has already made a significant contribution to the socio-economic indicators of countries and the volume of GDP. By this time, the tables of the SNA (system of national accounts) were developed, and the standardization of statistical accounting and reporting was carried out. A new stage in the development of tourism statistics was marked by the emergence of the TSA, aimed at assessing tourism as an economic phenomenon, within the framework of macroeconomic statistics. In 1980, the TSA becomes the subject of research by the UNWTO (World Tourism Organization, successor to IUOTO). More and more countries are switching to the TSA system, which provides not only a direct but also an indirect assessment of the contribution of tourism to the country's economy. However, in our opinion, due to the fact that the largest area of the territories of Russia is agricultural territories, the question of assessing the multiplicative contribution of agritourism to the sustainable development of the country is of a special strategic nature. Agritourism can influence the development of related agricultural sectors, as well as the level of employment and income of the local population.



2. The current state of the methodology for accounting for the contribution of tourism to the Russian economy

Until now, Russia uses a methodology that is not able to provide an assessment of the impact of tourism on related industries. The reasons for this are the following [1]:

- accounting the multiplier effect leading to an increase in the costs associated with collecting a large amount of data;
- non-compliance of national classifications and standards with international norms;
- lack of a unified method for calculating the multiplier effect;
- imperfection of both general statistics and statistics in the field of tourism;
- the absence of parameters for calculating the multiplier in the parameters for calculating national accounts

Below is an analysis of the contribution of tourism to the Russian economy in 2017-2019 (table 1).

Table 1. Analysis of the tourism contribution to the Russian economy in 2017-2019.

Index	2017	2018	2019
Share of gross value added of the tourism industry in the gross domestic product of the Russian Federation, %	3.9	3.9	...
Volume of services of travel agents, tour operators and other booking services and related services, RUB billion	166.5	172.1	179.8
<i>% of the total volume of paid services</i>	<i>1.8</i>	<i>1.8</i>	<i>1.8</i>
Volume of services provided by health resort organizations, billion rubles	112.3	124.8	127.2
<i>% of the total volume of paid services</i>	<i>1.2</i>	<i>1.3</i>	<i>1.2</i>
Volume of hotel services and similar services for the provision of temporary housing, billion rubles	219.9	255.7	247.3
<i>% of the total volume of paid services</i>	<i>2.4</i>	<i>2.6</i>	<i>2.4</i>
Export of services under the item "Travel" ^a , USD billion	8.9	11.5	11.0
<i>% of total exports of services</i>	<i>15.5</i>	<i>17.8</i>	<i>17.5</i>
Fixed capital investments ^b , RUB bln	314.0	353.1	355.7
<i>% of the total investment by type of activity</i>	<i>2.6</i>	<i>2.6</i>	<i>2.4</i>
Average number of employees, prs	1 191 464	1 166 350	1 179 697
<i>% of the average number of employees ^b for all types of activities</i>	<i>3.6</i>	<i>3.5</i>	<i>3.6</i>
Average monthly accrued wages of employees, rubles	46 160.3	51 580.0	54 185.4
<i>% to the average monthly wages of employees for all types of activities</i>	<i>102.8</i>	<i>103.4</i>	<i>100.5</i>

^a By the Bank of Russia's balance of payments.

^b By the collective grouping "Tourism" based on All-Russian Classifier of Economic Activities 2.

According to the Bank of Russia's balance of payments, the direct contribution of tourism to the Russian economy can be estimated. The share of the gross value added of the tourism industry in the gross domestic product of the Russian Federation has remained virtually unchanged for 3 years. The volume of tourist services (agencies and operators), hotel services, investments in fixed assets, the number of employees is also almost unchanged. As for the salary of employees of the tourism industry, we can safely say that it is reduced. All the above indicators assess the direct contribution to the country's economy [2]. According to 2017-2019 data, the contribution is stable, not significant. However, it is necessary to assess the indirect contribution of tourism (multiplicative).

3. Calculation of the multiplier effect of agritourism

Sustainable tourism development is associated with high socio-economic importance for each country. This importance manifests itself in both the direct and indirect impact of tourism on the economic

situation. The direct impact of tourism can be assessed within the framework of the system of national accounts applied in statistics. It is much more difficult to reliably assess the indirect contribution of tourism. There is an acute shortage of such an assessment in Russia.

The only possible way to assess the indirect contribution of tourism to the development and dependence of related industries on its efficiency is the method of calculating the multiplier effect, in particular in the form of a tourism multiplier [3].

As for the direct impact, there is a huge variety of fairly reliable indicators of its assessment. These indicators are: contribution to the budget through tax collections, participation in the formation of gross domestic product and determination of its share in it, improvement and improvement of the well-being of labor resources through tourism activities, job creation in the industry itself and related industries, reflection of the contribution of tourism to system of national accounts with varying degrees of reliability and efficiency [4].

In international statistics, a special section is provided that reflects satellite accounts, which provide a more detailed and in-depth analysis of the economic and social development of society. These satellite accounts are linked to the system of national accounts [5]. The TSA (Tourism Satellite Account) is used to assess tourism. The TSA consists of a linked set of tables that provide a measure of tourism from both the production and consumption sides, i.e. it becomes possible to compare tourism with other industries (indirect contribution of tourism).

According to the methodology reflected in the International Recommendations for Tourism Statistics (IRTS), the TSA consists of ten tables. Below are the names of these tables.

- Expenses related to inbound tourism, by product and visitor category;
- Expenditure related to domestic tourism, by product; categories of visitors and types of travel;
- Outbound tourism expenses by product and visitor category;
- Consumption related to tourism within the territory of the country, by product;
- Production accounts in tourism and other industries (at basic prices);
- Aggregate supply and aggregate consumption related to tourism within the territory of the country (at buyers' prices);
- Employment in the tourism industries;
- Tourism-related gross fixed capital formation in tourism and other sectors of the economy;
- Collective tourism consumption by product and government level;
- Non-cost indicators.

The big problem is that filling in the TSA tables requires processing a huge amount of data, which is often not possible to collect, due to the lack of most indicators in the statistical reports of organizations.

The first two tables contain the largest amount of information for calculating the multiplicative effect. They contain information about tourist expenses and their amounts (table 2).

Table 2. Expenses related to inbound tourism by product and category of visitors in Russia 2018, mln rubles.

Products	Expenses related to inbound tourism		
	Tourists	Visitors	Total
Consumer products:			
Typical tourist products			
1. Services in accommodation of visitors	1421.7	-	1421.7
2. Services of public catering enterprises	5513.1	-	5513.1
3. Transportation of passengers by rail	-	-	-
4. Automobile passenger transportation	-	-	-
5. The carriage of passengers by water transport	-	-	-
6. Transportation of passengers by air transport	10 563.8	-	10563.8
7. Rental services of transport vehicles	-	-	-
8. Reservation services	-	-	-

9. Services in the field of culture				
10. Sports and recreation services	621.6	-		621.9
11. Other typical tourist products for a specific country	375.8	-		375.8
12. Other typical tourist services for a specific country	179.9	-		179.9
	1547.3	-		1547.3
Other consumer products	-	-		-
Products with a certain value	-	-		-

As we can see, most of the data required for analysis is currently missing. These data are necessary for objective calculation of the multiplicative effect of tourism on related industries and for making strategic and managerial decisions.

Classification issues occupy a worthy place in the "International recommendations on tourism statistics" (IRTS) developed by UNWTO. Based on the TSA, it is possible to analyze the socio-economic situation of tourism in the country and in the world, as well as the relationship of tourism with other sectors in the economic process in order to determine the true scale and significance of tourism in the country's economy.

In our opinion, to assess the indirect impact of tourism related industries is possible by calculating the tourism multiplier by major components: accommodation, food, passenger transport, tourist firms, services in the sphere of culture, retail trade of travel goods and others. The basis for collecting these indicators is the indicator Revenue for All-Russian Classifier of Economic Activities (Tourism). Table 3 shows the distribution of proceeds by the collective group "Tourism" based on the All-Russian Classifier of Economic Activities 2 in the context of the groupings of types of economic activities included in it, %. The advantageous position of the industry related to transportation in the tourism industry is clearly visible.

Analyzing table 3, we see that the greatest multiplicative effect over 5 years was exerted on passenger transportation and services of travel companies. Slightly less, but a significant effect falls on the means of placement, retail trade and others. A smaller tourist multiplier effect affected public catering. In our opinion, this is partly due to the fact that tourists eat independently [6].

Similarly, it is possible to calculate the multiplicative contribution of agrotourism to related industries, which will provide a more rational approach to the sustainable development of agricultural territories. It will allow to diversify the economy, direct it to the development of related industries, and increase the indirect contribution. Of course, the author's method of calculating the multiplicative effect of agrotourism is subjective. For a more objective calculation of the indirect contribution of agritourism to the sustainable development of agricultural territories, it is absolutely necessary to use the "International recommendations on tourism statistics" (IRTS) developed by UNWTO when collecting statistics from organizations located in rural areas. The collection of statistical data, according to international recommendations, is large and expensive, but it will help our country to reconsider the concept of the tourism industry [7]. You can direct the development of tourism in the direction of domestic (agro) tourism, get away from the raw material economy.

Table 3. Selected indicators of travel industry organizations for the collective grouping of All-Russian Classifier of Economic Activities (Tourism).

Types of travel expenses	Expenses, million rubles					Sum of expenses	Value of tourist multiplier
	2014	2015	2016	2017	2018		
Accommodation	175.9	197	217.2	390.9	440.7	1421.7	8.08
Nutrition	1079.6	1085.2	1058.7	1122.6	1167.0	5513.1	5.1
Passenger Transportation	980.4	1182.4	1396.3	3294.7	3710.0	10563.8	10.77
Travel agency services	50	78.8	96.2	173.1	223.5	621.6	12.4

Services in the field of culture	45.2	50.6	58.9	106.1	116.0	375.8	8.31
Retail trade in tourism goods	22.6	25.3	27.9	50.2	53.9	179.9	7.96
Others	160.2	196	248.2	446.7	496.2	1547.3	9.60
Revenue, RUB bln	2513.9	2815.3	3103.4	5584.3	6207.3	20224.2	8.04

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