# Sustainable Development of Tourism Services in the Russian Federation on the Example of Work Efficiency Analysis of the FTP «Development of Domestic and Inbound Tourism in the Russian Federation (2011-2018)» and Advisability of the Prolongation for 2019-2025

Nadezhda Yu. Agaeva<sup>®</sup><sup>a</sup> and Irina P. Shchetilina<sup>®</sup><sup>b</sup> Voronezh State University of Engineering Technologies, Voronezh, Russian Federation

Keywords: Sustainable Development, Russian Federation, Federal Target Program (FTP), Prolongation, Development, Forecast, Tourism, Indicators, Economy.

Abstract: The development and increase of profitability in all spheres and sectors of the economy is the main strategic task of any state. Tourism is one of the fastest growing sectors of the economy. Considering the huge variety of values of Russia, cultures, nationalities, it can be assumed that the potential of Russia is enormous and at the moment is not just partially in demand. Based on this, the government of the Russian Federation is developing and putting into effect a large number of programs supported by legislative acts, decrees of the President of Russia and the development and popularization of Russian culture at all levels of government. In this regard, the authors in the article investigated the effectiveness of the program directly related to the field of tourism. The authors carried out a comprehensive study and critical analysis of the program data and comparison of the predicted values. The article summarizes the data forecasted for the period of the program for the development of tourism at the external and internal levels. The corresponding program is aimed at identifying the effectiveness of the tourism industry, in accordance with its indicators. These indicators characterize the industry and its development in terms of the growth of collective accommodation facilities, the flow of tourists (Russian and foreign), an increase in the number of places in collective and individual accommodation facilities, an increase in the number of jobs, and the positive dynamics shows the development of the industry and makes it possible to identify the main indicators, which need to be further emphasized. Previously, the forecasting of target values for 2018 was carried out with the aim of further research, analysis and confirmation of the corresponding values in order to determine the effectiveness of the program and its further prolongation.

## **1** INTRODUCTION

The country's economy is at a completely new stage of development. The corresponding stage is characterized and expressed in the intensive growth of economic indicators, inflation, an increase in innovation and investment activity, reorientation to the domestic consumer (Erdem and Jiang, 2016). In this regard, the tourism sector can become a powerful tool for the development of Russia from a socioeconomic point of view. The tourism sector has a very significant impact on the socio-economic stability of the state, moreover, tourism is very important for the development of small business forms. Through the tourism sector, a fairly large number of jobs are created, and there is a significant increase in the selfemployed.

Looking at the industry in its dynamics, one can observe intensive growth, outstripping the global average. The development of tourism stimulates the development of related industries. At this stage, the tourism industry forms 3.4% of the country's GDP,

<sup>a</sup> https://orcid.org/0000-0001-8623-265

Agaeva, N. and Shchetilina, I.

In Proceedings of the 1st International Scientific Forum on Sustainable Development of Socio-economic Systems (WFSDS 2021), pages 151-158 ISBN: 978-989-758-597-5

Copyright © 2022 by SCITEPRESS - Science and Technology Publications, Lda. All rights reserved

<sup>&</sup>lt;sup>b</sup> https://orcid.org/0000-0002-2462-1480

Sustainable Development of Tourism Services in the Russian Federation on the Example of Work Efficiency Analysis of the FTP «Development of Domesic and Inbound Tourism in the Russian Federation (2011-2018)» and Advisability of the Prolongation for 2019-2025. DOI: 10.5220/0010665300003223

and has an impact on 53 parallel industries. Moreover, it should be noted that the creation of one job in the tourism industry contributes to the creation of up to 5 jobs in related industries.

#### 2 THEORY

At the present stage of development, the government of the Russian Federation pays great attention to the introduction of programs of various levels and directions, which contributes to the impetus for the development of individual areas of the economy. Programs are often backed up by numerous decrees of the President of the Russian Federation, multipurpose in nature and require rapid implementation (Set, Agbola, Mahmood, 2017). So in 2011, for the first time, a program for the development of domestic and inbound tourism was developed and put into effect. The program had a targeted character, was one of the tools for the implementation of state policy in the field of tourism. The main goal of the program was to significantly increase the competitiveness of tourism products on the domestic market. Special attention was paid to improving the quality of the formed tourist products in order to meet the needs of consumers (Russian and foreign citizens). Moreover, an improvement in quality entails an increase in demand for a tourist product, which in turn has a positive effect on profits from this area.

According to the Strategy for the Development of Tourism in the Russian Federation for the period up to 2020, tourism is considered as an essential component of the country's innovative development (Internet portal «Codex»).

It is necessary to pay attention to the key directions, which contribute to the growth and development of the tourism sector, that can be catalysts for the growth of the well-being of citizens Federation, development, of the Russian popularization and drawing attention to the territories of Russia that thus require special attention. Russian Federation pays close attention to these territorial resources of cultural, historical, ethnocultural and other potential. Numerous decrees, programs of federal, regional significance, grant resources aimed at the development and preservation of the country's cultural heritage and attracting additional attention of the foreign flow of tourists to it have been developed (Agaeva, et al., 2020).

The FTP«Development of domestic and inbound tourism in Russian Federation (2011-2018)», established by decree 644 of the Russian Federation government from August 2, 2011,aimed at the development of tourism and the promotion of tourist destinations, on both external and internal levels. The results achieved were monitored annually. The evaluation of the program was carried out using a sample of certain indicators, which determine the positive or negative dynamics of work. Target indicators are the key factors that characterize the effectiveness of this program. The main goal of the program is to achieve the set values or to get as close as possible to them.

Based on the initial data taken for analysis from the Rostourism website, the following conclusion can be drawn: in the period from 2019 to 2025, in accordance with the established specified parameters of the FTP and its positive work, the share of tourism in the country's GDP should increase by 5% (Rostourism website).

# 3 METHODOLOGY OF THE WORK

The main purpose of this work was to predict the target values specified in the study program, further forecast the change in target indicators and assess the effectiveness of the program based on the final data for the study period.

Objectives of the work: analytical review, generalized analysis, identification of the most promising directions of tourism, forecasting changes in target values at the end of the program in the study period 2011-2018 using the method of polynomial approximation, critical analysis of the results and their comparison with the established target indicators.

In order to optimize indicators and further convenience of performing calculations, some indicators were combined on a similar basis, namely:

- the number of citizens of the Russian Federation and foreign citizens accommodated in collective accommodation facilities (the total number of persons accommodated in collective accommodation facilities);
- the number of persons working in collective accommodation facilities and working in travel agencies (total number of persons working in the tourism sector);
- the volume of paid tourist services rendered to the population and the volume of paid services of hotels and similar accommodation facilities (the total volume of paid tourist services and hotel services) (Agaeva, et al., 2018). In the

Sustainable Development of Tourism Services in the Russian Federation on the Example of Work Efficiency Analysis of the FTP «Development of Domesic and Inbound Tourism in the Russian Federation (2011-2018)» and Advisability of the Prolongation for 2019-2025

course of data analysis, we can note a general growth trend in tourism indicators in the Russian Federation by the end of 2017.

According to the values obtained by the methods of analysis of Microsoft Office Excel, in 2018 a decrease in the values of indicators of the number of collective accommodation facilities and persons accommodated in them is expected. The analysis was carried out in 3 different ways of calculation and by plotting a trend line on a diagram. From the calculation methods, built-in functions of Microsoft Office Excel were used, such as «TREND", «LINEST" and «PREDICTION».

The calculation by using the «TREND» and «PREDICTION» functions was carried out by substituting the available values of the population indicators, the time interval and the value of the forecast year (2018) in the form. The calculation using the «LINEST» function was carried out by obtaining the coefficients of the linear trend a and b, then their further setting into the linear equation  $y=a+b^*x$ , where the desired value of the indicator is y, and x is the year of the forecast (WTTC website).

As a result of all three calculation methods, the same values were obtained. For the indicator of the number of collective accommodation facilities, the value was obtained - 20391 units of accommodation facilities (Figure 1), for the indicator of the number of persons accommodated in them – 54 189.82 thousand people (Figure 2).

The trend line format on the diagram was chosen polynomial, degree 5, so the indicator curve has maximum and minimum points, on both diagrams there are 4 such points, and the degree number is taken by one. The value of the approximation reliability, obtained by plotting the trend line on the diagram, has a high reliability value, for the indicator of the number of collective accommodation facilities - 0.9816 and for the number of persons accommodated in them - 0.9863.



Figure 1: Forecast of changes in the number of collective accommodation facilities by the end of 2018.



Figure 2: Forecast of changes in the number of persons placed in collective accommodation facilities by the end of 2018.

The sphere of tourism is a collective concept that includes many components, including collective accommodation facilities (Furmanov, Balaeva, Predvoditeleva).

The projected changes in the number of places available for placement in the DAC show a decrease in the indicator to a value of 1 786.7 thousand (Dedkova, Gudkov, 2019). The value of the accuracy of the approximation is equal to 0.9908. The forecast of the number of places in the DAC is presented in Figure 3.



Figure 3: Forecast of changes in the number of places in collective accommodation facilities by the end of 2018.

Based on the predicted values, the area of the room stock of the DAC in 2018 will increase to 16 192.4 thousand square meters (Figure 4). With the value obtained by the three above-mentioned methods of calculating in Microsoft Office Excel, the value of the accuracy of the approximation is 0.7913.



Figure 4: Forecast of changes in the area of the room stock of collective accommodation facilities by the end of 2018.

The world economic situation leaves its mark on the development of all spheres of the economy, including the tourism sector (Alegre, Pou, Sard, 2019). It is possible to observe – changes in the consumption of tourism services, and the level of employment in the tourism sector by people directly correlates with the consumption and development of tourism (Bronner, De Hoog, 2016). The projected number of people employed in tourism will also increase in 2018 to 481 138 people (Figure 5). In this case, the value of the accuracy of the approximation is 0.8594.

600 000			200.110	402 577	466 643	462 356		138,4
500 000	386 359	375 322	399 146	402 577	•			
	-	+						
5300 000 —				2.477		07 . 17	. 1.0	
					. IX" - IE-	-07x + 1E	+10	
200 000 -				9 5177				
200 000				<i>j</i> 5177	$R^2 = 0.8$			
200 000				, ,				

Figure 5: Forecast of changes in the number of people working in the field of tourism by the end of 2018.

The volume of investments in fixed assets will continue to grow, reaching the value of 59 747.14 million rubles (Figure 6). The value of the accuracy of the approximation is 0.6202.



Figure 6: Forecast of changes in the volume of investments in fixed assets aimed at the development of DAC by the end of 2018.

A positive forecast is also for the volume of paid tourist services and hotel services. According to the forecast, the value of the indicator in 2018 will be 425 360.56 (Figure 7). In this case, the value of the accuracy of the approximation is equal to 0.9975.



Figure 7: Forecast of changes in the volume of paid tourist services and hotel services by the end of 2018.

### **4 SCOPE OF THE RESULTS**

An analysis of the results obtained shows both an increase in certain indicators and a decrese in others. Indicators of the FTP efficiency, for which there is an increase: the area of the numbered DAC, the number of people employed in the tourism sector, the volume of tourist services and hotel services, the volume of investments in fixed assets. A decline in indicators is predicted: the number of collective accommodation facilities, the number of places available for placement.

Let us compare the predicted values obtained in the course of the calculations with the target indicators of the FTP efficiency. For convenience of comparison, let us summarize the results obtained in the table of planned and predicted values. The summary table is presented below (table 1).

As can be seen from the comparison of the forecasted values with the target indicators of the FTP efficiency, only the indicator of the volume of investments in fixed assets of the DAC exceeds the planned value. The rest of the indicators are below the planned values.

Joint target indicators of the FTP efficiency	Unit of measure	Plan	Forec ast
the FTT efficiency	ment	2018	
Number of beds in collective accommodation facilities	Thousan d units	189 3	1787
The area of the room fund of collective accommodation facilities	Thousan d sq. meters	21 547	16 192
Total number of persons accommodated in collective accommodation facilities	Million people	68	54
Number of persons working in the tourism sector	Thousan d people	794	481
Fixed capital investments in accommodation facilities (hotels, temporary accommodation)	Million rubles	35 025	59 747
The volume of paid tourism and hotel services (including similar accommodation facilities)	Billion rubles	917	425

Table 1: Summary comparison of the forecasted values with the planned indicators of the FTP.

According to the data obtained, the forecasted values of the federal target program «Development of domestic and inbound tourism in the Russian

Federation (2011-2018)» will be carried out only in terms of investment in fixed assets of the DAC.

Based on the result obtained for the predicted values, an analysis was carried out using statistical data posted on the official tourism websites at the end of 2018. The state statistics data were updated, which made it possible to draw a conclusion about the effectiveness of the FTP «Development of domestic and inbound tourism in the Russian Federation (2011-2018)» for specific indicators, as well as to assess the reliability of the forecast obtained by Microsoft Office Excel analysis methods. Indicators used in data comparison:

- combined target indicators of the FTP efficiency;
- the number of beds in collective accommodation facilities;
- the area of the room stock of collective accommodation facilities;
- the total number of persons accommodated in collective accommodation facilities;
- the number of persons working in the field of tourism (the number of persons working in collective accommodation facilities and working in travel companies);
- investments in fixed assets of accommodation facilities (hotels, places for temporary residence);
- the volume of paid tourist and hotel services (including similar accommodation facilities).

According to the values obtained by the methods of analysis of Microsoft Office Excel, in 2018 a decrease in the values of indicators of the number of collective accommodation facilities and persons accommodated in them is expected. The analysis was carried out in 3 different ways of calculation and by plotting a trend line on a diagram. From the calculation methods, built-in functions of Microsoft Office Excel were used, such as «TREND", «LINEST" and «PREDICTION».

The calculation by using the «TREND» and «PREDICTION» functions was carried out by substituting the available values of the population indicators, the time interval and the value of the forecast year (2018) in the form. The calculation using the «LINEST» function was carried out by obtaining the coefficients of the linear trend a and b, then their further setting into the linear equation y=a+b\*x, where the desired value of the indicator is y, and x is the year of the forecast (Furmanov, Balaeva, Predvoditeleva).

As a result of all three calculation methods, the same values were obtained. For the indicator of the number of collective accommodation facilities, the value was obtained - 20391 units of accommodation facilities (Figure 1), for the indicator of the number of persons accommodated in them -54 189.82 thousand people (Figure 2).

The trend line format on the diagram was chosen polynomial, degree 5, so the indicator curve has maximum and minimum points, on both diagrams there are 4 such points, and the degree number is taken by one. The value of the approximation reliability, obtained by plotting the trend line on the diagram, has a high reliability value, for the indicator of the number of collective accommodation facilities - 0.9816 and for the number of persons accommodated in them - 0.9863.

Based on the data analyzed, we can note a general growth trend in tourism indicators in the Russian Federation in 2018. According to the updated state statistics of July 7, 2019, the number of collective accommodation facilities in 2018 is 28072 units (The number of collective facilities for placing EMISS). The number of persons accommodated in them is 73 694 thousand people (The number of persons placed in the collective accommodation facilities of the EMISS). The number of collective accommodation facilities (25291 units as of 2017) increased by 11% or 2 781 units compared to the previous 2017. The number of persons accommodated in them (61 623 thousand people as of 2017) increased by 19.6% or 12 071 thousand people. The actual statistical indicators exceed not only the planned values, but also the indicators for the last year, which indicates an improvement in the situation of the tourism sector in the Russian Federation.

The forecast of changes in the number of places available for placement in the DAC shows a decrease in the indicator to a value of 1 787 thousand places. The value of the accuracy of the approximation is equal to 0.9908. The forecast of the number of places in the DAC is presented in Figure 8.



Figure 8: Forecast of changes in the number of places in collective accommodation facilities by the end of 2018.

The number of places available for placement in the DAC, as of 2018, is 2 415 thousand places (The number of places in the collective accommodation facilities of the EMISS). The actual value of 2018 exceeds the last year's figure (2 168 thousand seats in 2017) by 11.4% or 247 thousand seats.

According to the forecast, the area of the DAC rooms in 2018 will increase to 16 192 thousand square meters. With the value obtained by the three above-mentioned methods of calculating Microsoft Office Excel, the value of the accuracy of the approximation is 0.7913. The area of the room fund in 2018 increased compared to the previous year to an indicator of 21 633 thousand square meters (The area of the room stock of collective accommodation facilities of the EMISS). According to the statistics of 2018, the area of the room fund has increased by 11.2% or 2 181 thousand square meters in relation to the previous indicator (19 452 thousand square meters).

The projected number of people employed in tourism will also increase in 2018 to 481 138. In this case, the value of the accuracy of the approximation is 0.8594. Due to the updating of the calculation method for the sum of OKVED codes of 2 organizations included in the collective group «Tourism», the average number of employees has undergone a change (Federal State Statistics Service. Annual statistical information on the collective group «Tourism» based on OKVED 2). As of 2018, the average number of employees is 1 167 549 people, which is more than 2 times higher than the forecasted value.

According to the forecast, the volume of investments in fixed assets will continue to grow, reaching 425.4 billion rubles. The value of the accuracy of the approximation is 0.6202. In 2018, the actual volume of investments in fixed assets reached 314.8 billion rubles. Compared to last year (300.3 billion rubles – 2017), the indicator increased by 12.5% or 14.5 billion rubles.

A positive forecast for the volume of paid tourist services and hotel services. According to the forecast, the value of the indicator in 2018 will be equal to 425 361 million rubles. In this case, the value of the accuracy of the approximation is equal to 0.9975. The actual volume of paid tourist services and hotel services in 2018 is 427 798 million rubles. Compared to the 2017 indicator (386 436 million rubles), the volume of services increased by 10.7% or 41 362 million rubles.

## 5 CONCLUSIONS

Let us compare the predicted values obtained in the course of the calculations with the target indicators of the FTP efficiency (Federal target program

«Development of domestic and inbound tourism in the Russian Federation (2011 - 2018)»). For ease of comparison, we will summarize the results obtained in a table with the values of the target indicators. The summary table is presented below (table 2).Let us compare the predicted values obtained in the course of the calculations with the target indicators of the FTP efficiency (Federal target program «Development of domestic and inbound tourism in the Russian Federation (2011 - 2018)»). For ease of comparison, we will summarize the results obtained in a table with the target indicators values. The summary table is presented below (table 2).

Table 2: Summary comparison of the forecasted values with the planned indicators of the FTP.

_ <u>.</u> .		1	_		
Joint target indicators of	Unit of	Plan	Forecas	Actual	
the FTP	measure		t		
	ment		2018		
efficiency Number of	Thousand				
beds in	units				
collective	units	1 452	1 787	2 415	
accommodation		1 432	1 /0/	2 413	
facilities					
The area of the	Thousand				
room fund of	sq. meters				
collective	sq. meters	16 192	16 193	21 633	
accommodation		10 172	10 175	21 055	
facilities					
Total number	Million				
of persons	people				
accommodated	people				
in collective		43.7	54.2	73.7	
accommodation	/ · · · · ·				
facilities					
Number of	Thousand				
persons	people	(21.5	401.1	1 1 (7 5	
working in the		621.5	481.1	1 167.5	
tourism sector					
Fixed capital	Million				
investments in	rubles				
accommodation		238.2	425.4	314.8	
facilities (hotels,		230.2	423.4	514.0	
temporary					
accommodation)					
The volume of	billion				
paid tourism	rubles				
and hotel					
services		917	425	428	
(including		717	723	720	
similar					
accommodation					
facilities)					

An analysis of the results obtained shows an increase in the actual indicators compared to the previous 2017. As can be seen from the comparison

Sustainable Development of Tourism Services in the Russian Federation on the Example of Work Efficiency Analysis of the FTP «Development of Domesic and Inbound Tourism in the Russian Federation (2011-2018)» and Advisability of the Prolongation for 2019-2025

of the actual values with the predicted indicators of the FTP efficiency, all indicators exceed the predicted values, except for the volume of investments in fixed assets of the DAC. The actual indicator of the volume of paid tourist services and hotel services is almost 2 times less than the planned value. According to the obtained forecasted values, the FTP «Development of domestic and inbound tourism in the Russian Federation (2011-2018)» was carried out for all indicators, except for the volume of paid tourist services and hotel services.

Based on the analysis, the authors fully confirmed the predicted results, moreover, the forecast and the actual values exceeded even the most daring expectations and overlap in terms of performance with the report given in official sources.

Therefore, we can draw the following conclusions:

- during the period of the program, previously undeveloped territories were involved, which contributed to the popularization of the «territorial» potential of the Russian Federation.
- in about 35 constituent entities of the Russian Federation, the development of tourist and recreational clusters was carried out, the necessary infrastructure was created (or reconstructed), objects of cultural display were improved or «renovated».
- during the period of the program, a large
- number of engineering networks were modernized.
- an increase in the internal tourist flow in the country has been achieved.

Accordingly, it can be considered that the programs developed and implemented by the government of the Russian Federation clearly outline the range of issues aimed at sustainable development of all sectors of the economy, including tourism. The tourism industry has proven its effectiveness through the implementation and effective operation of programs at the federal, regional and local levels. This fact is confirmed by the steady increase in the number of collective accommodation facilities, the tourist flow both at the internal and external levels of jobs.

Based on the foregoing, we can safely talk about the advisability of prolonging the FTP«Development of domestic and inbound tourism in the Russian Federation (2019 - 2025)», as a program that has proven to be effective and confirmed its effectiveness.

## REFERENCES

- Erdem, M., Jiang, L., 2016. An overview of hotel revenue management research and emerging key patterns in the third millennium. *Journal of Hospitality and Tourism Technology*, 7(3): 300–312.
- Set, K, Agbola, F.W., Mahmood, A., 2017. Tourism small and medium enterprise management practices and firm performance. *Tourism Analysis*, 22: 237–245.
- Internet portal «Codex». http://docs.entd.ru/document/420200177.
- Agaeva, N.Yu., Alekseeva, T.V., Taltynova, E.S., Stolyarov, A.E., Pevneva, D.M., Nesterenko, I.V., 2020. Forecasting the target values of the FTP indicators «Development of domestic and inbound tourism in the Russian Federation in 2011-2018». Bulletin of the Voronezh State University of Engineering Technologies, 82(1 (83)): 313-321.
- Rostourism website. https://www.russiatourism.ru/content/9/section/85/deta il/13464.
- Agaeva, N. Yu., Tokareva, D. M., Babenko, A. A., Yartseva, A. A., 2018. Analysis of the dynamics of the number of collective funds Placement in the period from 2002 to 2017. *Azimuth of scientific research: economics and management*, 7(3(24)): 13-17.
- WTTC website. https://www.wttc.org/media-centre/pressreleases/press-releases/2018/one-in-five-of-all-newjobs-created-globally-in-2017-are-attributable-totravel-and-tourism. Date of access– September 18.09.2020.
- Furmanov, K., Balaeva, O., Predvoditeleva, M. Forecasting Tourism Flows from the Russian Federation into the Mediterranean Countries Tourism Management, Marketing, and Development, pages 39-57.
- Dedkova, E., Gudkov, A., 2019. Tourism Export Potential: Problems of Competitiveness and Financial Support. International Conference on Integrated Science ICIS 2019: Integrated Science in Digital Age, pages 187-202.
- Alegre, J., Pou, L., Sard, M. 2019. High Unemployment and Tourism Participation. Current Issues in *Tourism*, 22(10): 1138–1149.
- Bronner, F., De Hoog, R. 2016. Crisis Resistance of Tourist Demand: The Importance of Quality of Life. *Journal of Travel Research*, 55 (2): 190–204.
- The number of collective facilities for placing EMISS. https://www.fedstat.ru/indicator/31579.
- The number of persons placed in the collective accommodation facilities of the EMISS. https://www.fedstat.ru/indicator/31560.
- The number of places in the collective accommodation facilities of the EMISS. https://www.fedstat.ru/indicator/31583.
- The area of the room stock of collective accommodation facilities of the EMISS. https://www.fedstat.ru/indicator/44041.
- Federal State Statistics Service. Annual statistical information on the collective group «Tourism» based

on OKVED 2 (for the full range of organizations). https://www.gks.ru/folder/23457.

Federal target program «Development of domestic and inbound tourism in the Russian Federation (2011 -2018)». http://fcp.economy.gov.ru/cgibin/cis/fcp.cgi/Fcp/ViewFcp/View/2012/361?yover=2 018

