Approaches to the Assessment of the Contribution of Tourism Into the Regional Surplus Product: Case of the Kaliningrad Region

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Abstract

Article examines the contribution of tourism to the regional economy through construction of the value added chain. The results of research of an integrated model of formation of the tourism industry contribution to regional surplus product; the augmented and transformed model of the tourism product; the typical characteristics of ‘inputs’ and ‘outputs’ in the production and marketing of regional tourism product testing carried out on the model example of the Kaliningrad region of Russia. The authors apply the logic-structural method in strategic planning and management of socio-economic systems. In the constructed ‘problem tree’, hierarchically represented a causal link between negative or adverse events that hinder or even prevent future development of the tourism industry. Developed and described scenarios for the tourism industry (project-ambitious, compensation, basic). The factors that will have the greatest impact on the development of tourism in terms of solving regional problems of the economy ‘transition period’ after the end of the Special Economic Zone, operating in 2006-2016, were grounded. In order to assess the contribution of tourism to the regional economy it is not enough to rely solely on the statistics. This is due to the fact that there are no universal formulas for the isolation of the share is created by tourism in a number of sectors that make up the value chain for tourism. Such activities include catering services, transport services etc. Value added of tourism is directly dependent on the scenario conditions that underpin the development.

Keywords: tourism, regional development, value added chain, the “problem tree”, the Kaliningrad region of the Russian Federation

1. Introduction

Not only Russian, but also the world economy is going through difficult times now. According to the forecast of the Organization for Economic Cooperation and Development (OECD), it waits for a slow recovery under the influence of the United States, restraining by the threat of the recession in Europe and by the challenges of the large developing economies. As for the Russian economy, the OECD predicts that the growth of Russia’s GDP in 2015 is expected to be equal to zero, and in 2016 is projected to increase Russia’s GDP by 2% (OECD predicts …., 2015). In 2014-2015, the Russian economy is influenced by fundamental factors associated with the persistence of negative geopolitical situation, as well as the decline in oil prices, which leads to additional pressure on the national currency.

Under these conditions, issues of state support of Russian entrepreneurs are becoming more relevant. In every region of the Russian Federation there are its own development priorities of the development of different sectors of the regional economy. In the Kaliningrad region, which obtains unique natural and recreational resources, one of the priorities of development is tourism.

To develop evidence-based strategies for tourism development in the regions, including in the Kaliningrad region, it is necessary to conduct the research on the forecast of tourism development and evaluation of its contribution to the gross regional product (GRP).

To estimate the contribution of the tourism industry in the GRP it is advisable to use the value chain model. This is largely due to the fact that “in strategy analysis and strategy development the value chain model is one way of thinking” (Hansen, 2008). The founder of the use of this concept in strategic planning is considered M. Porter (1985). In consequence, this concept has been adapted to a variety of industries. This approach is of considerable interest to the tourism industry in the countries where the industry faces a stage of growth, as it allows assessing the real contribution of this sector to the economy.
The fact that the tourism product is the result of a complex production process, allowed to apply the process approach into the evaluation of the contribution of tourism to the regional domestic product. It is a way the development of the concept of a tourist product by Stephen Smith (Smith, 1994).

For the tourism industry, this approach is the most relevant, but at the same time - the most difficult, since not enough to determine the types of economic activity, forming a value chain. The greatest challenges is the finding out of proportion, which was created by namely tourism. For example, in catering services, there is difficulty in distinguishing services produced for tourists from the services for the other visitors to restaurants. There is a similar situation with transport services etc.

In addition, in this study the Logical Framework Approach and Scenario planning are applied. According to the results there have been developed a ‘problem tree’ and have been suggested scenarios of the development of the Russian enclave – the Kaliningrad region.

2. Application of the Added Value Concept for the Regional Strategies (Including in Relation to Tourism)

The idea of M. Porter that in strategic planning it is worth to apply the concept of the value added chain is shared by many modern scientists and experts. For instance, Humphrey, J., Schmitz, H. note “We believe that Interesting Cases of integrating value chain methodology in Tourism Sector is emerging country which had a strong increasing customers of their tourism services in last 10-15 years” (Humphrey & Schmitz, 2002). As an example, it is possible to exemplify Vietnam System of tourism services (Schoen, 2008). Tourism in Vietnam consisted of less 5% in 2000, but due to Value Chain Analysis (VCA) it was founded their own program called Vietnam Tourism Occupational Skill Standard System (VPSSP) (Mitchell & Phuc, 2007) in Da Nang which has expanded tourism sector more than 40% in the amount of 1.3 million USD. In center of their system they divided customers into domestic and international ones. Moreover for international tourists there were defined negatives factors (based on the SWOT and cluster analysis) (Shawn et al., 2008). For example, among the key factors are 'dirty beach' and 'looking like an industrial estate' which were picked out in ‘The challenges Tree’ (Ashley, 2006). Due to diversification of customers they found out that the losses from missing potential international tourists (due to the non-satisfaction) amounted up to $54 per person. It is calculated as the difference between the day-expenditure of one international tourist who spends 93$ per day and the expenditures of one domestic tourist who spends 39$ daily. More over VCA reflects the interconnection (in a way a net) with other sectors of regional economy and the influence of those sectors (for example: agricultural sectors, museums (Cham Museum), relevant restaurants, hotels, tour operators and the Department of Tourism. Thus based on VCA the Center of development of Vietnam Tourism convinced the Government (Ashley, 2006) to build in Vietnam about 19 hotels; and rapid reconstruction of 10 hostels; 10 pavement cafes; 17 taxis and 37 tourists support centers (ex: at the Cham Museum and Da Nang Railway Station) (Yuk, 2008). They used VCA to sum-up that main problems in low income from tourism in 2000s are related to lack in craft-shops, sight-seeing and entertainment (as they are part of the VAC). In Vietnam VCA (Mitchell & Phuc, 2007) formed chain as well with transport sector (they calculated forecast profit for taxi and other transport’s which will be occurred in case of the additional international demand).

There are the other cases of successful integration of VCA in developing countries. In Zanzibar (Steck et al. 2010) tourism sector provides 51% of GDP (2010). But for reach such result the country deeply explored challenges connected to poor service and the connections with the other sectors: “Zanzibaris have very limited access to employment in the tourism sector due to limited training facilities”, «Inability of suppliers of Local Goods to meet the quality required for the general operation of tourism sector businesses” (Steck et al. 2010). Zanzibar’s Center of integration VCA in their tourism sector formed Pro Poor Income (PPI) (Mitchell & Faal, 2008) like as «a percentage of the overall revenues accrued to each sector». Thus due to PPI indicator they set direct, indirect, induced and long term dynamic effects from Tourism Sector on other chain sectors economics (transport, museum and other). In Brazil (Mitchell & Faal, 2008) when Center of Tourism introduced VCA approach, they had examined Pro-Poor Tourism Partnership, such as entertainment, accommodation, (World Tourism Organization (WTO), Tourism Market Trends, 2005) food, shopping and travel, etc. Thus, they divide incoming tourist receipts and international tourist arrival. Thus, they can set moving demand of international tourist from Argentineans, Uruguayans, Paraguayans and Chileans in 2000 to the new tourists’ flow in 2010 – Dutch, USA etc. tourists. Thus, they predict cost and demand with useful VCA for other sectors of economics such as meals, lodging, car rentals, and airport arrivals and departures. They calculated that in Rio and Sao Paulo are the expensive airport taxes (about 368 in comparing the Netherlands 21$) despite of that they are the main tourism’s cities. Center of development of Tourism in Brazil stimulated decrease in tourist’s cost (including airport duties) and formed 72 hours-working shops (Brazil-Arab News Agency..., 2005), 40 international fairs and create new environment for Dutch and USA’s tourists r in which a wide array of ecological attractions is provided by local and international operators.
(Euromonitor, 2004; Slob & Wilde, 2006).

For Russia the value added chain approach was applied by Tatarinov (1998). In 2014 the authors of the article participated in the development of the value chain model for tourism industry of the Kaliningrad region of the Russian Federation.

3. **The Use of the Process Approach in the Evaluation of the Contribution of Tourism to the Regional Domestic Product**

First of all, it is necessary to evaluate the nature of creation and implementation of the tourism product. According to Pitta and Laric (2004), Smith (1994, 1998, 2010), the model of which is cited by a number of Russian and foreign researchers (Dzhandzhugazova, 2004; Goeldner et al., 2000; Heiden, 2006; Lynch, 2006; Porter, 1985), tourist product is based on the indissoluble connection of those providing services (PP – Physical Plant, S - Services, H- hospitality), and those who use them (FC - Freedom of choice, I -Involvement) (Figure 1).

![Figure 1. The Generic Tourism Product, where PP – Physical Plant, S - Services, H- hospitality, FC - Freedom of choice, I –Involvement](image)

*Source: Adopted from Smith, 2010, p. 587*

Feature of the product made by the sector of tourism and recreation, but the most specific ones: not storability, specificity on location, complexity, considerable expenses of measurement of quality (experienced goods, etc.), is process of its production where stages of its (tourist's product) of production, at the same time are also compound components of this product (Burton et al., 2004).

Following suggestions by S. Smith, as well as by our own research we have developed a comprehensive model of the regional tourism industry surplus product (Figure 2).

In this article, we assume that the physical basis is a model of inputs, freedom of choice is the model of demand and model of competition of enterprises providing tourism services. The process of providing services and involvement are related to the model of transformation, hospitality is characterized by the model of output resources. In general, we can prove Smith’s idea (Smith, 1994) that the tourist product - is the result of complex production function and that value is added at each stage of the production process.

![Figure 2. Integrated authoring model of regional tourism industry surplus product](image)
The production stages of a tourist product based on the synthesis of model Smith (Figure 1), the existing approaches to the development of the value chain (Yuldasheva et al., 2007) and the author’s integrated model (Figure 2) are shown in Table 1.

Table 1. Characteristic of “inputs” and “outputs” in the regional tourism product production and sale

<table>
<thead>
<tr>
<th>Types of «inputs» and «outputs»</th>
<th>Content of «inputs» and «outputs» by S. Smith (1994)</th>
<th>Reflection in the complex model of the authors of the article</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Inputs (Recourses)</td>
<td>Land, Labor, Water, Agricultural produce, Fuel, Building Materials, Capital</td>
<td>Model of inputs, Model of demand</td>
</tr>
<tr>
<td>Intermediate Inputs (Facilities and Services)</td>
<td>Parks, Resorts, Transportation modes, Museums, Craft shops, Convention centers, Hotels, Restaurants, Rental car fleets</td>
<td>Model of impact</td>
</tr>
<tr>
<td>Intermediate Outputs (Services)</td>
<td>Park interpretation, Guide services, Cultural performances, Souvenirs, Conventions, Performances, Accommodations, Meals and drinks, Festivals and events</td>
<td>Model of competition, Model of promotion</td>
</tr>
<tr>
<td>Final Outputs (Experiences)</td>
<td>Recreation, Social contacts, Education, Relaxation, Memories, Business contacts</td>
<td>Model of outputs</td>
</tr>
</tbody>
</table>

**Source:** Based on Smith, 1994

4. Using the All-Russian Industry Classification System in the Construction of the Model Estimates the Contribution of Tourism in Gross Regional Product

Tourism industry added value is provided directly by the components of its branch structure, namely, accommodation services, food services, services of intermediary organizations (travel agencies, TIC) and others. One of the approaches to systematization of economic entities in the Russian Federation is to use the All-Russian Industry Classification System (ARICS) (All-Russian classifier of types of economic activity, 2002). According to ARICS there have been allocated codes for certain activities and services consumed by the tourism industry (Table 2).

Table 2. Classification of activities and services consumed by the tourism industry (according to ARICS’ codes)

<table>
<thead>
<tr>
<th>Types of services</th>
<th>Activities and services</th>
<th>Classification by ARICS’ codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation services</td>
<td>Hotels</td>
<td>63.30.1 Organization of complex tourist services, etc., 55.23.2 Activities of boarding houses, hotels, resorts</td>
</tr>
<tr>
<td>Holiday homes</td>
<td>63.30.1 Organization of complex touristic services etc., 55.23.2 Activities of boarding houses, hotels, resorts</td>
<td></td>
</tr>
<tr>
<td>Spa sanatoriums</td>
<td>63.30.1 Organization of complex tourist services, etc., 55.23.2 Activities of boarding houses, hotels, resorts</td>
<td></td>
</tr>
<tr>
<td>Boarding houses</td>
<td>63.30.1 Organization of complex tourist services, etc., 55.23.2 Activities of boarding houses, hotels, resorts</td>
<td></td>
</tr>
<tr>
<td>Services of a tourist complex of the region</td>
<td>Transport</td>
<td>63.30.2 Providing excursion tickets, etc., 63.30.1 Organization of complex touristic service etc.</td>
</tr>
<tr>
<td></td>
<td>The museums, excursions on architecture monuments</td>
<td>63.30.2 Providing excursion tickets, etc., 63.30.1 Organization of complex tourist services etc.</td>
</tr>
<tr>
<td>Tour companies, TIC and others.</td>
<td>Tourist offices</td>
<td>63.30.3 Provision of tourist information services, 79. Activities of travel agencies and tour operators</td>
</tr>
<tr>
<td></td>
<td>Tourist information centers</td>
<td>63.30.3 Provision of tourist information services, 79. Activities of travel agencies and tour operators</td>
</tr>
<tr>
<td>Catering services</td>
<td>Catering services in the resort area</td>
<td>55.52 Section: Section H Hotels and restaurants. This class includes: - activities of catering, 63.30.1 Organization of complex tourist services etc.</td>
</tr>
<tr>
<td></td>
<td>Catering services in hotels</td>
<td>55.52 Section: Section H Hotels and restaurants. This class includes: - activities of catering, 63.30.1 Organization of complex tourist services etc.</td>
</tr>
<tr>
<td></td>
<td>Catering services in guest houses</td>
<td>55.52 Section: Section H Hotels and restaurants. This class includes: - activities of catering, 63.30.1 Organization of complex tourist services etc.</td>
</tr>
<tr>
<td></td>
<td>Catering services in resort spas</td>
<td>55.52 Section: Section H Hotels and restaurants. This class includes: - activities of catering, 63.30.1 Organization of complex tourist services etc.</td>
</tr>
<tr>
<td></td>
<td>Catering services in boarding houses</td>
<td>55.52 Section: Section H Hotels and restaurants. This class includes: - activities of catering, 63.30.1 Organization of complex tourist services etc.</td>
</tr>
</tbody>
</table>
5. Application of Logical Framework Approach into the Strategic Planning of Tourism Development in the Region

Further, during the study the authors had applied a Logical Framework Approach in strategic planning and in management of socio-economic systems. Within this approach there has been developed a ‘problem tree’. In identifying the problems of the development of the tourism industry of the Kaliningrad Oblast (KO), focused on the factors which in the procedure of SWOT-analysis could be attributed either to the weakness or to the threats that could negatively affect the development of tourism in the Kaliningrad region (Semenova et al., 2013).

In fact, the ‘problem tree’ hierarchically is a causal link between negative or adverse events that hinder or even could prevent future development of the tourism industry in the Kaliningrad region.

The method of application of the logic structural approach to the process of constructing the “problem tree” tourism industry of the Kaliningrad region assumes implementation of the following actions:

− to select the factors that have the most negative impact on the development of the tourism industry of the Kaliningrad region;
− to pairwise allocate similar problems (problems related to the same issues);
− from the each of pairs there is released a causal factor, and a factor that is a consequence of this one or groups of factors;
− analyzed pairwise factors are hierarchically placed in the upper part of the scheme (‘Consequences’) or lower (‘Reasons’), providing a logical connection between the totality of the factors influencing the development of the tourism industry in the Kaliningrad region.

In this case, the same reasons may contribute to the emergence of different effects. For example, the high probability of crisis variants of the Russian economy leads to the fact that, on the one hand, state support for the development of recreation and tourism sector, both at the federal and regional level, will decline even more and, on the other hand, the business investment activity will continue to decline consequently.

The analysis of factors of internal and external environment will identify as the main problem - the lack of consistently strong demand for the tourism industry of the Kaliningrad region in a calendar year. This is due to the fact that the regional tourism product of the Kaliningrad region is not enough competitive as compared to the same Russian and foreign tourist products.

In addition, there is uneven loading of objects of the tourism industry of the Kaliningrad region during the year. Almost all the reasons presented in Figure 3, are subjective and can be eliminated with the appropriate political, administrative, organizational and economic decisions, both on the part of public authorities and businesses. The only exceptions are two objective reasons: the case that the Kaliningrad region being an enclave, is in relation to the rest of the Russian Federation, as well as the short period of the amenities of the main flow of tourists in the region.

![Figure 7. ‘The problem tree’ of the recreation and tourism sector of the Kaliningrad region](image-url)
6. Scenarios for Tourism Development in the Kaliningrad Region

On the basis of the identified problems of the tourism industry and according to the expert estimates of the probability of their gains or attenuations three scenarios for the development of this sector in the Kaliningrad region have been developed:

1. "Project-based" and ambitious scenario was developed on the basis of increased investment in the region with the aim to create new tourist attractions - the flagship tourist and recreational projects that contribute to the inflow of Russian tourists as well as foreigners; effective use of all the infrastructure developed in connection with the FIFA World Cup-2018, addressing transport accessibility of the region for tourists from Russia at the federal level. The main objective of this scenario is to increase the contribution of tourism to the gross regional product (GRP).

2. Compensation scenario is worked out on the basis of the strategy of the Kaliningrad region development as an area year-round tourism. It is presumed that tourism is considered to be one of the basic priorities of the regional economy in a changing regime of special economic zone after 2016 (deadline for the Law on the Special Economic Zone in Kaliningrad) and additional state support at the federal level. The main objective of this scenario - to ensure the stable growth in revenues from tourism and smoothing seasonal fluctuations in demand for the services of the tourism industry of the Kaliningrad region.

3. The basic scenario developed based on the redistribution of powers between the federal and regional authorities, cancelation of the regime of the special economic zone, bringing the business environment in the Kaliningrad region into the similar one as in the other Russian regions. The main objective of this scenario - not an assumption of reduction in the number of tourists visiting the Kaliningrad region and/or the number of nights, spent in the region per tourist, as well as maintaining the existing dynamics of revenues from tourism in the region.

On the basis of the use of forward-looking data on the development of tourism in the Kaliningrad region, in the judgment of the Government of the Kaliningrad region from 24.12.2013 N 993 “On the State Program of the Kaliningrad region “Tourism” (On the State Program ..., 2013) and other legislative acts of the Government of the Kaliningrad region (On the approval of the Programme ..., 2006; On the Strategy of socio-economic ..., 2012), and expert evaluation of their feasibility calculations were performed copyrights values of parameters “share of the tourism industry in GRP” and “The number of tourist arrivals to the Kaliningrad region” for the period up to 2030, including the types of tourism, in all three scenarios. The following is an example calculation for compensatory scenario (Table 3).

Table 3. Forecast of tourism industry development in the Kaliningrad region according to compensation scenario

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of tourism in GDP, %</td>
<td>2.1</td>
<td>2.5</td>
<td>3.0</td>
<td>4.0</td>
<td>4.0</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>The number of tourist arrivals to the Kaliningrad region, thousand people</td>
<td>650</td>
<td>750</td>
<td>850</td>
<td>1000</td>
<td>1200</td>
<td>1500</td>
<td>1,875</td>
<td>2,344</td>
</tr>
<tr>
<td>Including, by types of tourism:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and recreation tourism</td>
<td>268.32</td>
<td>309.60</td>
<td>350.88</td>
<td>412.80</td>
<td>495.36</td>
<td>619.20</td>
<td>774.00</td>
<td>967.50</td>
</tr>
<tr>
<td>Cultural-cognitive tourism</td>
<td>198.38</td>
<td>228.90</td>
<td>259.42</td>
<td>305.20</td>
<td>366.24</td>
<td>457.80</td>
<td>572.25</td>
<td>715.31</td>
</tr>
<tr>
<td>Business tourism</td>
<td>104.52</td>
<td>120.60</td>
<td>136.68</td>
<td>160.80</td>
<td>192.96</td>
<td>241.20</td>
<td>301.50</td>
<td>376.88</td>
</tr>
<tr>
<td>Ecological tourism</td>
<td>39.13</td>
<td>45.15</td>
<td>51.17</td>
<td>60.20</td>
<td>72.24</td>
<td>90.30</td>
<td>112.88</td>
<td>141.09</td>
</tr>
<tr>
<td>The other types of tourism</td>
<td>39.65</td>
<td>45.75</td>
<td>51.85</td>
<td>61.00</td>
<td>73.20</td>
<td>91.50</td>
<td>114.38</td>
<td>142.97</td>
</tr>
</tbody>
</table>

7. Conclusion

7.1 Influence of factors internal and external environment for the development of tourism in the Kaliningrad region

With the increase of the negative dynamics of the socio-economic processes in the country and the associated to it the high degree of uncertainty of individual industries and sectors of the economy, it is difficult to make a prediction of their development. This study led to the conclusion that for the development of tourist and recreational complex of the Kaliningrad region until 2030 will have the greatest impact of the following factors of internal and external environment:

− the degree of adaptation of the tourism industry in the Kaliningrad region to change the dynamics of regional
and national economies;

- Depending on the level of development of tourist and recreational complex of the Kaliningrad region of the state of the investment climate in the region;
- The status of existing tourist and technological advance in a number of sectors of the tourism industry (mainly in the tour operator and travel agent activity) in the face of increasing demand for activation of innovation and investment components of tourism growth;
- The extent to overcome the limitations in the tourism industry in the Kaliningrad region (transport accessibility, the visa regime, the regime of the limited availability of certain areas of the Kaliningrad region for both Russian and foreign tourists, and others.);
- The level of efficiency in the use of labor resources in the tourism industry conditions began declining population of working age, as well as gains skills shortages.

Thus, we can conclude that the Kaliningrad region could strengthen its position on the domestic tourism market, especially considering the fact that on 01.11.2014, the tourists’ outflows declined by more than 30% (that means that 30 % less Russians travel abroad since that time). In this situation, the most western Russian region (Kaliningrad) has a great chance to attract the Russians, who had previously relied on Western tourist destinations, including the Baltic coast.

Tourism in the Kaliningrad region could also become a ‘driver of development’ in solving the problems of the economy of the ‘transition period’ after the end of the regime of free customs zone (the Law on Special Economic Zone was in operation in the Kaliningrad region from 2006 to 2016, for the time being it is unclear situation about its future). This requires the continuation of scientific and practical research and development of recommendations to improve the process of formation and promotion of regional tourism product in the domestic and international markets increase its competitiveness through the use of innovative approaches and computer technology.

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