

# Regional Social and Economic Concern of Supply Chain Sustainability in Republic of Tatarstan

Khusainova S.V.<sup>1</sup>, Osadchy E.A.<sup>2</sup>, Bakhvalov S.Y.<sup>3</sup>, Ustyuzhina O.N.<sup>4</sup>

<sup>1,2,3,4</sup> *Elabuga Institute of Kazan (Volga region) Federal University*

**Abstract**— Sustainability of supply chains is achieved through the consideration of the economic, environmental and social aspects in the decision making process. There is an objective need to systematize knowledge about the peculiarities of the competitiveness of municipalities, identify factors that determine the competitive position of municipalities, and search for new supply chain management that allow improving and supplementing existing mechanisms for managing the competitiveness of municipal economic systems, as well as managing the competitiveness and socio-economic development of municipalities. The economic pillar of sustainability is addressed in this work considering the costs of the supply chain. In this regard, the sphere of culture should be considered as an integral part of the mechanism for forming the competitiveness of the national municipality of the Republic of Tatarstan. Valid approaches have been formulated for estimating the economic effects of supply chain strategy on regional economy and for identifying critical backward commodities. Using the developed approaches, the case study shows that local procurement strategy can significantly affect the regional economy

**Keywords**— *supply chain management, competitiveness, economy, culture, economic development.*

## 1. Introduction

One of the most significant and dominant criteria to evaluate regional social and economic sustainability, in recent years, is the gain in stakeholders' shared values. Numerous research efforts have been dedicated to the assessment of the sustainability of supply chains [1-5].

The problem was compounded by the fact that, having switched mainly to the interests of oil workers and the plant under construction, the city in tatarstan missed many previously occupied economic niches, such as the textile, furniture, and food processing industries. In [1] claimed that models to assess the people/society impact of supply chains are lacking and identify this issue as a future challenging research stream. There were

also large distortions in the creation of social and engineering infrastructure. Some objects were created in excess in the calculation of half a million city, and some due to the sudden termination of funding simply did not have time to build [3].

Supply chain management (SCM) in the economic, society and industry can easily yield significant improvements in regional economy and, therefore, create shared value. Local communities, supply chain partners, and the general public have been increasingly inspecting SCM performance in the society.

## 2. Methods

### Measuring sustainability in supply chains

A number of sustainability measures have been presented in the literature and used in the context of supply chains to aid stakeholders in making tactical and strategic decisions. In [4] an optimization supply chain network design model is proposed. The objective was to maximize sustainability expressed as linear benefit function of three components representing the economic, social and environmental dimensions of sustainability. Environmental measures used were based on energy consumption in the different supply chain echelons. The social indicator used is the one for health and safety, which covered worker safety for technologies and community safety for sites. A multi-objective linear programming model was formulated in [6] to design and plan a closed loop supply chain. In fact, it was a medium-term program with elements of strategic programming, while it had a clearly expressed applied nature [7-10].

The goal of the program was to achieve economic and social self-sufficiency of the territory at the level of standards approved in the Republic, which would provide not only financing of current expenditures of the territory, but also create incentives for development.

Priority sectors were identified: industrial production, implementation of investment projects in urban enterprises; agriculture; tourism; services, including housing and communal services. In the process of implementing the Program, state and local authorities, as well as economic entities of the territory and the population were involved [6].

The selection of projects of economic entities was carried out not only on the payback period and profitability, but also depending on the degree of their participation in the territorial reproduction process and on the focus on the implementation of strategic directions, such as promoting employment, promoting the growth of living standards, promoting the sustainability and structural diversification of the local economy, environmental impact, promoting the formation of a chosen image and perspective specialization, and promoting overall economic growth. The empirical implementation of the proposed approach was based on the principle of balancing the volume of consumption by an economic entity and its employees of services financed from the budget, and the degree of its financial investments in the development of the territory [5, 7].

Taking into account the tourist and recreational development prospects of the territory, much attention was paid to the environmental aspect. Almost all production was removed from neighborhoods where there was residential development.

### 3. Results

Suggested approach allows for the separate consideration of each supply chain actor in order to evaluate the total supply chain sustainability. To this end a set of normalized economic, environmental, and social indicators have been proposed. The fact that the indicators are normalized allows comparing the different entities of the supply chain, as well as aggregating the three sustainability dimensions to a single index. Furthermore, the inclusion of the relative importance of each of the indicators for each supply chain actor addresses the problem of global supply chain extending between industrialized and developing countries. Today, at the end of the program, the indicators of socio-economic development of the territory are evidence of the accuracy of the chosen direction [2].

The territory was positioned in terms of the volume of output per capita and the volume of investment

per capita in relation to the national average and the national average. It is clearly visible here how the territory has moved from the zone of least efficiency to the zone of high efficiency over the years [6].

The revenue structure of the territory has also changed. Today, the Elabuga municipal district has become self-sufficient. Tax revenues from oil-producing enterprises account for only 7.2 % of the territory's total revenue (compared to 70% in 2000). Changes in the main indicators are reflected in the development of the economy and changes in the quality of life in the territory.

Thus, the territory is on a trajectory of stable development; many businesses are developing effectively competitive; a project of Federal significance - the special economic zone of industrial type Alabuga; changed look of the city, the restored historic part of developed social infrastructure. Living and working in the Elabuga municipal district is becoming prestigious.

The research on sustainable supply chains in developing countries is scarce [14]. The main challenge faced in supply chain management is the coordination between developing and industrialized countries in view of the difference in legislations. Two challenges in decision making for supply chains are present [3]: First, firms tend to build stronger relationships with their suppliers since more design and production activities may be delegated to them. Second, an increasing number of organizations are incorporated in the supply chain due to the focus on core competencies. With the focal company considered responsible for the performance and actions of their suppliers affecting the environment and society [15], the assessment of each supply chain actor and the overall supply chain sustainability seems vital for decision making. Furthermore, we focus on sustainability practice papers in the private sectors of SSCM in developing countries and exclude those in public sector because SSCM in public procurement is normally dealt separately having significantly different characters from SSCM in private sector.

The total area of the National Park is 26.112 ha, including a zone with a protected regime-7.1%; a zone of a nature reserve-50.3%; an ecological forest zone-10.6%; a zone of regulated recreational use-19.6%; and a visitor service zone-12.4%.

There are 174 species of vertebrates in the Park, of which 1/6 are rare, including beaver, otter, flying

squirrel, ROE deer, lynx, etc. there Are birds of prey listed in the Red book. 192 species of plants were studied, every fifth of which is considered rare. These are, first of all, lilies-locusts, shoes, hawthorns, bells.

Today, the local authorities of Yelabuga consider the sphere of culture as a mechanism for forming the competitiveness of the municipality [9]. According to the city's management, the development of culture as an industry should meet two main requirements: first, it should create conditions for meeting the spiritual needs of the population of this territory, as the basis for the quality of life; second, it should encourage investment and business to this territory [11-14].

The entire historical part of the city is considered by the city authorities as an important component necessary for creating a high-quality environment for residents of the city, and as a recreational area that is attractive to tourists, which in combination with a nature reserve and business tourism objects creates a wonderful tourist product.

First, an administrative resource was used and all state institutions that could be placed in historical buildings were used. Given that these institutions are in demand by the population, wherever they are located, and the financing of their maintenance is a fairly real and stable item, we managed to achieve some business revival of the main historical quarters of the city. Then, after long negotiations with the city's entrepreneurs, in agreement with The President of the Republic, it was decided to sell the objects that were under the jurisdiction of the Republic and local authorities to private investors. In fact, it was not a sale, but a transfer — after all, the prices were almost conditional at first [15-17].

But at the same time, strict requirements were set for preserving the architectural appearance and carrying out restoration work. Registration of property rights was allowed only if all the requirements of the Museum-reserve were met.

There are many disputes over the privatization of cultural heritage sites. But one thing is clear that this helped the elabuzhans to preserve the main value of the old part of the city — the integrity of its historical development. In total, 69 historical and cultural monuments, mostly of national significance, are in private hands today. All owners comply with the requirements of the Federal law on cultural heritage objects under the control of the Elabuga state Museum-reserve. Almost all

buildings-historical and cultural monuments that are privately owned — are in good condition today.

#### 4. Conclusions

Rapid urbanization in developing countries and rising living standards bring associated dilemmas and threats to sustainable supply chain that may not be taken into account in global business scenarios. It has become a good tradition in the city, for 5 years in a row, to annually summarize the results of the year on the activities of the owners of buildings-monuments of history and culture for the preservation and use of cultural heritage objects. Every year, 5-6 owners are celebrated with letters of thanks on behalf of the city and the Elabuga state Museum-reserve, as well as memorable gifts.

Analyzing the experience of the city's development in previous years, it is important to consistently implement the sustainable supply chain that the development of the economy and culture is inseparable. In this regard, the sphere of culture should be considered as an integral part of the mechanism for forming the competitiveness of the municipality of Elabuga. Finally, the biggest challenge in the developing country's context is to overcome the long list of barriers that inhibit businesses from applying sustainable practices along their supply chain. First, a better understanding and identification of barriers in developing countries is needed, along with comparative research between developing countries. Both ex-ante and ex-post barriers require further attention, especially to understand how ex-ante barriers are overcome during the implementation process and avoided in the long term. Ex-post barriers need more analysis since they are the ones that prevail over time and could potentially cause the business to abandon sustainable practices. The study of ex-post barriers requires a multi-stakeholder approach to understand how various stakeholders can play a role in overcoming them

#### References

- [1] Aboelmaged, M. G. (2012) Sustainable Supply Chain Management in a Developing Context: An Empirical Examination of Antecedents and Consequences. *International Journal of Social Ecology and Sustainable Development (IJSESD)*, 3(3), 22-41
- [2] Khusainova S. V., Ayupova V. K., & Ustyuzhina O. N. Directions for improving the competitiveness of Russian regions. Publisher: Economics and entrepreneurship. No. 6 (59) (part 3), 330-333, 2015.
- [3] Khusainova S. V. Economic essence of competition and competitiveness. *Modern regional policy: domestic and foreign*

- experience and prospects: Materials of the International scientific and practical conference (November 24-26, 2010): in 4 hours-Kazan: NOU VPO "Academy of management "TISBI", Part II, 157-164, 2010.
- [4] Khusainova S. V. Social and economic development of regions: problems of management and regulation. Monograph. edited by sh. M. Gimbatov: Pero publishing House, 208, 2013.
- [5] Vasilev, V.L., Sazanov, O.V., Ishkinyeva, A.R. Marketing as the city economic security improvement tool. *Academy of Marketing Studies Journal*. 11 (2): 55-2, 2016.
- [6] Husainova, S.V., & Sazanov O.V. The role of the local government of the tasks of the socio-economic development of a region. Publishing house: Economy and entrepreneurship, 11 (2): 52-2, 2014.
- [7] Kukarekaya, L.I. Topical issues of forecasting of the socio-economic development within the context of strategizing. *Bulletin of the Altay academy of economics and law*, No. 1: 45-49, 2013.
- [8] Fattakhova A. R., Khusainova S. V., & Karnach G. K. The Evaluating Methodology of Municipal Management Performance. Publishing house: Asian Social Science; 11, No. 14, pp.20-26, 2015.
- [9] Martin, R.L., A Study on the Factors of Regional Competitiveness: A Draft Final Report for the European Commission Directorate-General Regional Policy. Cambridge University Press, Cambridge. 2005.
- [10] Porter, M. Competition. Moscow, St. Petersburg, Kiev: Williams, Edition 2, pp: 608, 2006.
- [11] Kashirskaya, L. V., Sitnov, A. A., Davlatzoda, D. A., & Vorozheykina, T. M. Knowledge audit as a key tool for business research in the information society. *Entrepreneurship and Sustainability Issues*, 7(3), 2299-2319, 2020. doi:10.9770/jesi.2020.7.3(56)
- [12] Dunets, A. N., Yankovskaya, V. V., Plisova, A. B., Mikhailova, M. V., Vakhrushev, I. B., & Aleshko, R. A. Health tourism in low mountains: A case study. *Entrepreneurship and Sustainability Issues*, 7(3), 2213-2227, 2020. doi:10.9770/jesi.2020.7.3(50)
- [13] Turgaeva, A. A., Kashirskaya, L. V., Zurnadzhants, Y. A., Latysheva, O. A., Pustokhina, I. V., & Sevbitov, A. V. Assessment of the financial security of insurance companies in the organization of internal control. *Entrepreneurship and Sustainability Issues*, 7(3), 2243-2254, 2020. doi:10.9770/jesi.2020.7.3(52)
- [14] Dunets, A. N., Vakhrushev, I. B., Sukhova, M. G., Sokolov, M. S., Utkina, K. M., & Shichiyakh, R. A. Selection of strategic priorities for sustainable development of tourism in a mountain region: Concentration of tourist infrastructure or nature-oriented tourism. *Entrepreneurship and Sustainability Issues*, 7(2), 1217-1229, 2019. doi:10.9770/jesi.2019.7.2(29)
- [15] Aleksandrova, T. N., Romashev, A. O., & Semenikhin, D. N. Mineral and technological aspects and promising methods for intensifying enrichment of sulfide gold-bearing ore. *Metallurgist*, 59(3-4), 330-338, 2015. doi:10.1007/s11015-015-0105-6
- [16] Elbendary, A., Aleksandrova, T., & Nikolaeva, N. Influence of operating parameters on the flotation of the khibiny apatite-nepheline deposits. *Journal of Materials Research and Technology*, 8(6), 5080-5090, 2019. doi:10.1016/j.jmrt.2019.08.027
- [17] Dunets, A. N., Muhamedieva, A. G., Sycheva, I. N., Perepechkina, E. G., Vakhrushev, I. B., & Kulchytskiy, A. V. Spatial development of tourism based on the structure model of the territorial tourist complex. *European Research Studies Journal*, 21(Special Issue 3), 200-210, 2018. doi:10.35808/ersj/1373