

Smart Territorial Development in Latvia: the Case of Zemgale Planning Region

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Abstract

Since 2013, Latvia has defined the smart specialization strategy at national level. In 2020, the planned outcome is the increased capacity of innovations including the share of high and medium-high technology sectors in the export; the number of researchers employed in the private sector; an increase in manufacturing productivity and share of innovative enterprises. The regional policy has the task to establish and implement local smart specialization strategies in order to achieve the planned results in country. Evaluating Zemgale planning region, it develops according to monocentric development at average national level.

Keywords: smart growth, smart specialisation strategy, Zemgale planning region.

Introduction

In 2013, Latvia as a response to European Commission initiative in 2011 developed the smart specialization strategy (RIS3). Latvia developed strategic settings, which result from the National Development plan for years 2014-2020, for the implementation of the Latvian national reform programme “Europe 2020” strategy, as well as for the carried out research and analysis of national industrial policy and research, technology development and innovation policy development (Ministry of Education and Science, 2013a). This conceptually new and complex strategy provides a balanced and complementary support to strengthen the innovation capacity of Latvian economy. By measures of Innovation Union Scoreboard, Latvia is a modest innovator (Ministry of Education and

Science, 2013b). Therefore, its RIS3 is a strategy of economic transformation towards higher added value and more efficient use of resources.

There is strong mono-centric development in Latvia as concluded in previous studies (Gemma and Vītoliņa, 2017; 2018), and this creates unfavourable consequences in the environment for business in regions. Specialisation of the existing resources of territories, proposing the prospective economic development opportunities and directions is one of priorities of the RIS3 strategy in Latvia. The one of the most important directions in achieving this priority is strengthening the innovation capacity of industries in municipalities.

Rural areas as a necessary component of living space for the population is an increasing focus both in official documents of various EU institutions and in research investigations. Both the documents and the research papers stress the necessity to enhance and maintain the viability of rural areas. The viability of rural areas is ensured by employment opportunities and the readiness of residents for active and innovative economic activity (Rivza and Kruzmetra, 2017). Accordingly, the regional policy of Latvia determines the concentration of investments in national and regional development centres, the identification and specialization of the existing resources of the territory, with economic development prospects. Public policies to encourage the creation of innovation should be selective and directed to selected sector and cooperation in the creation of a specific innovation (Prokop and

Stejskal, 2016). Therefore, in Latvia since 2013 the task has been given to the municipalities to establish and implement local smart specialization strategies in order to achieve the planned results in country.

Looking at the situation in neighbour country Lithuania, researchers (Greblikaite, Gerulaitiene and Sroka, 2017) stress that nowadays rural business in Lithuania has many problems, such as depopulation, migration of young people, aging, lacking of human resources, business education, etc. However, since 2004, Lithuania has improved the situation in rural areas because of EU support and the latest rural development policy is tightly connected with social entrepreneurship and development of social enterprises in Lithuanian rural areas. The Organisation for Economic Co-operation and Development recommends to Lithuania to improve the efficiency of government institutions, to strengthen finance for high-potential growth firms and monitor the impact of current corporate tax regimen and ensure it does not create obstacles to the growth of young firms (Hutschenreiter et. al., 2016).

Innovation and entrepreneurship are an important component of RIS3 and territorial development. Innovative entrepreneurship is one of the decisive aspects of the overall implementation of RIS3. Therefore, authors evaluate territorial development form this aspect.

The aim of this article is to evaluate the situation of smart territorial development in Zemgale planning region (ZPR) focusing on the innovative entrepreneurship development. The applied research methods were as follows: monographic, comparison, graphical methods and statistical analysis.

Theoretical framework of the research

ZPR is one of the five planning regions of Latvia located in the middle of the country. It is located in the central part of Latvia, south from Riga, it has long (270 km) borderland with the Republic of Lithuania (Fig. 1). There are 22 local governments in ZPR and 2 of them are cities of national importance – Jelgava and Jekabpils, and 20 county governments (Development Planning of Zemgale).



Fig. 1. ZPR location in Latvia and distance from the biggest cities of Zemgale to capital Riga

Source: author's based on Development Planning of Zemgale

The inhabitants of ZPR are concentrated in two major cities of national importance – Jelgava and Jekabpils, although a half (50.3% in 2010 (EUROSTAT)) of ZPR inhabitants live in rural areas. According to ESPON research “EDORA – European Development Opportunities for Rural Areas” (2013), ZPR is declared as agrarian rural economic territory because all flat land territory of ZPR has the big potential for agricultural development and specialization. However, at the same time the west

part of the region is located close to the capital Riga, so large part of the city's population of ZPR goes to work in the capital Riga thanks to the good transport infrastructure in this way ensuring monocentric development of Latvia. Comparing with Riga Planning Region, it as a capital city region is pronouncedly monocentric, with Riga city as its socioeconomic core that develops a wide network of functional ties, and creates a home for the part of the society that works in Riga, but lives in the adjacent

suburban territories, also north part and the biggest cities of ZPR (Rivza, Azena and Rivza, 2017).

Overall compared with other regions, ZPR has comparative advantages in agriculture, well-developed infrastructure, flexible labour market and positive demographic situation, cheaper labour, as well as the access to the educational institutions and scientific institutions for the development of region's potential.

By evaluating the available resources, traditions and production industries in the region, as dominant business sectors in ZPR are defined education, science and innovation, agriculture, food industry, forestry and wood processing, mining and quarrying, metal processing and machinery, chemical industry, textiles and tourism (Development Planning of Zemgale).

Smart specialisation strategies are about enabling regions to turn their needs, strengths and competitive advantages into marketable goods and services. They aim to prioritise public research and innovation investments through a bottom-up approach for the economic transformation of regions, building on regional competitive advantages and facilitating market opportunities in new inter-regional and European value chains. They help regions to anticipate, plan and accompany their process of economic modernization (European Commission, 2017). Jean-Claude Juncker, President of the European Commission, in 2017 stressed out that "smart specialisation strategies enable regions to hold their own by developing their assets and helping their local businesses access global supply chains, particularly in industry" (Smart specialisation pilot actions, 2018).

During the elaboration process there were identified several challenges for transformation of the national economy of Latvia:

1. The productivity level of the national economy of Latvia is one of the lowest in the EU;
2. A competitive advantage of the national economy of Latvia is cheap labour. But cheap labour and relatively high profitability do not create incentives for changing the business model and creation of other competitive advantages;
3. The low level of innovations in Latvia shows that there are significant weaknesses in the existing innovation system.

Research methodology

To induce the change and growth, the strategy has outlined seven investment priorities and defined five specialization areas in Latvia. The investment priorities are: 1) high added value products; 2) productive innovation system; 3) energy efficiency;

4) modern information and communication technologies (ICT); 5) modern education; 6) the knowledge base; 7) polycentric development. The knowledge specialization areas are: 1) knowledge-intensive bio-economics; 2) biomedicine, medical technologies; 3) bio-pharmacy and biotechnologies; 4) smart materials, technologies and engineering systems, smart energetics; 5) ICT (Ministry of Education and Science, 2013a).

Innovations and entrepreneurship are significant components of RIS3 and territory development promoters.

The European Structural and Investment Funds (ESI) is the most important tool to implement RIS3 in Latvia. Latvia benefits from ESI funding of EUR 5,6 billion, ESI Funds total budget for Research and Innovation of Latvia – EUR 580 Million (Smart Specialisation..., 2017).

To ensure availability of information for the state, municipal and regional planning specialists as well as investors and the whole society in order to promote common and versatile understanding of regional politics and prospects of territorial development by state administration, municipal institutions and society in Latvia there is developed Regional development indicators module (RDIM) as an Information System that serves as a tool for monitoring the regional development and support in the decision taking, for evaluating the development trends in municipal territories as well as for elaboration and monitoring the development programs (Regional development indicators module, 2018).

Other database in Latvia ensuring data of Business Registry information system is Lursoft. It provides access to the general national legal information database and also provides a range of services. Authors used data about the industries with high transfer potential that were broken down by RIS3 specialisation field. The data selected allowed to identify the main change in the growth of industries in municipalities and cities.

Analysis of research results or scientific problem

The economic development of ZPR defines ZPR development Programme 2015-2020 which defines six medium-term development priorities, certain directions of action for achieving development priorities and the results to be achieved. The implementation of development priorities must take into account two horizontal principles – areas that allow all priorities: conservations of habitat – sustainability of community and living space and Smart management. Medium-term development

priorities are 1) an attractive environment for business – a base for long-term innovation, 2) flexible life-long education, 3) efficient and high-quality transport system and infrastructure for the external and internal reach of the region, 4) sustainable management and development of environment and natural resources, 5) effective service system and 6) cultural Environment and Identity of the ZPR (Attīstība, 2015). As it is seen, most of the priorities are related to RIS3, each adapted to ZPR features. According to the data analysed previous in the article, the ZPR develops at the average of national level taking into account its specialities. As the problems in the rural space of all the regions are recognized the prevalence of the services segment and the low proportion of the manufacturing industry (Rivza, Kruzmetra and Zaluksne (2017).

First, a little insight into a situation before RIS3. Data obtained from Lursoft database – the number of newly established enterprises indicates the economic development in the ZPR (Fig. 2). An analysis of the number of newly established enterprises in the period 2009-2013 reveals interesting dynamics. The data on the number of newly established enterprises

operating in the industries having high transfer potential in at least one RIS3 specialisation field were selected for the analysis. Industries having high transfer potential are those that most closely correspond to the specialization areas of RIS3 of Latvia (e.g. chemical industry, manufacture of electrical and optical equipment, manufacture of non-metal minerals, manufacture of machinery and equipment, etc. (Gemma and Vītoliņa, 2018)).

The economic situation of this period could be characterised as a post-crisis time, although the number of newly established enterprises in the industries with high transfer potential pertaining to RIS3 was slightly larger compared with 2010. A considerable increase in the number of newly established enterprises occurred in 2011, which indicated a decline in the economic crisis. In 2012, the number of newly established enterprises decreased by half, while in 2013 their number continued decreasing and was even below the 2009 level, thereby stabilising the situation in the real estate market that stagnated during the crisis. Data dynamic in Figure 2 shows the important necessity for innovation development in region for next years.

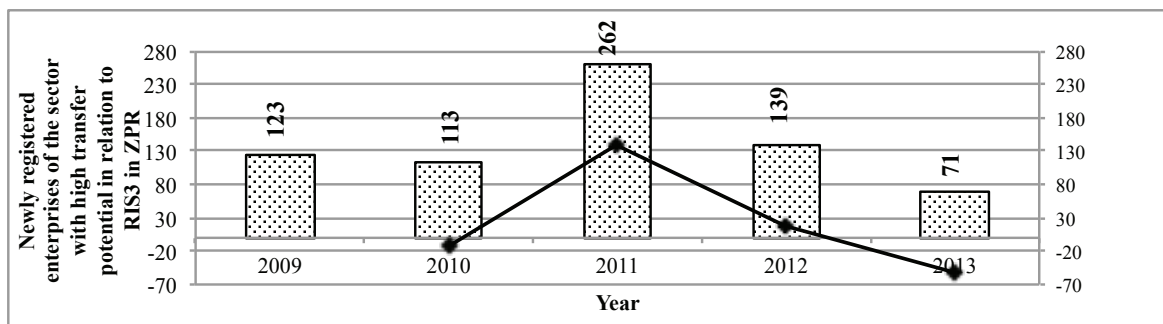


Fig. 2. Number of newly registered enterprises of the sector with high transfer potential in relation to RIS3 in the statistical regions in the period 2009-2013 and basic absolute increase (as line)

Source: authors' calculations based on Lursoft data

According to Rivza, Kruzmetra and Zaluksne (2017), the knowledge-based economy enters the rural space at a quite fast pace already in the period 2009-2014, outpacing the processes taking place in

the country's largest cities, which allows asserting that at least a small decrease in disparities between rural and urban areas becomes evident.

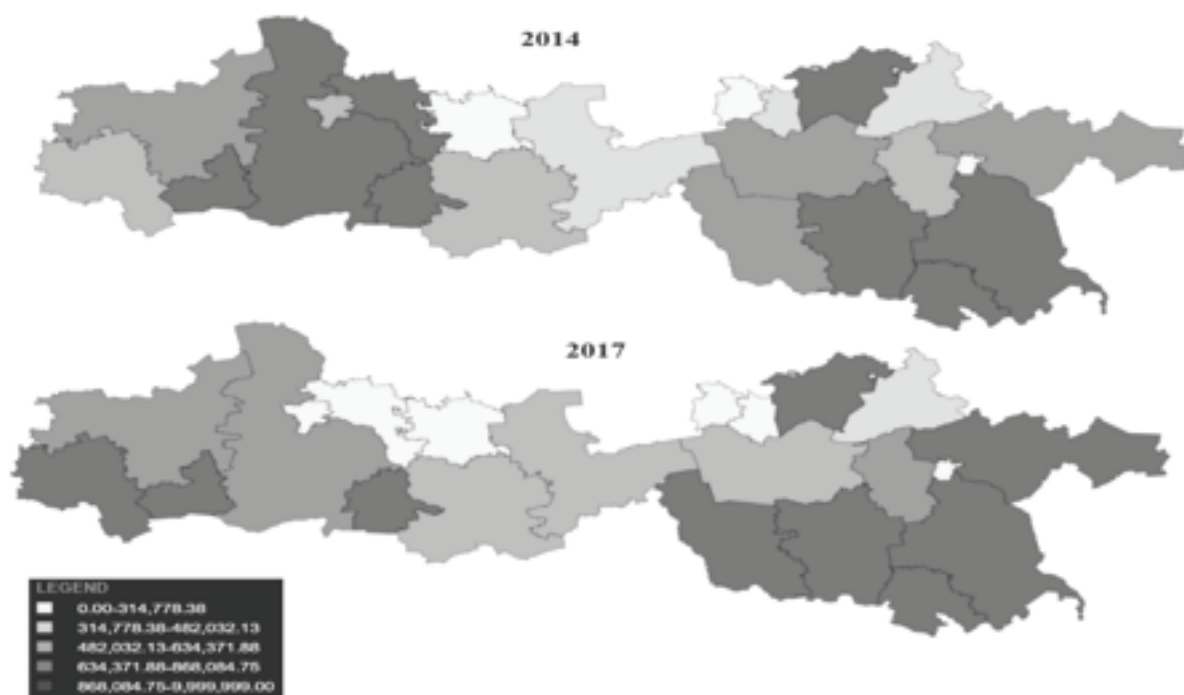


Fig. 3. EU structural fund funding per 1000 inhabitants, 2014 and 2017, EUR

Source: authors' construction based on Regional development indicators module, 2018

Researchers Jakusonoka and Rivza (2013) studying the use of EU funds in ZPR divided municipalities of ZPR by breakdown by population. Comparison of the per-capita amounts of funding from the EU invested in projects in ZPR municipalities in the period 2007-2015 with the Central – Eastern European countries average shows that this indicator was 23% higher in the development centres of national significance (Jelgava and Jekabpils), while in the group of municipalities that had no development centre of regional significance and had a population of more than 5000 it was 33 % higher. But the other groups of municipalities considerably lagged behind.

But if analysing the European Union (EU) funding per 1000 inhabitants in municipalities in ZPR (Fig.3.), one can conclude that in three years period there has been significant increase. Municipalities nearby capital Riga and cities of national importance are characterised by the highest number of total inhabitants, the EU funding per 1000 inhabitants

is higher in more remote areas. The peripheral and rural municipalities are very active in attracting EU money as investment from the national government and directed to the national and regional centres as part of polycentric regional politics.

As previously mentioned, one of the problems of economy of Latvia is monocentric development which creates unfavourable consequences in the environment for business in regions, including the decrease in population and ineffective use of resources of the region. For balanced development it is essential to promote more rapid development and increase of competitiveness in all areas, therefore the RIS3 as one of the priorities identify studying and specialisation of the existing resources of territories, proposing the prospective economic development opportunities and directions in municipal territories. In ZPR are working 3 business incubators in Jelgava, Bauska and Jekabpils so giving opportunity to develop young entrepreneurs and business ideas.



Fig. 4. Share of innovative enterprises in the total number of enterprises in municipalities, 2016, %

Source: authors' construction

Also Figure 4 clearly characterises the mono-centric structure – the innovations are more centred close to capital city Riga, increasing unfavourable differences between centre and periphery. Also innovations are closely related to the number of inhabitants in the territory – more people – more innovative ideas. To stabilise the uneven development and foster balanced and more harmonised development of region and country at all, the regional policy must be priority in next policy planning period.

Proportion of innovative companies is one of the RIS3 targets for the period 2014–2020. In 2020, the proportion of innovative companies (% of all companies) in Latvia should be 40% but the number in 2017 was just 23,4% (Eurostat data). It shows quite slow progress and it is high possibility that in 2020 the planned goal will not be achieved.

In the south of ZPR, it has a long borderline with neighbour country Lithuania so reading the situation in Lithuania, the share of innovative enterprises in the total number of enterprises in 2016 were almost a half – 46.6 % (Statistics Lithuania, 2016). Also evaluating the economic situation in Lithuania after OECD report (Hutschenreiter et. al., 2016) it can be concluded that Lithuania has achieved more than Latvia and ZPR in the field of innovative economy.

Speaking about research and development (R&D), there are seven scientific research institutes in ZPR, of which five are located in structural units of Latvia University of Life Sciences and Technologies. There are three scientific research institutes in the structure of university laboratories. All of these resources are specialized in agriculture and forestry. Research work shows the stable scientific productivity – over 10 patents per year (Zemgales plānošanas reģiona..., 2012).

Conclusions

Smart specialisation strategies aim to foster the economic transformation of regions, building on regional competitive advantages.

The peripheral and rural municipalities are very active in attracting EU money as investment from the national government which are directed to the national and regional centres as part of polycentric regional politics.

Evaluating newly established enterprises of ZPR in the period 2009 – 2013, in the post-crisis period, the number of newly established enterprises in 2011 was two times larger than in 2010, while in 2009, 2010, 2012 and 2013 the numbers were almost equal. One can conclude that no considerable economic growth was observed in the analysed period.

The low level and monocentric trend of innovations in ZPR and Latvia prove that there are significant weaknesses in the existing innovation system.

The regional policy must be priority in next policy planning period to stabilise the uneven development and foster balanced and more harmonised development of region and country.

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Интеллектуальное территориальное развитие в Латвии: пример региона планирования Земгале

Резюме

С 2013 года Латвия определила стратегию интеллектуальной специализации на национальном уровне. В 2020 году запланированный результат - увеличение потенциала инноваций, в том числе доля высоких и средних технологий в экспорте; число исследователей, занятых в частном секторе; повышение производительности труда и доля инновационных предприятий. В нем региональная политика Латвии определяет концентрацию инвестиций в национальные и региональные центры развития, выявление и специализацию существующих ресурсов территории с перспективами и перспективами экономического развития. Поэтому муниципалитетам приходится ставить задачу разработать и внедрить местные стратегии интеллектуальной специализации для достижения запланированных результатов в стране. При реализации стратегии интеллектуальной специализации следует избегать односторонней поддержки экономического роста: необходимо создать экономическую среду и развитие людских ресурсов, которые способствуют экономической активности. Оценивая регион планирования Земгале, он развивается в соответствии с моноцентрическим развитием на среднем национальном уровне.

В Латвии существует сильное моноцентрическое развитие, что создает неблагоприятные последствия для окружающей среды для бизнеса в регионах. Специализация существующих ресурсов территорий, предлагающая перспективные возможности и направления экономического развития, является одним из приоритетов стратегии интеллектуальной специализации в Латвии. Одним из наиболее важных направлений в достижении этого приоритета является укрепление инновационного потенциала отраслей в муниципалитетах.

Инновации и предпринимательство являются важным компонентом стратегии интеллектуальной специализации и территориального развития. Инновационное предпринимательство является одним из решающих аспектов общей реализации стратегии умной специализации. Поэтому авторы оценивают территориальное развитие в этом аспекте.

Цель этой статьи - оценить ситуацию интеллектуального территориального развития в регионе планирования Земгале с упором на инновационное развитие предпринимательства.

Земгальский район планирования является одним из пяти планирующих регионов Латвии, расположенных в центре страны. Жители Земгальского района планирования сосредоточены в двух крупных городах, имеющих национальное значение, хотя половина

жителей района Земгале проживает в сельской местности. Земгальский район планирования объявляется аграрной сельской экономической территорией. Но в то же время западная часть региона расположена недалеко от столицы Риги, поэтому значительная часть населения Земгальского района планирования работает в столице Риге. В целом по сравнению с другими регионами регион планирования Земгале имеет сравнительные преимущества в сельском хозяйстве, развитую инфраструктуру, гибкий рынок труда и позитивную демографическую ситуацию, более дешевый труд, а также доступ к учебным заведениям и научным учреждениям для развития регионального потенциала. В качестве доминирующих бизнес-секторов в регионе планирования Земгале определены образование, наука и инновации, сельское хозяйство, пищевая промышленность, лесное хозяйство и деревообработка, добыча полезных ископаемых, обработка металлов и машиностроение, химическая промышленность, текстиль и туризм.

Экономическое развитие региона Земгальского планирования определяет Программу развития региона Земгале 2015-2017 гг., которая определяет шесть среднесрочных приоритетов развития, определенные направления действий для достижения приоритетов развития и результаты, которые должны быть достигнуты. Для реализации приоритетов развития необходимо учитывать два горизонтальных принципа - области, которые позволяют использовать все приоритеты: сохранение среды обитания - устойчивость сообщества и жизненного пространства и интеллектуальное управление.

Как отмечают авторы, одной из проблем экономики Латвии является моноцентрическое развитие, которое создает неблагоприятные последствия для окружающей среды для бизнеса в регионах, включая снижение численности населения и неэффективное использование ресурсов региона. Для сбалансированного развития важно содействовать более быстрому развитию и повышению конкурентоспособности во всех областях, поэтому стратегия интеллектуальной специализации в качестве одного из приоритетов определяет изучение и специализацию существующих ресурсов территорий, предлагая перспективные возможности и направления экономического развития в муниципальных территориях.

Говоря об исследованиях и разработках, в Земгальском регионе планирования имеется семь научно-исследовательских институтов, из которых пять расположены в структурных подразделениях Латвийского университета живых наук и технологий. В

структуре университетских лабораторий есть три научно-исследовательских института. Все эти ресурсы специализируются на сельском и лесном хозяйстве. Исследовательская работа показывает стабильную научную производительность - более 10 патентов в год.

Чтобы стабилизировать неравномерное развитие

и способствовать сбалансированному и более гармонизированному развитию региона и страны в целом, региональная политика должна быть приоритетной в следующий период планирования политики.

Ключевые слова: умный рост, стратегия умной специализации, регион планирования Земгале.