## ANALYSIS OF KURZEME REGION DEVELOPMENT IN THE CONTEXT OF SMART SPECIALIZATION STRATEGY: PRELIMINARY RESULTS

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**Abstract.** According to the Latvian National development plan regional development or its polycentric aspect is relatively close to economic development in Latvia. Supply and demand are tools of economic growth, supply factors are quantity and quality of natural resources, human resources, supply of capital goods and technology. However, there is also a new factor of economic growth defined in the past years – innovation. In situation, when European countries and Latvia are trying to escape from crisis, we should focus on possibilities which provide innovation. Trends in regional development still are fairly monocentric, and according to RIS3 strategy there should be development of economics and entrepreneurship in all regions, and best practices should be introduced outside the borders of a region. ESPON Cube, RAIM module and the matrix of level and speed of development form the basis of methodology used in this research. Questionnaires and focus group discussions as qualitative research methods have also been used in the research project in general and to produce this research paper in particular. Findings and results on Kurzeme region related to the state funded research programme EKOSOC 5.2.3. "Processes of development and opportunities for countryside and regions in Latvia within the context of knowledge economics" are discussed and analysed, and relevant conclusions are provided in the paper.

Keywords: regional development, innovation, smart specialization.

#### Introduction

Decrease of inequality between the EU average and Latvia based on GDP labour force, level of entrepreneurial activities and other indicators is one of the main challenges for Latvia on macroeconomic level. Minimization of development differences between the capital city Riga and region around it and other regions of Latvia is an essential task on the country level. Therefore, determination of preferences for competitiveness for each region in Latvia can help ensure equal development of all regions in Latvia and restrict growing depopulation within the regions of the country.

In order to minimize differences in territorial development and to determine advantages for competitiveness for each particular region it is necessary to analyze all stakeholders involved in the regional development including governance, public sector, companies in the local market, export orientated enterprises and inhabitants. To solve the above mentioned tasks it is necessary to research in the existing situation within each region based on the indicators of development and the rate of development. Selection of a model, which accurately evaluates the situation, also should be carried out. Finally, impacting factors have to be determined and possible solutions and alternatives should be created as well as appropriate development model for each region should be designed, tested and after necessary adjustments implemented.

Although the theoretical framework and research methods applied in this research are relevant for all regions in Latvia, fieldwork, data analysis and discussion of preliminary results relate only to Kurzeme region. The research discussed in the paper is *related to the state funded research programme EKOSOC 5.2.3. "Processes of development and opportunities for countryside and regions in Latvia within the context of knowledge economics"*.

### **Theoretical framework**

The EU legal acts and documents on European territorial cooperation and territorially specific models, legal regulations of Latvia as well as the EU and Latvia policy planning documents form the basis of theoretical framework for this research paper. The main aspects covered by the EU and Latvia policy planning documents relevant for this research are competitiveness and knowledge based economy, regional and country development and balanced and sustainable development model.

*EU Smart specialization strategy* [1] and *Europe 2020* [2] are among the basic policy planning documents on European level, which state that development of a country is determined by equal development of all territories and regions within the country. Smart Specialization Platform and

Guidelines for creation of Smart Specialization policies show that there are 6 steps for developing Smart Specializations Strategy. Some steps are made for development of Smart Specialization strategy, but for the best results there is a need to build Regional development Policy, based on the needs for all regions. The goal is to support regional innovations to reach economic development and prosperity in order to focus on the strengths of the region. Representative of the Ministry of Education and Science of the Republic of Latvia Mrs. Agrita Kiopa in her presentation about RIS3 platform explains that the existing problems of development are orientated towards cheap labour business model rather than towards innovation development, week cooperation between industry and science and monocentric regional development. Latvia can be described as almost complete monocentric state, because out of all 1 967 000 inhabitants of Latvia (data as from March 10<sup>th</sup> 2016) more than a half of all population, i.e. 1 008 616 [3] live in the capital city Riga and the region around Riga. Therefore, RIS3 defines the priority – transformation of economy. The National Development Plan of Latvia for 2014-2020 [4] defines vision for Latvia in 2020 which is "Economic breakthrough - for the greater well-being of Latvia." To reach this ambitious goal, focus should be put on sustainability and creativity in all levels of governance, starting with the state, regional, local authorities as well as with the sector of entrepreneurship. Latvia 2030 [5] is also among the main planning documents for regional development on the national level. Guidelines for development of science, technology and innovations [6] and Guidelines for industrial policy [7] comprise directions for regional development on the country level.

Finally, strategies and action plans for development of each particular region are the policy planning documents on regional level. For example, the *Planning Region sustainable development strategy "Kurzeme 2030"* [8] is among the key documents for Kurzeme region development. There are 2 cities of national significance in Kurzeme region, i.e. Liepāja and Ventspils and 3 development centers of regional significance, i.e. Kuldīga, Saldus and Talsi. Kurzeme region consists of 18 municipalities. The area of Kurzeme region occupies 21% of the total area of Latvia and the total number of population in the region is 279 961 inhabitants or 13% of the whole population of Latvia. Kurzeme region development strategy defines priorities, special values of the region and economic profile of the region. Long coastline, high biological and landscape diversity, high quality water resources, Trans-European transport (TEN-T) elements (large ports, roads, railways, airports) as well as the main sectors, i.e. transport and logistics, wood processing, metal processing, agriculture, food and clothing production, fisheries and tourism are mentioned as key values of the region.

According to that potential the following strategic goals are defined for the region.

- 1. Smart development (investments in education, science, creative industries, changing public environment and developing entrepreneurial thinking).
- 2. Attractive living environment change of living and working environment.
- 3. Global connectedness and openness openness and the use of global opportunities by the region, place and individuals.

As mentioned before, there is an important role of smart specialization in developing sustainable strategy of the region. Investigations of regional development made by researchers, who specialize in regional innovation systems, reveal that innovative business has trends to be spatially localized, while standard business has trends to be globalized. For the best results all three stakeholders of innovation systems (academic environment and researchers, business supporting institutions as business incubators and science parks, and entrepreneurs) should cooperate very close together [9].

## Research methodology

ESPON Cube model with three indicators, i.e. geographical location, area characteristics and development rate, was used to determine, which territories within particular region have the highest development rate and development level [10]. Matrix of development rate and development level was designed, where segment I "Leaders" comprised territories with high development level and high development rate, segment II "Promising territories" contained territories with low development level but high development rate and segment IV "Territories stepping back" included territories with high development level and low development rate. The data table covered the number of economically

active market sector statistical units per 1000 inhabitants and the number of individual commersants and companies per 1000 inhabitants within each local municipality of Kurzeme region. Statistical data were available for years 2009-2013. To determine the most relevant territories for the research in Kurzeme region the number of inhabitants and growth rate were also analyzed.

To design appropriate development model for each region qualitative research methods were employed. First of all, a survey of executive directors of municipalities was conducted. The main issues covered by the survey were related to evaluation of the overall economic situation in the country and examples of successful utilization of the EU structural funds (investment plans of local governments, competencies of employees at local governments in development planning and project management and financial management). Overall, more than a half of executive directors of the local municipalities in Kurzeme region participated in the survey.

Another survey was organized to determine rural sustainable development and covered all key stakeholders, i.e. governmental institutions, local municipality institutions and inhabitants of the territories. The questionnaire used in this survey covered impact factors for each stakeholder. All in total 250 inhabitants from Kurzeme region participated in the survey. The main impact factors for governmental institutions were maintenance of favorable economic situation in the country, maintenance of legislation stability, design of a tax system, which fosters economic activity, provision of access to the EU financing. Ability to attract and successfully utilize financial resources of the EU structural funds, design and implementation of development strategy of the territory, competence of municipality representatives in development planning and project management as well as successful relationship with local entrepreneurs, NGOs and inhabitants were among the impact factors for local municipality institutions. Finally, several questions were related to the impact factors for inhabitants of the territory including willingness of local people to participate in solving practical issues of the native region/town, readiness of local people to be involved in economic activities, involvement of inhabitants in acquiring and distribution of innovative ideas, readiness of local inhabitants to acquire new knowledge by participating in lectures, seminars and career development courses.

Best practice method was also used in this research and 6 best practice examples from Kurzeme region were selected and described. Finally, the smart territory model for Kurzeme region which comprises smart economy, smart people, smart governance and smart environment will be developed, tested and implemented.

### Preliminary results and discussion

ESPON Cube model has been successfully used to foster regional development in several EU countries [11]. Based on the ESPON Cube model a matrix of the development level and development rate for local municipalities in Kurzeme region was designed. Data for calculations were obtained from the Latvian Central Statistical Bureau and Kurzeme Planning Region. Figure 1 below shows the results of the development rate and development level clusters for Kurzeme region. The number next to the names of local municipalities pinpoints the level of development where 14 is the lowest and 97 is the highest.

According to Figure 1 majority of local municipalities in Kurzeme region can be classified as territories with low development rate or rate below average. Lack of growth support centers including limited number or non-existence of professional and higher education establishments in the nearby cities and towns is one of the reasons, which explains the existing situation.

Growth rate clusters in accordance with the number of inhabitants in Kurzeme region were also analyzed and the results showed that majority of local municipalities in Kurzeme region can be classified as territories with low number of inhabitants (1<sup>st</sup> segment of the matrix with the number of inhabitants between two thousand and nine thousand people). Based on the results of the statistical data analyzed by the EPSON Cube model three local municipalities from Kurzeme region were selected for further research. Alsunga territory was chosen because of the high development level and high development rate as well as because of location between three large cities, which comprise professional and higher education establishments as well as facilitators for the growth, i.e. business incubators. Rucava territory was selected due to the high development rate as well as location close to the seaport city Liepaja and neighboring country Lithuania. Finally, despite the low development rate

Pavilosta territory was also selected due to the positive perspective for growth and development based on the number of individual commersants and SMEs as well as possibilities to develop the existing local port. On a later stage applicability of the smart territory matrix will be explored for the territories described above.

I Low rateHigh levelGrobiņas novads37Mērsraga novads14Nīcas novads31Rojas novads27Saldus novads32Low level0Dundagas novads52Kuldīgas novads64Skrundas novads92Talsu novads49	II <u>Rate below average</u> <i>High level</i> <i>Low level</i> Aizputes novads 70 Brocēnu novads 53 Pāvilostas novads 67 Priekules novads 83 Durbes novads43
<b>III <u>Rate above average</u></b> <i>High level</i> <i>Low level</i>	IV High rateHigh levelAlsungas novads38Low levelRucavas novads74Vaiņodes novads97

Fig. 1. Development clusters for Kurzeme region

In order to design appropriate development model for Kurzeme region two surveys based on questionnaires were conducted. Respondents of the first survey were mostly executive directors of local municipalities, who have had to share their opinion on the main factors, which impacted the economic activity in the respective territory they are responsible for. Out of all 18 local authorities, (state level cities Liepāja and Ventspils were excluded from the research) 60 % executive directors from the local municipalities provided their opinion and completed the questionnaire. Factors influencing economic activities in local territory were mentioned as follows: a) investment plan of the local government and completed projects, which correspond to the priorities of the development programme vital for the municipality, b) EU structural fund investments; c) received special purpose grants, d) results of implementation of local government development programme have been thoroughly evaluated and e) competencies of local government employees in finance management are essential for all municipalities.

To determine the impact factors for sustainable rural development another survey which comprised 250 inhabitants of Kurzeme region was carried out. Respondents had to evaluate activity of the impact factors for the state as institutions, for local municipalities as local governance institutions and for communities living in the territory of local municipality. The results revealed that the majority of respondents emphasized that on average governmental institutions are able to maintain favorable economic situation in the country and to provide access to the EU financing. However, competence of local municipality leaders to attract financing of the EU structural funds was rated as high. The respondents also noted that on average local municipalities are able maintain close business contacts with local entrepreneurs to solve important issues for both involved stakeholders as well as that deputies of the local municipality are involved in purposeful design and implementation of the development strategy for the local territory. Finally, the respondents also highlighted that on average people in local municipalities are ready for economic activities to increase the personal income level. However, readiness of local inhabitants to acquire new knowledge by attending lectures, seminars or

different courses was rated as low. Majority of respondents also agreed that readiness to accept changes at work, in society and environment among local people still is relatively low.

Best practice examples of Kurzeme region also were used for selection of a relevant development model for the region. Innovation strategies nowadays ask not to do something just better than competitors but to do it in absolutely different way or to do something else in order to achieve the most important results. It means that entrepreneurs should make their businesses in unique way and find their own smart specialization strategy. Therefore, best practice examples from Kurzeme region were collected to determine a different and unique way of entrepreneurial activities. As examples of active small and medium size enterprises for local and/or foreign markets can be mentioned "Baltic Solar" Ltd., which is located in Nīca municipality. The company is dealing with friendly to environment energy and projects of solar parks. The company "Palešu mebeles" Ltd., which produces and sells furniture in a form of pallets, can be mentioned as another good example from Kurzeme region. The enterprise promotes use of natural materials in households of Latvia. The company "J.A.Wood Country" Ltd. provides ecological natural wooden toys for children up to 3 years. The main direction of "LGV Network" Ltd. is creation of charging network for electro mobiles. Among good practices for cooperation Ventspils High Technology Park, Liepaja Triangular consultative council and Talsi municipality foundation can be mentioned, and their main objectives are to share support for all small and medium size enterprises in order to reach the best results in business and local territory development.

### Next steps

Based on the results obtained from employment of the ESPON Cube model, qualitative surveys and the best practice example the further step is to create and develop the smart specialization model for Kurzeme region (AHP model). The AHP model incorporates the impacting factors determined in the surveys, which were discussed before, second level criteria for evaluation of the factors, design of new alternatives and the range or weight for each alternative, which later will be used for factor analysis and cluster analysis for local municipalities of Kurzeme region [12]. Smart specialization matrix is shown in Figure 2.

I Smart Economics	II Smart People
- Industrial production	- Human capital
- Agricultural production	- Social capital
III Smart Governance	<ul> <li>IV Smart Environment</li> <li>Social environment</li> <li>Environment of nature</li> <li>Infrastructure</li> </ul>

### Fig. 2. Smart specialization model for the region

All four quadrants, i.e. smart economics, smart people, smart governance and smart environment are formed based on the factors, which relate to the EU impact, governmental impact, local municipality impact and impact of inhabitants. The created AHP model for Kurzeme region will be pilot tested and after necessary corrections and adjustments implemented in the region.

### Conclusions

- 1. ESPON Cube model and AHP model can help highlight solutions on how to decrease differences in territorial development and can help determine the competitive advantage for Kurzeme region.
- 2. Survey results and best practice examples revealed that close cooperation between all stakeholders including governmental institutions, local municipalities, entrepreneurs and local

inhabitants is essential for sustainable development of all regions in Latvia and Kurzeme in particular.

- 3. Research results also pinpoint that strengthening of local communities, involvement of communities in entrepreneurial and social activities of the local municipality are essential factors for forming smart communities in Kurzeme region.
- 4. Smart specialization model for Kurzeme region should cover key values of the region, which comprise location, national resources, high biological and landscape diversity, transportation and logistics networks and presence of competitive production and service industries.

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