World Academy of Science, Engineering and Technology
International Journal of Humanities and Social Sciences
Vol:7, No:9, 2013

Influence of City Environment to the Regional Development in Baltic Countries

Ilze Stokmane

Open Science Index, Humanities and Social Sciences Vol:7, No:9, 2013 publications.waset.org/16868/pdf

***Abstract*—**Economic processes underway in the country directly and indirectly affect the welfare of the people and the social environment, starting with job security and having a direct impact on the qualitative and safe living environment.

The paper describes existing situation and gives analysis of the regional development policy determination and implementation in the all three Baltic countries. According statistical indicators there are differences between implementation of the regional development activities between all Baltic countries and in regions of inside each country.

It is analyzed more detail differences between regions in Latvia, Lithuania and Estonia according possibility to evaluate success of development processes in regions of the Baltic countries. The descriptive analyze of documents, statistical indicators at national level and regional level were used in the research.

***Keywords*—**Baltic countries, city environment, regional development, urban areas.

I. Introduction

THE Baltic countries are a single geographical region, but every country has its different territorial division and living conditions. It influences the development of a particular region and the growth possibilities of the different sectors of national economy.

The regaining of independence caused several changes not only in the political life of the Baltic countries, but also in the economic activities. In the Baltic countries there were developed new economic relations, the structure of property changed, and the foreign investments flew in. There emerged the necessity for the change of state administration, changes to be carried out concerning the state development strategy and planning. Until the beginning of 1990s, in the Baltic countries there was developed planning in the aspect of industries, but, alongside with the transition to the democratic state administration and the development of market economy, the aims and objectives of planning changed considerably, setting as the main problem the sustainable and balanced state development.

Irrespective of the attempts of economic integration, the economic similarity and perception of national interests, the cooperation of the Baltic countries has created also the contrary directed forces. Since there are very similar capacities of capital and labor force on a larger scale, there are manufactured similar types of products, and the competition takes place regarding the same external markets. The experience of the Baltic countries confirms the statement that the most difficult stage of the practical management of transition processes is the necessity to develop such interrelated political framework for the maintaining of stable macroeconomic situation and structural reforms, which would comprise the prognosis of developmental dynamics.

Labor placement largely depends on economic activity in region, i.e., location of employment opportunities, where consequently the dependency ratio is different in different areas. In areas with more jobs and better wage opportunities, especially in urban areas and their surroundings, tend to concentrate the active population, while the less economically active rural areas remain largely the elderly, employment opportunities which are no longer needed.

Through co-operation it is possible to ensure qualitative life environment for the population, facilitating the development of regions and a country on the whole, therefore modern regional development is based on the planning of the utilization of interconnected resources and it is inter-territorial. Modern regional development policy is characterized by several fundamental principles – democracy, publicity, and decentralization. Taking into consideration the changing political situation and developmental tendencies in the Baltic countries and the European Union, the role and place of population within these processes becomes an important problem.

In the international practice, for the evaluation of a country's developmental process it is conceptually assumed that the social and economic environment in the country's territory should gradually develop in order the inhabitants of the territory would have a desire to live and work even better. Unfortunately, the speed differs in the territories of different countries and is limited in relation of the potential development progress.

In order to align with the single world and European economic system, the country or its separate region should clearly understand the advantages of its competitiveness, as well as it should be able to determine the basic factors of successful regional integration.

II. Concept and Principles of Regional Development

When speaking about the territory within the context of its development, we should keep in mind that the territory is a land together with its inhabitants who have their different needs, territory includes also the natural resources of this land, infrastructure, culture, history, relations with other territories (inhabitants) and many other aspects, which form the identity of this territory. The changes of all aspects within a particular

I. Stokmane is with the Department of Architecture and Building, Faculty of Rural Engineering, Latvia University of Agriculture, 2 Liela street, Jelgava, Latvia (e-mail: ilze.stokmane@llu.lv).

Open Science Index, Humanities and Social Sciences Vol:7, No:9, 2013 publications.waset.org/16868/pdf

period of time also structure the content, which should be considered to understand the development.

The use of developmental concept has become more widely used under the circumstances of the country's development and changes: the developmental concept means all types of positive changes. In particular the developmental concept means favorable for the society progress of the process of changes regarding the natural environment, cultural environment, social environment, and economic activities.

Like in the developmental conceptions of many European countries, in the National Development Plan of Latvia it is indicated that the development should be considered as favorable, if there exists or is being facilitated the increase of population's welfare, which is based on creative work, moral and ethical values, healthy way of life, harmony and balance between the economic activities and environment.

The regional development initially appeared, when the country's development was viewed from the inter-sectoral aspect, as well as when the peculiarities of the country irregular development were evaluated.

In the country's geographical space and in the inter-state geographical space the interdependent development is viewed as a result of the regional development policy. The processes of regional development are seen in two ways: the ones of self-development, based on the local resources and conditions, and the purposefully managed processes, which are determined by the purposeful regional development policy of the state and local governments.

It is possible to point out that regional development comprises the totality of certain principles, methods, means and measures, which are named the instruments for the regional development. The regional development is supported by applying the organizational instruments (decisions, laws, clearly determined functions and procedures), financial instruments, innovative measures (measures for the facilitation of innovations) and territorial planning.

Many of the above mentioned means for the regional development are closely related and may be utilized as a complex [1].

The choice of the means for the regional development is based on the issue regarding the approach to the regional development policy. The means, chosen by the state, shape the regional policy of a particular country. The administrative-territorial reforms also influence the regional development and, if the reforms are oriented towards the economic strengthening of municipalities, they may be considered to be the means for the regional development.

The modern regional development is being structured as the planning of the utilization of interrelated resources and it is inter-territorial. Therefore the author's point of view is that the modern regional development policy is characterized by several fundamental principles – democracy, publicity and decentralization.

III. Legal Aspects of Regional Development

The introduction of the modern concept and practice of regional policy began in 1930s, when Great Britain and the USA started the active state policy to develop the problem regions. Within the framework of regional policy, the state is the most active concerning the intervention in the activities of a private sector. The interests and initiatives of local governments and population are primary for the modern regional development.

In the age of globalization, when there had been eliminated the obstacles for the movement of goods, services and persons, the population expects that the government would ensure their safety and welfare. The enterprises expect from the public institutions that they would ensure equal rules of the game and facilitate the competition.

The legislation is significant for the achievement of these aims. It serves for different purposes – ensuring of the harmlessness of foodstuffs to protect health; setting of quality standards for air and water to protect environment; introduction of rules in the market for competing enterprises in order they could compete under equal circumstances. Legislation is a necessary and generally accepted aspect of modern society. It takes place at all levels – local, state and international.

One of most important aims of the EU is to ensure free movement of goods, services, capital and persons; therefore a great number of legislation at European level is dedicated to ensuring the functioning of this single market. The legislation of the European level is adopted also in the policies, where the EU Member States have agreed on the common policy (agriculture, fisheries, trade, customs), and other policies, where they have recognized that under certain circumstances the legislation at the European level provides added value (environment, justice and home affairs, health and consumer protection).

It is possible to observe significant social and economic differences between the regions in the European Union. The significant social and economic differences hinder the development of the EU on the whole and the development of the regions, including the richest ones, of each particular country. Therefore one of the priorities of the EU, when implementing the principal of solidarity, is the economic and social cohesion [2].

Competitiveness and cohesion are the corner stone's of the expenditure plans of the EU, therefore in these fields the spent funds within the period of time from 2007 till 2013 are increased for 23% in comparison to the sum spent during previous seven years. If the EU and national means of regional policy would not be utilized and there would not be eliminated the negative influence of the market economy, the difference between economically stronger and weaker regions would not only remain, but also increase even more. The author agrees to the statement [3] that the conditions for the investments are more favorable in the economically stronger regions: there is a developed infrastructure, skilled labor force, availability of different services etc.

The objects of regional policy are local, state authority and administration institutions, entrepreneurs, non-governmental organizations of different levels, as well as individuals and families. The main subjects in the process of regional policy

implementation are the state authority and administration institutions, as well as international organizations, particularly the European Commission and other EU institutions. However, in the process of power and administration decentralization, which takes place in many countries — both advanced and less developed countries — in conformity with the principle of subsidiary, it is possible to observe the increase of the importance of self-governments (local and regional) as the implementers of regional policy. Therefore we can find that self-governments are simultaneously the object and subject of regional policy. The author also agrees to the statement, expressed by Inese Vaidere [4], that the stronger are self-governments in the country, the more opportunities for regional development it is possible to find.

IV. Legislative Acts and Documents of the Regional Policy Planning of the European Union

There are several document types of developmental planning: policy planning documents, documents for the management of institutions and documents for the territorial development planning.

The policy planning documents provide the aims, objectives and actions for the facilitation of the development of one or several policy spheres, industries or sub-industries. The developmental planning documents are developed at the national, regional and local levels.

The documents of long-term territorial planning for the regional and local levels provide the developmental priorities and the perspective of special development for the respective territory, but the documents of medium-term developmental planning provide the totality of measures to be taken for the implementation of priorities.

The Baltic countries develop their legislation in conformity with the declarations of international world organizations, as well as the normative acts in force in the European Union, and taking into consideration the binding policy and developmental documents of other organizations.

V. Tendencies of the Regional Development in the Baltic Countries

Irrespective of the geographic closeness of the three countries, it is hard not to notice the significant historical, ethnic, cultural and social differences in the region. All three Baltic countries have undergone several periods of different rulers. They have originated from the small places of settlements, which historically have turned into large centers of trade. The territorial borders of countries have changed over the time, depending on the existing authority and its success and needs during the war. It is possible to observe similar tendencies in the economic processes taking place in the Baltic countries. However, the countries are at different points of developmental cycle, which is explicitly proved by the macroeconomic indicators [5].

Like it was earlier, nowadays we also can speak about every of these countries separately, as well as about the region on the whole. Further regional analysis of the Baltic countries is viewed within the framework of the administrative–territorial division.

VI. Social and Economic Environment in the Baltic Region

When comparing the structure of the export and import of the Baltic countries, it is obvious that Latvia has favorable geographical location, increasing the import and export shares in the markets of the Baltic countries. 32% of the export market of Latvia is directed towards Estonia (14% respectively) and Lithuania (18%), whereas the export of Estonia to Latvia constitutes 9% and to Lithuania – only 5%. But Lithuania's share of export to Latvia constitutes 11% and to Estonia – only 8%. The share of import market is also influenced by the geographic location of countries, and the major part of import goods from the Baltic countries comes to Lithuania from Latvia (6%). The import goods to Latvia from Lithuania constitute 19% out of the total amount of import, and from Estonia it constitutes 7%. Estonia imports goods from the Baltic countries in the equal amount close to 10% from Latvia and close to 9% from Lithuania.

The activization of external markets will be determinant for the export development of the Baltic countries and the stabilization of the global economic environment, which is proved by separate indicators, would be sustainable. The export opportunities and improvements in the outer environment will be determined by the improvement of competitiveness, decrease of prices and costs, as well as by the solutions found by enterprises themselves. It should be pointed out that in some external markets – Russia, Lithuania, Estonia, Finland, Denmark, Sweden and Germany – the shares of Latvia's export market have increased in comparison to the end of 2008.

But the recovery is slow, and it took many months until we observed positive GDP increase within a year. The specialists of the Bank of Latvia [6] find that the unbalanced growth from 2005 till 2008 was the reason for the economic crisis in the Baltic countries. However, most of the manifestations of unbalance had been already eliminated [7] – there had been surplus created in the current accounts, the excessive inflation has turned into deflation (including the spheres of remuneration, real property and other spheres), and there had been started the process of arrangement.

The economic processes, taking place in the country, directly and indirectly influence population's welfare and social environment, starting from the ensuring of work places and directly influencing qualitative and safe life environment.

The distribution of labor force mostly depends on the distribution of economic activities, i.e. employment opportunities; as a result, the demographic load differs in different territories. In the territories with more work places and better remuneration possibilities, particularly in the cities and territories around them, there is a tendency of the concentration of able-bodied population, whereas in the economically less active rural regions are inhabited mostly by pensioners, who do not need employment opportunities anymore.

Open Science Index, Humanities and Social Sciences Vol:7, No:9, 2013 publications.waset.org/16868/pdf

Open Science Index, Humanities and Social Sciences Vol:7, No:9, 2013 publications.waset.org/16868/pdf

The differences of the level of population's welfare are determined by the irregular distribution of resources and economical activities in the countries, which is the reason for the differences of population's welfare level in different rural territories. It is possible to observe higher level of population's welfare near the cities, where the relatively short distance to the city does not limit the daily mobility of labor force.

The settling structure has considerably changed in the Baltic countries since 1920, which clearly shows the favorable social environment for the population. During the first period of independence, less than one third of population lived in the cities, but in the year 2000 almost two thirds of the population of the Baltic countries had chosen city environment for their place of residence and this number is still increasing.

It is possible to observe the tendency among the regional population of Lithuania – more than in other Baltic countries – to choose cities as the place for permanent residence. In the most part of Lithuania's territory, more than a half of the number of population, residing in a particular region, lives in the cities.

The specific weight of the population, residing in the cities of Estonia and Latvia (more than 50% of population, residing in the cities), constitutes a bit less than a half of the total number of population, residing in the territory. In the region of Central Estonia the specific weight of city dwellers constitutes only 21.4% of the total number of regional population; whereas in those regions of the Baltic countries, which comprise also the capitals of the countries, the specific weight of city dwellers is within 78 to 83% out of the total number of population of the respective region.

When comparing the amount of natural increases during 1920s and 1930s with the modern tendencies, it is possible to observe drastic differences – at the beginning of the 20th century the natural increases were positive in all Baltic countries, but at the beginning of the 21st century, when comparing the indicators of demographic situation, it is possible to find the negative tendency regarding the changes of the population's number.

The main reason for the changes of the population's number is not only the natural decreases, but also the international migration, which we can observe in the territory of all Baltic countries.

VII. The Analysis of the Developmental Indicators of the Baltic Countries

Every administrative-territorial unit (rural municipality, city, district, county) and region may be characterized by different indicators, and it is possible to form different territorial groups according to these indicators. Particularly important among these parameters are those, which may be useful as indicators, when characterizing the situation on the whole, looking for causal relationship, as well as emphasizing the present processes.

The research is based on the statistical data available for the public on the regions of the Baltic countries. These statistical data are available in the issues published by the statistical bureaus of the Baltic countries. In the research it is chosen the indicators or indications, characterizing the regions of the Baltic countries (at the level of NUTS 3).

The indications have been selected so that the analysis would cover the indications of the groups of different statistical indicators – the indicators, characterizing the territory, population, economic situation, and infrastructure.

There are different statistical methods, including factorial analysis [8] and cluster analysis, widely applied for the studies of economic phenomena.

The choice to apply the factor analysis for the development research paper was determined by the essence of this method – finding out the interconnection between the initial indications and obtaining less number of factors to be studied and by means of which could be analyzed the social and economic development in the regions of the Baltic countries, characterizing their competitiveness.

In order to perform the regional economic analysis of the Baltic countries, it is necessary to classify factors, influencing social and economic processes, for example, the factors of the increase of social load, the decrease of employment indicators etc. When processing the chosen system of indicators by the method of factorial analysis, their totality divides into several groups, which are concentrated around the factor to be interpreted economically. Thus the factorial analysis enables to perform the objective classification.

Using the software SPSS, which contains the system module "Factor Analysis" for the processing of statistical data, the factor analysis was performed for the regional indicators of the Baltic countries at NUTS 3 level, forming 3 complex factors which characterize the territory or the life environment and 2 complex factors which characterize the social situation, and 2 complex factors which characterize the economic situation in the regions.

As a result of the factor analysis, the initial indications, characterizing the territory, group into 3 complex factors (Fig. 1), which characterize the territory or the life environment and which explain 69.8% of information on the whole. The first factor explains 32.2%, the second – 24.5% and the third – 13.1% of information.

The higher is the value of the first – life environment quality – factor, the more characteristic for the region is a greater number of dwelling places, as well as the housing fund is calculated per 1 inhabitant, which is more characteristic for the city environment, there are also more persons attended at the hotels, which is calculated per 1,000 inhabitants, and there are more places at the hotels. The negative feature in this situation is a significant number of committed crimes.

In their turn, such indicators as demographic load and the cultivated area of agricultural lands fall within the complex factor with the negative factor load – it means that the region has a low demographic load and small territories, which are cultivated for agricultural purposes.

Open Science Index, Humanities and Social Sciences Vol:7, No:9, 2013 publications.waset.org/16868/pdf

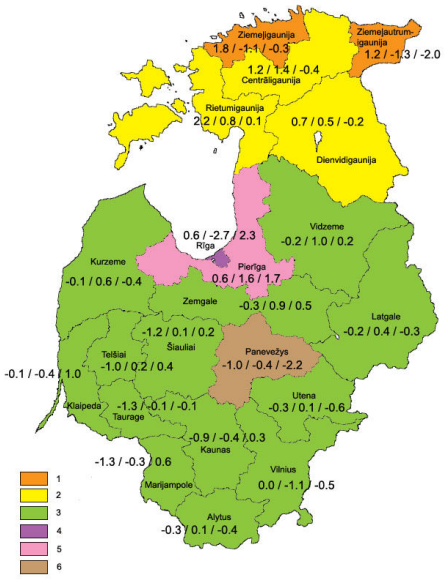


Fig. 1 Clusters of the complex factors (*Quality of living environment / Attractiveness of living environment / Accessibility of territory*) obtained as a result of factor analysis and characterizing territory and living environment in the regions of the Baltic countries

The higher is the value of the second – attractiveness of life environment – factor, the higher are the indicators of population's migration and larger territories of forest in the region, as well as density of population is smaller and therefore the specific weight of city dwellers is also smaller in the territory.

The higher is the value of the third — accessibility of territory — factor, the higher is the number of road accidents, calculated per 1,000 inhabitants.

These complex factors explicitly show the interaction between the territories of cities and rural areas and the characteristic features of the environment of cities and rural areas.

When analyzing the social environment of regions, as a result of factor analysis (Fig. 2), the initial indications group into 2 complex factors, which explain 65.4% of information on the whole. The first factor explains 41.8% and the second – 23.6% of information.

The higher is the value of the first – social climate – factor, the more characteristic for the region is higher natural increases and a greater number of preschoolers at the preschool educational establishments, as well as a greater number of phones and better accessibility of computers and internet for the households. But in the regions, where the factor value is lower, there are less pupils and a smaller number of private vehicles per 1,000 inhabitants.

The higher is the value of the second – social stability - factor, the greater is the number of beds, doctors and paramedics, and there is a greater number of marriages registered and the cases of divorce.

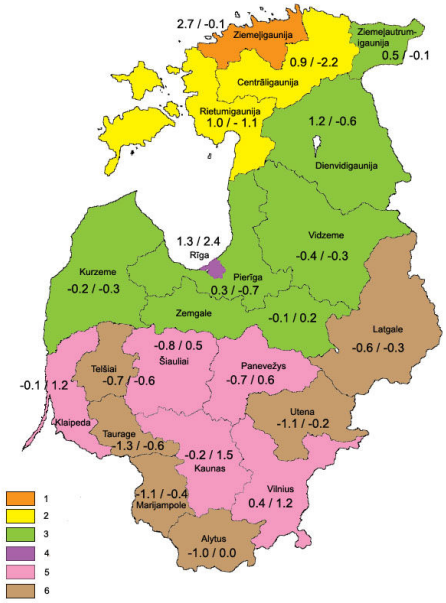


Fig. 2 Clusters of the complex factors *(Social climate / Social stability*) obtained as a result of factor analysis and characterizing social environment in the regions of the Baltic countries

When analyzing the economic environment of regions, as a result of factor analysis (Fig. 3), the initial indications group into 2 complex factors, which characterize 81.9% of information on the whole.

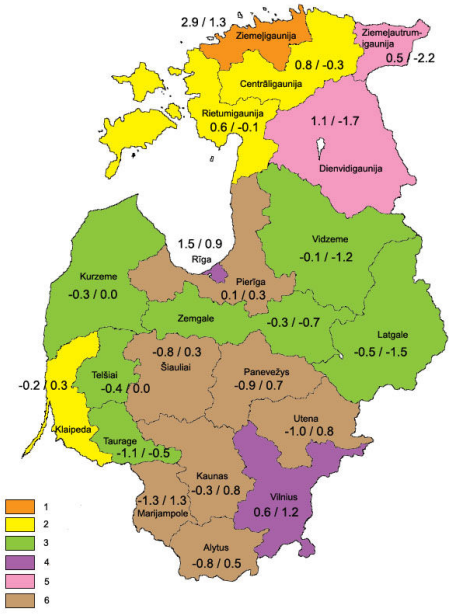


Fig. 3 Clusters of the complex factors (*Economic environment / Employment*) obtained as a result of factor analysis and characterizing economic environment in the regions of the Baltic countries

The first factor explains 51.8% and the second – 30.1% of information.

Open Science Index, Humanities and Social Sciences Vol:7, No:9, 2013 publications.waset.org/16868/pdf

The higher is value of the first – economic environment – factor, the more characteristic for the region are higher indicators of gross domestic product and total added value, as well as the greater is the number of economically active units and higher indicators of average monthly wages, there is also higher income at the disposal of households and therefore also higher expenditures of households.

The higher is the value of second – employment – factor, the higher is the level of economic activity and employment, but lower — the specific weight of unemployment in the region.

The author finds that several well-known economists [9], [10] in their research performed have concluded that there often exists interconnection and even dependence between several indicators, characterizing the developmental level of territories. Thus there exists a possibility to reduce information, in order to decrease the volume of information needed for the analysis, by segregating only the most significant information from the summarized information and by disclosing the interconnection of data.

Therefore for further studies it was used cluster analysis, which is a method of statistical analysis and which can be applied to form and obtain the significant groups of objects from the similar objects. The main aim and objective of the application of this method is to group the objects or individuals to be studied into subsets or clusters on the basis of the comparison of certain characteristic parameters.

There was carried out the clusterization of the administrative-territorial units (regions) of the Baltic countries at NUTS 3 level. For this process there were selected the above mentioned obtained complex factors.

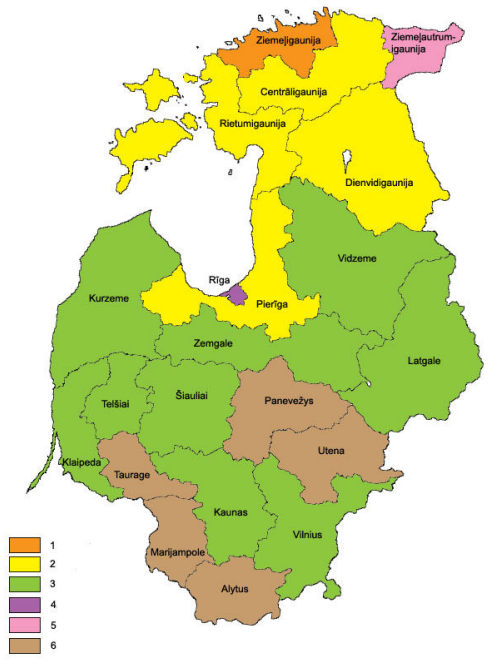


Fig. 4 Grouping of the Regions of the Baltic Countries into 6 Clusters

The author, parallel to the traditional statistical analysis, analyzes the indications also cartographically, which provides an insight into the diversity of conditions in the regions of the Baltic countries. When performing the clusterization into 6 groups according to the values of selected complex factors, there was the following division of the regions of the Baltic countries obtained (Fig. 4).

Having evaluated grouping into 6 clusters, the author draws a conclusion that it is possible to observe an unambiguous tendency that the region of Riga (comprising only the capital of Latvia) and the region of Northern Estonia (comprising only Tallinn — the capital of Estonia) have explicitly different social and economic situation, which repeatedly proves the point of view that Latvia and Estonia have irregular development with the capital cities dominating at the national level and determining the speed of development. It is also possible to observe the separation of the region of Northeast Estonia into an individual cluster.

Moreover, it is possible to observe similar social and economic processes in most of the regions of Latvia and Lithuania, which emphasizes the similar situation and common social and economic spheres, where the improvements are needed. Situation, similar to the regions of Estonia, we can observe only in such region of Latvia as the region of Riga's suburbs, which shows good developmental speed on the whole.

VIII. Conclusions

Emphasizing that the aim of the country's economic development is not the achievement of certain macroeconomic indicators, the economic development shall be analyzed within the process, where the significant role is attributed not only to the macroeconomic stability, but also to such closely interconnected factors as quality of administration, society's capacity to develop its intellectual and technological abilities, modern types of competition, and the provision of continuous increase of benefit to the country's population, ensuring the balanced increase of welfare in all social groups.

On the basis of the developmental priorities of the Baltic countries, defined in the documents of long-term strategic planning, the development of a country is possible by supporting education and science, facilitating the development of entrepreneurship, based on innovations, being aware of the peculiarities of cultural environment, which comprises traditions, historical heritage and modern developmental tendencies.

The facilitation of different types of co-operation between countries and regions becomes more and more significant at the global scale. Thus it is possible to improve and harmonize the speed of economic development, as well as to ensure more efficient and competitive development of an economic system, the elaboration of national scientific and social policies. Alongside with the increase of economic scale and diversity, it is possible to solve several developmental problems by means of the automatization of society, the development of information and communication and other technologies.

The competitive developmental policy of the Baltic countries shall solve several problems and face challenges:

- in economy: it is possible to observe relatively low income in the Baltic countries in comparison to the average level in the EU, as well as aging labor face and higher dependence from the primary sector;
- in the social sphere: higher level of unemployment, reduction of social tension, low density of population and the decrease of number of population as a result of natural and mechanic movement. It may increase the emergence of risks regarding such problems as inaccessibility of basic services, social isolation and narrower spectrum of employment choice.

Population's knowledge and competence have a significant role in the facilitation of sustainable and balanced economic growth. The products and services, created by knowledge, will facilitate the development of innovations and technologies for the arranging and introduction of infrastructure and production objects in the Baltic countries, thus increasing the countries' added value and ensuring the increase of the skilled labour force.

Open Science Index, Humanities and Social Sciences Vol:7, No:9, 2013 publications.waset.org/16868/pdf

ACKNOWLEDGMENT

Publication and dissemination of research results has been made due to the funding of the ERAF project „Promotion of scientific activities of LLU", contract Nr. 2010/0198/2DP/2.1.1.2.0/10/APIA/VIAA/020.

REFERENCES

[1] C.J. Dawkins "Regional Development Theory: Conceptual Foundations, Classic Works, and Recent Developments," *Journal of Planning Literature*, vol. 18, No. 2, p.131-172, 2003.
[2] *Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community*, 2007/C 306/01, signed at Lisbon, 13 December 2007.
[3] H.W.Armstrong, R. Read "Microstates and Subnatural Regions: Mutual Industrial Policy Lessons," *International Regional Science Review*, vol.26 (1), p.117-141, 2003.
[4] I. Vaidere, E. Vanags, I. Vanags, I. Vilka, *Regional policy and municipality development in EU and Latvia*. (In Latvian). Riga: Latvia University, Latvian Statistical Institute, 2006.
[5] I. Stokmane "Competitiveness and Development Tendencies of the Baltic Countries", Resume of the Ph.D. thesis for the scientific degree of Dr.oec., Jelgava, 2010.
[6] D. Paula "Competitiveness and challenges of Latvia economy," (In Latvian) *Bank of Latvia, Averss & Reverss*, vol.2, 2009.
[7] Baltic Macro Outlook: Update, *Macro Outlook*, The Baltic Region, Swedbank, July 2009.
[8] T. Hill, P.Lewicki, *STATISTICS: Methods and Applications*. StatSoft, Tulsa, OK, 2007.
[9] J. H. Hair, R. E. Anderson, R. L. Tatham, W. C. Black, *Multivariate data analysis: with readings*. Fourth Edition. Prentice Hall, 1995.
[10] R. A. Johnson, D. W. Wichern, *Applied Multivariate statistical analysis*. USA: Prentice – Hall International Editions, 1992.

Ilze Stokmane, Dr.oec., assistant professor of Latvia University of Agriculture. She has taken her Dr. Degree in regional economics in 2010. Her research work focuses on regional development promoting existing and looking for new local heritage within globalization processes. She has published near to 20 scientific papers and she is co-author of book about interaction of nature and social economic factors and it influence to development of rural areas in Latvia.