TRENDS OF REGIONAL DEVELOPMENT IN LATVIA – ASPECT OF HUMAN RESOURCE

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Abstract- This paper presents analysis of trends of regional development in Latvia during years 2000 – 2015 (for some indicators there is different period under consideration due to limited data). Analysis is carried out in two breakdowns – first, for 6 statistical regions of Latvia, and second – for 9 republican importance cities. In this research, the main accent is on aspect of human resource, as population is one of the most important determinants of sustainable development – quantity and quality of human resource directly affects all other dimensions of sustainable development. To feature trends of development, such indicators as number of inhabitants, changes in number of inhabitants, structure of population by age groups, demographic burden and education of population are used.

Index terms- Human resource, Region, Cities, Development, Latvia.

I. INTRODUCTION

Sustainable development is the central issue for each country and region worldwide, as well as for global society as a whole. Development that has no negative impact on the potential development of future generations is a relevant and great aim, but it is not so easy to achieve it. The nature of sustainable development is very complicated, so all countries and regions are facing different challenges to plan and carry out operation that ensure it. Also for Latvia, its statistical regions and biggest cities, there are many challenges for development, as there are negative or unwanted trends in many very important indicators related to human resource.

[1, 2] To some of statistical regions and cities in Latvia, these problems are especially topical. If we assume that there is positive correlation between number of inhabitants and economic growth [3], reduction of population number is an unfavorable trend for sustainable development. Furthermore, there are also changes in the age structure of population that can be essential threat for possibilities of economic growth of region and country as a whole. Focus of research is to take out and assess trends of social development of Latvian statistical regions and biggest cities in order to evaluate situation of human resource in Latvia. For this, analysis of dynamics is carried out and method of comparison is used. The results of the research lead to the conclusions that human capital has significant impact on sustainable development possibilities of region and situation in Latvian statistical regions and biggest cities is very different, although there are also some similar negative trends.

II. MAIN ASPECTS OF REGIONAL DEVELOPMENT

To ensure sustainable development of region or country, an integrated approach is required. There are four significant dimensions of sustainable development [4]:

1. Economic dimension;
2. Social dimension;
3. Environmental dimension;
4. Institutional dimension.

We should take into account very essential aspect – overall development of country, region or city does not depend only on the success of various dimensions. Development of dimensions is mutually dependent, too.

But still, we must accentuate that social dimension is more important than other dimensions, as population is the primary ground for formation of regions. In Figure 1, process of emergence of regions and places is illustrated. As it can be seen, individuals are those, who create human agency and regions in their full meaning, such creating and forming society.

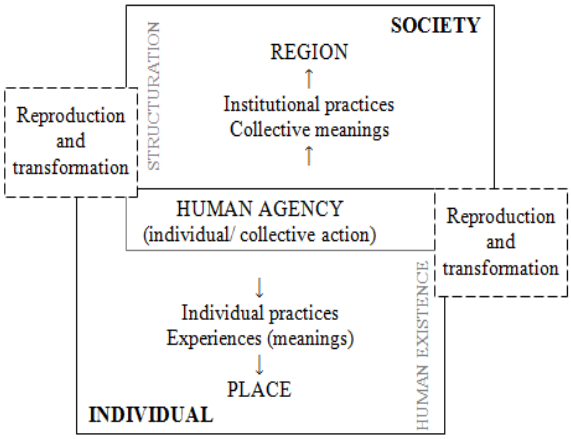

Figure 1: The emergence of regions and places [5]

Human capital and better options for its development and utilization are studied because their importance is constantly increasing. Human capital is one of the main determinants for regional growth. A high level of education promotes innovation in facilitating the creation of new knowledge and techniques and their

rapid spread and acceptance. Consequently, the regional development is closely linked with the ability to create, retain and attract human capital, which in turn is linked to the region's educational quality and lifelong learning opportunities. [6]

III. NUMBER OF POPULATION IN LATVIA REGIONS AND CITIES – MAIN TRENDS

In Latvia are six statistical regions based on the European Parliament and Council Regulation (EC) No. 1059/2003 approved on 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS). Latvian statistical regions are as follows:

1. Riga (includes the city of Riga);
2. Pieriga (includes 28 municipalities and one republican city – Jurmala);
3. Vidzeme (includes 25 municipalities and one republican city – Valmiera);
4. Kurzeme (includes 18 municipalities and two republican cities – Liepaja and Ventspils);
5. Zemgale (includes 20 municipalities and two republican cities – Jelgava and Jekabpils);
6. Latgale (includes 19 municipalities and two republican cities – Daugavpils and Rezekne).

For Latvia, its regions and cities, there are negative or unwanted trends in such very important indicators as number of population, structure of GDP, quality of life and others. [1] That creates many challenges for development. On the other hand, there are different approaches to evaluate relationship between population change and sustainable development [3], so situation of human resource in Latvia, its regions and cities cannot be seen as unambiguously poor.

Analysis is carried out in two breakdowns – first, for 6 statistical regions of Latvia, and second – for 9 republican importance cities. 6 statistical regions covers all country, but also analysis of 9 biggest (republican importance) cities is significant, as at the beginning of year 2015 in these 9 cities were 1017435 inhabitants that represented 51.2% of all number of population in Latvia (most important is city Riga – number of inhabitants were 641007 or 32.3% of all population in Latvia).

Table 1 represents main indicators that describes size of statistical regions and cities, as well as average changes of number of population is calculated. Results show not only trends of number of population but also describes two main reasons of changes – natural and mechanical movement of population.

Table 1
Number of inhabitants, average changes of number of inhabitants and indicators of natural and mechanical movement of population in statistical regions and biggest cities of Latvia
(Authors compilation, using [7])

Territorial unit	Number of inhabitants			Average changes per year, persons (period 2000-2014)	
	At the beginning of year 2000	At the beginning of year 2015	Average changes per year, persons (period 2000-2015)	Natural movement	Mechanical movement
LATVIA	2381715	1986096	-26375	-9926	-16449
Statistical regions					
Riga	766381	641007	-8358	-2652	-5706
Pieriga	358099	367609	634	-705	1339
Vidzeme	256087	199027	-3804	-1241	-2563
Kurzeme	322221	254722	-4500	-1208	-3291
Zemgale	293267	242150	-3408	-1123	-2285
Latgale	385660	281581	-6939	-2996	-3942
Cities					
Riga	766381	641007	-8358	-2652	-5706
Daugavpils	115574	86435	-1943	-582	-1361
Jelgava	63743	57180	-438	-111	-327
Jekabpils	27911	23019	-326	-91	-235
Jurmala	55673	49646	-402	-257	-144
Liepaja	89641	71125	-1234	-302	-932
Rezekne	39430	29317	-674	-213	-461
Valmiera	27799	23432	-291	-66	-226
Ventspils	43951	36274	-512	-176	-336

By number of inhabitants, biggest statistical region in Latvia is Riga region, smallest – Vidzeme region (difference at the beginning of year 2015 was 441980 persons or 3.2 times). Biggest city of republican importance is Riga, but smallest – Jekabpils (difference at the beginning of year 2015 was 617988 persons or 27.8 times). Such a great disparity shows us that both these groups consists of very different territorial units, so the problems they are facing with and possible ways of development can be different, too.

All statistical regions (except only Pieriga region), as well as all biggest cities in Latvia have the same negative trend – number of inhabitants is decreasing. But, if changes are compared with the average number of inhabitants in territorial unit, it

can be observed that rate of changes is different. In group of statistical regions, only Pieriga region has positive indicator – number of population is increasing in average for 0.17% per year. The highest decrease of number of inhabitants is observed in Latgale region – in average for 2.08% every year, which is for 0.87%p higher decrease than in Latvia in average (1.21%). Actually, only in Riga region relative changes of population is less negative than in Latvia in average, in all other statistical regions number of inhabitants decrease at faster rate.

In Latvia, 37.6% of decrease of number of inhabitants is due to negative indicator of natural movement (number of death exceeds number of birth), 62.4% – due to negative indicator of mechanical movement (number of emigrants exceeds number of immigrants). In all statistical regions number of death exceeds number of birth (even in Pieriga region, where total changes are positive). If compared to total population changes, natural movement has lower impact than mechanical movement, but with different proportion. In Kurzeme region, share of natural movement is 26.9%, in Latgale region – 43.2% from all changes. In Pieriga region number of immigrants exceeds number of emigrants, so it cannot be said that there is similar trend in whole country – somehow Pieriga region is able to attract people. Observed data can also indicate that there is competition between regions for inhabitants.

In all biggest cities in Latvia number of inhabitants is decreasing every year, but with different speed. The lowest rate of decrease is in Jegava city – 0.71%. Also in Jurmala, Valmiera and Riga rate of decrease was lower than in Latvia in average (although in Riga – lower for only 0.01%p). In other 5 cities rate of decrease was higher than in Latvia in average, the highest decrease was in Daugavpils and Rezekne cities (1.91% and 1.94% respectively). Both these cities are located in Latgale region that has the highest decrease in group of statistical regions. It justifies once more the great impact of cities at the regional level.

In all biggest cities, except Jurmala, can be observed the same trend – impact of natural movement is lower than impact of mechanical movement. Two extreme distributions are in Liepaja (24.5% of all decrease due to negative indicator of natural movement, 75.5% due to negative indicator of mechanical movement) and in Jurmala (64.1% and 35.9% respectively).

IV. STRUCTURE OF POPULATION BY AGE GROUPS AND DEMOGRAPHIC BURDEN IN LATVIA REGIONS AND CITIES

To understand possibilities of development for region or city, not only number but also composition of population must be taken into account. Options for people of different age groups to have direct positive impact on development are different (to create added value, increase budget income etc.). Table 2 represents structure of population by 3 main age groups (in Latvia, working age group is 15-62 years) and demographic burden in analyzed territorial units.

Table 2
Demographic burden and structure of population by age groups in statistical regions and biggest cities of Latvia (Authors compilation, using [7])

Territorial unit	Demographic burden		Structure of population by age groups (%), year 2011			Structure of population by age groups (%), year 2015		
	Year 2011	Year 2015	Under working age	At working age	Above working age	Under working age	At working age	Above working age
LATVIJA	558	613	14.2	64.2	21.6	15.	62	23
Statistical regions								
Riga	540	610	12.9	65	22.1	14.5	62.1	23.4
Pieriga	557	609	16	64.2	19.8	17	62.1	20.9
Vidzeme	579	617	14.2	63.3	22.5	14.4	61.8	23.8
Kurzeme	589	638	15.2	62.9	21.9	15.4	61	23.6
Zemgale	555	597	14.9	64.3	20.8	15.3	62.6	22.1
Latgale	562	610	13.3	64	22.7	13.4	62.1	24.5
Cities								
Riga	540	610	12.9	65	22.1	14.5	62.1	23.4
Daugavpils	533	632	12.8	65.2	22	14	61.3	24.7
Jelgava	536	619	15	65.1	19.9	16.7	61.8	21.5
Jekabpils	538	595	15.1	65	19.9	15.2	62.7	22.1
Jurmala	578	637	14	63.4	22.6	14.3	61.1	24.6
Liepaja	599	679	15.4	62.5	22.1	16.4	59.6	24
Rezekne	533	609	14.2	65.2	20.6	14.6	62.1	23.3
Valmiera	557	654	14.6	64.2	21.2	16	60.4	23.6
Ventspils	568	643	14.4	63.8	21.8	14.6	60.9	24.5

Demographic burden is the indicator of the public distribution by age groups in county. To calculate the indicator, details about the number of people under working age, at working age and over working age are used. It also characterizes the existing public burden imposed on the people of working age.

In all statistical regions, as well as in all biggest cities, share of people under working age and share of people above working age has increased. In absolute terms, number of people under working age has increased in Riga and Pieriga region and in group of cities – in Riga, Daugavpils, Jelgava and Valmiera.

Also number of people above working age was changing differently – it decreased in Vidzeme and Latgale region. So, share of people that are not at working age has increased in all regions and cities mainly because number of people at working age has decreased in all territorial units and in more rapid rate that number of people in other age groups.

If structure of age groups is compared within group of territorial units, one similar tendency can be observed. In year 2015, largest share of people under working age was in Pieriga region, smallest – in Latgale region. Largest share of people above working age was in Latgale region but smallest – in Pieriga region. The same situation is for cities – largest share of people under working age was in Jelgava, smallest – in Daugavpils, but largest share of people above working age was in Daugavpils and smallest – in Jelgava.

Demographic burden in Latvia at the beginning of year 2015 has increased by 55 persons, or 9.95%, comparing to year 2011. The highest average demographic burden in period under consideration was in Kurzeme region (612), the lowest – in Zemgale region (574). The highest average demographic burden in group of cities was in Liepaja (640), the lowest – in Jekabpils (565). In all statistical regions and cities major share of demographic burden is caused by number of people above working age, but it differs (in Latgale region 64%, in Pieriga region 55.5%; in Daugavpils 63.7%, in Jelgava 57%)

The overall situation in Latvia is not very good – population is becoming older (average age in Latvia in 2011 was 41.6 years, in 2015 – 42.5 years), many working age people are going to work and live abroad (also with families), average age of having first baby is increasing and average number of kids in family – decreasing. If we take into account all this, observed changes of demographic burden can be described as negative trend.

V. ROLE OF EDUCATION AND SITUATION IN LATVIA REGIONS

Human knowledge and skills as human capital now becomes a key factor in economic development because of modern knowledge economy. The development of human resources and human capital is dependent on the public interest to invest in its development. By investing more and more resources in human capital development, national economic growth is also stimulated. It is important to find ways how to attract people to the country, to keep them stay and find resources in which to make investments, to develop their own human resources and enhance competitiveness among other countries. Education and science are major directions of application of material and intellectual resources to ensure economic, social and cultural development of the particular country. Investments in human capital are education, health care, professional training and other activities that make people more productive economically. Investing in education is a determining factor human capital development. A high level of education promotes innovation in facilitating the creation of new knowledge and techniques and their rapid spread and acceptance. Consequently, the state and regional development is closely linked with the ability to create, retain and attract human capital, which in turn is linked to the state's educational quality and lifelong learning opportunities. [8]

In Figure 2, share (of total number of population) of people with higher education and those with vocational education or vocational secondary education in year 2002 and year 2014 is represented.

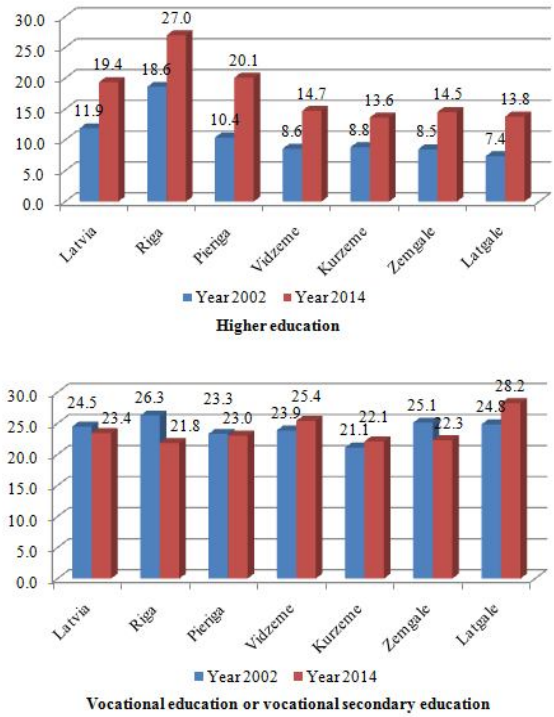

Figure 2: Proportion of the population by education level groups in statistical regions of Latvia, %
(Authors compilation, using [7])

In 12 year period, most significant changes have occurred in group of higher education – in all statistical region proportion of people with higher education has increased (from 4.8%p in Kurzeme region up to 9.7%p in Pieriga region). Also in absolute terms, number of people with higher education has increased in all statistical regions. Although in Latgale region was one of the highest growth rate of this proportion (87%), it still has one of the lowest indicator in the country.

Situation in group of vocational education or secondary vocational education is different. In some regions (Riga, Pieriga and Zemgale) relative amount of people with this kind of education has decreased, in other regions – increased, but not more than for 3.4%p. If analyzed in absolute terms number of persons with vocational education or secondary

vocational education has increased only in Pieriga region – for 0.7 thousand persons.

The highest (cumulative) proportion of people with both kinds of education (data about year 2014) is in Riga region (48.8%), Pieriga region (43.1%) and Latgale region (42%). It is obvious that Riga and Pieriga regions that are biggest regions by number of inhabitants also are richer with educated people. In context of Latvia, Latgale region is less developed region. [1,2] As cumulative proportion of educated persons in Latgale region is very close to that in Pieriga region, we can assume that not only total share, but also distribution by two groups of education is important. For Riga and Pieriga region, share of people with higher education is much bigger than share of people with vocational education or secondary vocational education.

CONCLUSIONS

Sustainable development of region, city or country is possible only, if there is successful development of different dimensions – social, economic, environmental and institutional. In Latvia are observed many negative trends in all dimensions that can sufficiently impact possibilities of sustainable development. These dimensions are in very strong interdependence, but the most important is social dimension, as people are the main resource for creation and development of territorial units, and also they are users of achieved results. Analysis must be done from bottom to top, as situation in regions and cities is very closely linked to development of the country, and directly influence it.

In Riga and Pieriga regions, that are biggest regions in Latvia by number of inhabitants, many indicators and trends are better than in other regions and in Latvia in average (changes of number of inhabitants, share of this changes due to natural movement of population, number of people under working age, proportion of people who have higher and vocational education or secondary vocational education). Also in republican importance cities that are located in these two statistical regions or closer to them (Riga, Jurmala, Jelgava) situation in average is better than in other cities. This data shows us that human resource in Latvia is distinctly concentrated by territorial aspect. The worst situation in average can be observed in Latgale region, and also in two republican cities, located in this region – Daugavpils and Rezekne.

Population is an important input to sustainable social and economic development of region and well-thought planning is required to change trends of changes in situation that treats sustainable development opportunities. Without sufficient amount and *quality* of inhabitants, even successful existence of some territorial units is endangered, not to mention some kind of growth and development.

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