THE STRUCTURE OF RURAL ECONOMY IN ZEMGALE INTRA-REGIONS

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Abstract

Zemgale planning region divides into two intra-regions (Zemgale 1 and Zemgale 2) by natural, soil and other agricultural resources. Each intra-region has different size of farms. The aim of the research was to find the structure of rural economy in different size farms or rural enterprises of Zemgale 1 and Zemgale 2 intra-regions. The research showed that very small farms dominate grow-plant sectors production. Medium size farms and enterprises have solid high proportion of grow-plant sector production in total production value. This proportion is even higher in biggest agricultural enterprises and companies (100≤250 ESU). In general author has stated that in Zemgale 1, which is the biggest agricultural production territory in Latvia, grow-plant production sectors dominate.

Key words: Zemgale, intra-regions, rural economy, structure.

Introduction

In Latvia there is one quite singular territory with its specific internal structure – Zemgale planning region (NUTS-3). In Zemgale region are included 5 districts with sharp differences taking into account agricultural resources, structure of land use and structure of agricultural sectors point of view. So, this region is interesting for researchers in agrarian economy.

Maybe it is the reason why in peer reviewed literature appeared papers about this region in the context of agrarian economy. K. Špoģis, Ž. Zaharova (2003) have proved that Zemgale region is main grow-plant production producer in Latvia. These authors defined Zemgale as consisting of Jelgava, Bauska, Dobele as well as Saldus districts, and of south-east part Tukuma district.

A. Boruks (1996) stated that for agricultural production most appropriate conditions exist in Zemgale region. J. Kaktiņš (2004) has researched farmers' forest resources in Zemgale. K. Špoģis, V. Strīķis, L. Siliņa, A. Radžele-Šulce (2004, 2005) made researches about creation of entrepreneurship environment and problems of its development in this region.

The understanding of Zemgale territory as well as definitions is very unlike. The newest normative documentations in Zemgale planning region and statistical region include not only Bauska, Dobele and Jelgava districts but also Aizkraukle and Jekabpils districts with essentially different agricultural resources and sector structure. Despite this author has accepted FADN information system (Bratka, 2007 and Drubiņa, 2006) where Zemgale planning region is divided in two intra-regions – Zemgale 1 (which includes Bauska, Dobele and Jelgava districts) and Zemgale 2 (which includes Aizkraukle and Jekabpils districts).

Described situation shows the need for special research in order to find out the agricultural production and nonagricultural sectors structure in Zemgale, as well as their development course and temp of development. The results of such research would give classified information to agricultural regional authorities and agricultural consultation service. There is ever growing demand for high qualification specialists-consultants, their knowledge and understanding for rural structural development tendencies. That proves the topicality of the theme and the subject.

The aim of the research is to clarify the structure of rural economy, including agricultural production and non agricultural sectors in Zemgale 1 and Zemgale 2 intra-regions of different economic size farms, evaluate the dynamic of production structure.

To achieve the aim, following tasks were set up:

- to study macrostructure of sector groups in different economic size farms in Zemgale 1, Zemgale 2 intra-regions;
- to study change direction of sector groups and structure in big and small agricultural enterprises and small scale farms.

Materials and Methods

SUDAT survey data as well as additional statistical data were used. Grouping, analysis and synthesis methods.

In the research were included such European size unit (ESU) farm groups:

- practically the biggest part of total amount of farms – small scale farms group (4≤8 ESU);
- medium size farms group (40≤100 ESU);
- bigger (100≤250 ESU) and biggest (>250 ESU) agricultural production farms.

Results and Discussion

Table 1

Macro-structure of production in sector groups in very small farms (4≤8 ESU) in Zemgale 1 intra-region in 2001 – 2006

Year	Production value of sector groups, LVL				Macrostructure of sector groups production value, %		
	Grow-plant	Cattle-breeding	Non-agricultural activities	Total	Grow-plant	Cattle-breeding	Non-agricultural activities
2001	4942	1646	0	6588	75.0	25.0	0.0
2002	5375	2296	0	7671	70.1	29.9	0.0
2003	2870	6765	275	9910	29.0	68.3	2.8
2004	4937	4180	64	9181	53.8	45.5	0.7
2005	6132	2966	148	9246	66.3	32.1	1.6
2006	5744	3751	172	9667	59.4	38.8	1.8

Source: SUDAT data and author's calculations

Conclusion could be made from Table 1. data and calculations:

- total value of all production in this group of farms does not grow up;
- there dominate grow-plant sector value, however its proportion shows slow decrease;
- several small farms develop non-agricultural activities, but its proportion to total amount of production value is little.

There is a place for discussion, of course, how to evaluate the stabilization of production value during last years. It could be seen as stagnation or even demand decrease in food market, either exhaustion of small scale farmers' capabilities and possibilities. In praxis I can say, that is usual phenomenon for natural and half-natural farms. Completely another situation is in production of sector groups in Zemgale 2 intra-region, which is seen in Table 2.

Table 2

Macro-structure of production in sector groups in very small farms (4≤8 ESU) in Zemgale 2 intra-region 2001 – 2006

Year	Production value of sector groups, LVL				Macrostructure of sector groups production value, %		
	Grow-plant	Cattle-breeding	Non-agricultural activities	Total	Grow-plant	Cattle-breeding	Non-agricultural activities
2001	3494	2855	33	6382	54.8	44.7	0.5
2002	4895	2740	654	8289	59.1	33.1	7.9
2003	4897	3354	112	8364	58.6	40.1	1.3
2004	4661	5431	434	10526	44.3	51.6	4.1
2005	5191	8561	922	14674	35.4	58.3	6.3
2006	5246	6980	2108	14334	36.6	48.7	14.7

Source: SUDAT data and author's calculations.

In that part of Zemgale planning region in the last years cattle-breeding and grow-plant sector experienced production value grow, nevertheless the fastest value growing shows cattle-breeding. There are radical changes in proportion of these sectors: cattle-breeding production shows greatest growing rate. It can be explained with growing milk price and financial aid to this sector.

Third feature of this region is that non-agricultural income has been essentially increased – its proportion to total value has achieved 15%. It is possible to assume that non-agricultural production is based on farmers' forestry, due to reason that Aizkraukle district is one of woodiest in Latvia. However, here develop also another non-agricultural production sectors. Aizkraukle district has almost the same forest territory (142,100 ha) as three Zemgale 1 districts in total (Bauska, Jelgava, Dobele – 15,600 ha). It is wooded by 55%, but Bauska, Jelgava and Dobele district has only 29-31% forests of all territory. Economists know that in wooded territories usually are located forestry downstream sectors – furniture, construction supplies, briquettes, charcoal production. In its turn that creates more workplaces and higher salaries. For example, low paid persons (average brute salary less than LVL 100 in month) in 2006 in Aizkraukle were 4.8%, but in Jelgava district two times more – 10%.

Non-agricultural production also attracts investments. For example in 2005 in Aizkraukle district total investment amount were LVL 59.2 mil., but in agricultural district Jelgava and Dobele only LVL 28.9-28.2 mil. In Table 3 is shown macrostructure in middle size farms, enterprises and business in both intra-regions.

Table 3

Macro-structure of production in middle size farm group (40≤100 ESU) of Zemgale 1 and Zemgale 2 intra-regions in 2001 – 2006

	Year	Production value of sector groups, LVL				Macrostructure of sector groups production value, %		
		Grow-plant	Cattle-breeding	Non-agricultural activities	Total	Grow-plant	Cattle-breeding	Non-agricultural activities
Zemgale 1	2001	59965	18756	4580	83301	72.0	22.5	5.5
	2002	64887	5978	4375	75240	86.2	8.0	5.8
	2003	74583	12584	18005	105172	70.9	12.0	17.1
	2004	86912	14811	15694	117417	74.0	12.6	13.4
	2005	75538	16749	8528	101025	74.8	16.6	8.4
	2006	83722	6614	13154	103490	80.9	6.4	12.7
Zemgale 2	2001	30325	68369	7327	106021	28.6	64.5	6.9
	2002	31809	27914	18496	78219	40.7	35.7	23.7
	2003	46284	15384	17395	79063	58.5	19.5	22.0
	2004	73174	4249	56	77479	94.4	5.5	0.1
	2005	61862	26576	2381	90819	68.1	29.3	2.6
	2006	68970	34466	6577	110013	62.7	31.3	6.0

Source: SUDAT data and author's calculations.

Sector groups' structure and their productions amount proportion in middle sized farms are very different and stable:

- Zemgale 1 intra-region during that period has high and persistent grow-plant sector production proportion, production amount in absolute number also increasing;
- cattle-breeding production value and relative proportion is insignificant and unstable, production value is fluctuating around 300%;
- non-agricultural production amount and value is relatively high (12-13%);
- there is no big progress in total production value, which during last years fluctuate from LVL 100,000 till LVL 117,000;
- in Zemgale 2 intra-region farms produce much less than Zemgale 1 and there are changes in development direction of its structure – grow-plant production proportion in last years increased, but it does not still come

close to Zemgale 1 level:

- Cattle-breeding production value is extremely unstable,
- Radical changes in politics of these farms toward non-agricultural activities, because their production value proportion in last years changed very strong.

Table 4

Macro-structure of production sectors in big agricultural business farms group (100≤250 ESU) and the biggest enterprises (>250 ESU) of Zemgales-1 intra-region in 2001 – 2006

	Year	Production value of sector groups, LVL				Macrostructure of sector groups production value, %		
		Grow-plant	Cattle-breeding	Non-agricultural activities	Total	Grow-plant	Cattle-breeding	Non-agricultural activities
100≤250 ESU	2001	135,925	18,284	17,731	171,940	79.1	10.6	10.3
	2002	166,825	43,587	22,935	233,347	71.5	18.7	9.8
	2003	189,640	28,077	37,557	255,274	74.3	11.0	14.6
	2004	223,707	36,059	32,784	292,550	76.5	12.3	11.2
	2005	241,528	33,267	40,938	315,733	76.5	10.5	13.0
	2006	209,336	39,792	20,589	269,717	77.6	14.8	7.6
>250 ESU	2001	717,465	1,188,453	302,527	2,208,249	32.5	53.8	13.7
	2002	669,399	751,835	192,403	1,613,637	41.5	46.6	11.9
	2003	709,560	1,032,465	174,380	1,916,268	37.0	53.9	9.1
	2004	686,011	717,180	152,440	1,555,513	44.1	46.1	9.8
	2005	925,576	940,781	260,528	2,126,885	43.5	44.2	12.3
	2006	717,603	562,071	192,280	1,471,954	48.8	38.2	13.1

Source: SUDAT data and author's calculations.

Interesting data can be found analyzing Zemgale 1 agricultural business groups' structural strategy (see Table 4).

Enterprises with 100≤250 ESU have strong and stable specialization in grow-plant sectors, proportion of these sectors approach 4/5 of all production value. Second - grow-plant sector tendency shows that during that period it has been increased by 60%, its chain growth rate is around 10%. Cattle-breeding and poultry keeping sectors production has no great fluctuations, however proportion of these agricultural sectors has slow decrease and during last three years proportion in total production value vary between 12-13%. In this agricultural business enterprises group important part has non-agricultural production value. Total production value dispersion during last five years is 33%, which much less in biggest agricultural enterprises.

Biggest agricultural business enterprises have different production and sector structure dynamic and changes in that period are unlike other farm groups. First of all, here risk factors have great importance, which make for sector production big fluctuations. For example, total production value dispersion during last 6 years is 50%. Nevertheless dispersions for each sector individually are different. In grow-plant sectors are greatest production stability, dispersion is 35%, which is quite close to average norm 20%. Cattle-breeding (including poultry keeping) sector has sharp fluctuations in production value: in 2001 it was 2.1 times higher than in 2006. Little lower fluctuations can be seen in non-agricultural production values.

Hypothetically and conceptually we can assume that fluctuations in production value of cattle-breeding and poultry keeping has been created by economical factor, - one of them changes in these markets not only in Latvia, but also in Europe and with it also global markets. These assumptions are based on information that in Zemgale region the biggest poultry keeping producers and agricultural complexes in Latvia are located.

During last three years, sectors 'production structure also in this group shows determined structural changes – rise of grow-plant sectors production proportion in total production value, but non-agricultural production proportion remains the same around 11-12%.

Conclusions

1. In Zemgale 1 small scale farms with certainty dominate grow-plant production value, but in Zemgale 2 macrostructure gradually changes, cattle-breeding production proportion tends to grow in total production value. Small scale farms of Zemgale 2 show increase in non-agricultural production value and this could be connected with forestry and its downstream sectors.
2. Middle sized (40-100 ESU) farms in Zemgale 1 have stable and high proportion of grow-plant production, but in Zemgale-2 goes on internal reorientation toward grow-plant production.
3. In big agricultural business farms production structure grow-plant production value takes leadership and its amount increasingly grows.
4. Among the biggest (>250 ESU) agricultural complexes and enterprises are very big cattle-breeding, and poultry meat complexes, as well as specialization in seeds and cereal growing.

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