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AGRICULTURE OF THE EASTERN REGION IN LIGHT OF CSO DATA

Abstract: The aim of the paper is to show the agriculture of the Eastern Region of Poland at the background of the entire country and demonstrate the internal diversity of this region's agriculture. In this region, agriculture forms a more significant part of the economy than the average for the country. At the same time, this agriculture is more fragmented in terms of agrarian structure, and it is more traditional. But within this scope it does not differ greatly from the national average. However, it is not a homogenous agriculture; on the contrary it is bi-polar. The demographic situation points to the possibility of accelerating the agrarian changes more significantly in the Eastern Region in the coming years than in other regions of the country. This will take place by a further increase of larger and economically stronger farms and a decrease in the number and significance of smaller farms–presently considered medium-sized farms. The main problem in the field of environmental sustainability is maintaining soil fertility. In this respect the situation cannot be considered satisfactory, since the balance of organic matter in the soil in the Eastern Region is slightly negative.

Key words: Agrarian structure, environmental sustainability, family farms.

Introduction

The spatial differentiation of socio-economic development in Poland has two clear axes, namely metropolises – peripheries, and East – West [Stanny 2013]. In the latter case the reasons for the situation derive from the times of Partitions of Poland [Frenkel, Rosner 1995; Bański 2010]. This differentiation also extends to agriculture, which is the very subject of the following article. Firstly, the paper aims to show the agriculture of the Eastern Region at the background of the entire country and, secondly, to demonstrate the internal diversity of this region's agriculture. The Eastern Region has been defined according to population and not agricultural criterion, which it is to serve for statistical purposes at the NUTS 1 level under the territorial (regional) division of the European Union (EU). Thus this division is significant in EU policy,

be it only in the scope of cohesion. If we add the Warmińsko-Mazurskie Voivodeship to the Eastern Region, we get a formation known as the Eastern Wall (Polish: *Ściana Wschodnia*) that has been covered by a special support programme under EU policy.

The characteristic of agriculture herein is limited to individual farms predominating in the agriculture of Poland in general, and this region in particular. Given the limited framework of the paper, it is restricted to the basic characteristics of farms and omits the issues of organisation and production structure. To this end, we use data from the National Agricultural Census 2010 (NAC 2010) and the assessment of a farm's sustainability conducted on the basis of data included in the Census [CSO 2013]. The analysis also covers changes regarding farms in the period between NAC 2002 and NAC 2010, which gives the means to answer the question on the cohesion of agriculture within the Eastern Region as well as between the region and the entire country.

1. Individual farms of the Eastern Region in light of NAC 2010

The differences between farms in the Eastern Region are greater than those between the region and the national average. These differences are already visible in the field of natural potential of farms. The average value of the indexation rate of agricultural production space in the country amounts to 66.6 points. The value of this rate exceeds the national average in the Lubelskie (74.1), Podkarpackie (70.4), and Świętokrzyskie (69.3) voivodeships, whereas it is lower – the lowest in the country – in the Podlaskie Voivodeship (55.0 points) [Stuczyński *et al.* 2007, p. 81, Table 2]. The area of a farm provides the historical ground to offset the weaker indexation of natural conditions [Zegar 1985], which is also the case for the Podlaskie Voivodeship (Table 1). Moreover, utilised agricultural area (UAA) in good agricultural condition represents 97-98% of the total UAA – apart from the Podkarpackie Voivodeship where this proportion amounts to 93%. The Podkarpackie Voivodeship also differs in regard to the percentage of sown arable land, which in the aforementioned spatial units, ranges from 92 to 96% and in the Podkarpackie Voivodeship it amounts to only 83%.

Table 1

Elements of the natural potential of farms in 2010 (average per farm)

Specification	Poland	Eastern Region	Lubelskie	Podkarpackie	Podlaskie	Świętokrzyskie
Overall area (ha)	8.10	6.30	6.78	3.33	13.52	5.29
UAA (ha)	7.09	5.33	5.83	2.76	11.30	4.52
Arable land (ha)	5.10	3.55	4.43	1.61	6.67	3.05
Permanent grassland (ha)	1.63	1.42	0.96	0.90	4.37	0.99
Orchards (ha)	0.19	0.19	0.30	0.06	0.06	0.30

Specification	Poland	Eastern Region	Lubelskie	Podkarpackie	Podlaskie	Świętokrzyskie
Forests and forest land (ha)	0.59	0.62	0.60	0.30	1.61	0.46
Farms with kitchen gardens (%)	22.4	34.4	52.7	30.7	22.9	13.7
Permanent grasslands in UAA (%)	22.9	26.6	16.4	32.6	38.7	21.9

Source: Based on data calculated for the paper by the Statistical Office in Olsztyn [CSO 2013].

The natural potential of farms in the Eastern Region *en bloc* is smaller than the national average; in regard to the UAA by 1/4 and the area of arable land by 2/5. With respect to voivodeships from the Eastern Region, farms from the Podlaskie Voivodeship have good results–their natural potential exceeds the national average by 2/5 for the UAA and by almost 1/3 in case of arable land. These farms also have 2.7 times more permanent grasslands and 2.7 times greater forest areas. On the other hand, farms from the Podkarpackie Voivodeship clearly lag behind–the average acreage of UAA of farms represents approx. 2/5 of the national average, and in case of arable land – 1/3.

Education, age, and sex of the farm user are among the important characteristics thereof. In case of general education, the proportion of farm users with higher and secondary education exceeds 40% and there are no significant differences between the Eastern Region and the country in this respect as well as between voivodeships of the Region (Fig. 1).

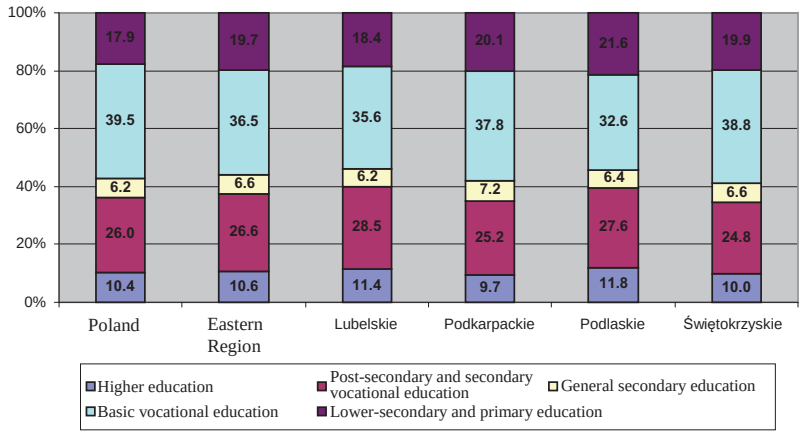

Figure 1. Structure of farms according to the general education of a farm's user

Source: Own compilation based on data from Table 1 (Figs. 1-5).

However, significant differences are noted in regard to agricultural education. First of all, the majority of farm users do not have formal agricultural education: 60% in the country, 63% in the Eastern Region – including 52% in the Podlaskie

Voivodeship and 70% in the Podkarpackie Voivodeship. The remaining proportion of farm users have formal education consisting, *e.g.*, agricultural courses and basic vocational agricultural education. The percentage of farm users having higher agricultural education is low (Fig. 2). Vocational preparation is significant not only in case of large farms, but also for small farms. The methods of agricultural production is not only effective in economic terms, but also efficient in regard to environmental sustainability criteria – shifting to sustainable intensification both for industrial and agri-environmental. This is a growing challenge of our time[1].

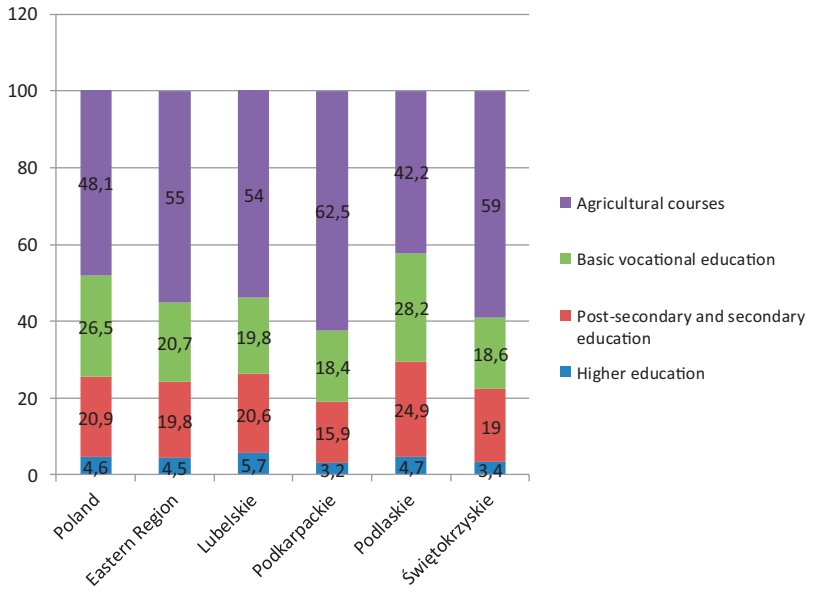

Figure 2. Structure of farms according to the agricultural education of a farm's user (%)

In the country, women act as farm users in case of 34% of farms, and in the Eastern Region – 36% of farms, but in the Podkarpackie Voivodeship they use as much as 44% and in Podlaskie – 23% of farms. There is no one reason explaining the differences in this scope. The significant circumstances include gainful employment undertaken by men (in the country and abroad), widowhood (especially in case of farms of retirees), acquisition of farms by unmarried daughters, and others.

In regard to the age of farm users, the Eastern Region lags only slightly behind the national average, but the differences between individual voivodeships of the

[1] Sustainable intensification means a farming method allowing to obtain more food from a smaller acreage, and at lower energy and water consumption, with the use of genetic modifications, nanotechnologies, genomics, computerization, but also by using the laws of nature [*Royal Soc*iety 2009; Godfrey *et al.* 2010; Lang, Barling 2012; Sage 2013; *OECD* 2013].

region are considerable. The best situation is in the Podlaskie Voivodeship as there the proportion of farm users aged under 44 is the highest and the lowest proportion of users aged 65 and over. The worst situation is in Podkarpackie Voivodeship, where these figures are reversed (Fig. 3).

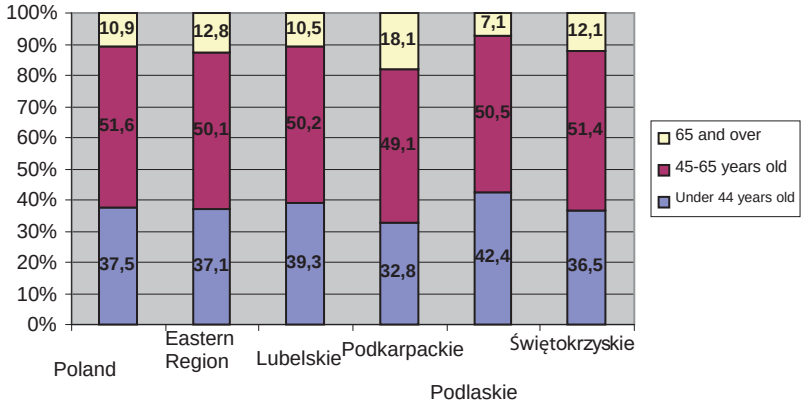

Figure 3. Structure of farm users according to age

Agrarian fragmentation, small production scale, and progressing mechanisation result in stable labour input. As expressed in the so-called annual work unit (AWU)[2], these inputs are slightly above 1 AWU per farm. In general, they refer to the user of a farm and his/her family members helping to a certain extent on a permanent or temporary basis. Permanent employment is rare in Polish agriculture–its average level in the country does not exceed 2% of the total labour input, and in the Eastern Region it fluctuates around 5 pro mille. The above-mentioned factors result in a high labour input per area unit (usually per 100 ha of UAA) – in the Eastern Region they are approx. 30% higher compared to the national average. Also, in this case, the Podlaskie and Podkarpackie Voivodeships are ranked on opposite positions. This also refers to elderly working people (65 and over) as well as the aforementioned age of users (Table 2).

In regard to the sources of income for farms in the Eastern Region, they do not differ greatly from those for the entire country. The majority of households with a farm user obtain income not only from the farm, but also from other sources – firstly, from gainful employment and secondly, from social benefits (Table 3).

In the Eastern Region, the proportion of farms obtaining income from gainful employment is the highest in the Podkarpackie Voivodeship and the lowest in the Podlaskie Voivodeship. This is predetermined by the situation in the labour market

[2] AWU – Annual Work Unit – labour input unit applied in statistical research which is equivalent to 2,120 hours of work per year.

Table 2

Characteristics of labour input and users

Specification	Poland	Eastern Region	Lubelskie	Podkarpackie	Podlaskie	Świętokrzyskie
Labour input (AWU)	1.09	1.05	1.10	0.87	1.24	1.17
Permanent employment (% of AWU)	1.78	0.55	0.66	0.39	0.61	0.52
Labour input per 100 ha (AWU)	15.3	19.8	18.8	31.6	10.9	25.9
Number of persons in a family	2.36	2.45	2.42	2.52	2.31	2.48
Number of persons/AWU[a]	2.25	2.37	2.27	2.91	1.90	2.15
Share of working people ≥ 65 years old	10.7	12.2	10.6	15.0	9.4	11.7
User – women (%)	34.3	36.5	34.3	44.2	23.4	36.8
Users aged ≥65 (%)	10.9	12.8	10.5	18.1	7.1	12.1

[a] Number of natural persons in a household per 1 AWU of a family

Source: As in Table 1.

and access to this market is related to the possibility of commuting to work and, of course, the profitability of farms. Even greater differences are noted with reference to obtaining income on account of retirement and disability pensions. In the Podkarpackie Voivodeship almost every second farm benefits from such an income, while in the Podlaskie Voivodeship – every fourth farm (in the country – every third farm). This points to the huge role social benefits play in ensuring livelihood. Around 1/5 of households with farm users have a recognised income on account of retirement and disability pensions – their major (above 50% of disposable income) source of livelihood; in the Podkarpackie Voivodeship it is nearly 1/3. Farming activities provide a livelihood for 47% of families linked to agriculture in the Podlaskie Voivodeship, but only 8% in the Podkarpackie Voivodeship (Fig. 4).

Efficiency of farms may be expressed by some aggregated indicators expressing the level of basic economic categories. These are based on uniform methodological grounds applied in the European Union. The case refers to the standard production (SP) expressed in euro (EUR) and standard gross margin (SGM) expressed in ESU. Values corresponding to these categories may be referred to a farm, area units (1 ha of UAA), annual work unit (AWU), and others.

Standard production per farm points to a revealed production potential – the volume of agricultural production of a farm, and when calculated per hectare of UAA it may be used as a synthetic measure of land productivity. On the other hand, the standard gross margin of a farm points to the primary income category, when calculated per work unit it may be used as a measure of economic efficiency of labour. Table 4 gives a set of these indicators for the aforementioned spatial units.

Table 3

Farms obtaining income from non-farming activities (% of all farms)

Specification	Poland	Eastern Region	Lubelskie	Podkar-packie	Podlaskie	Święto-krzyskie
Including non-farming income	83.8	86.6	83.8	96.2	72.0	85.3
- from non-farming activities	19.7	18.7	16.2	21.2	18.9	18.9
- from gainful employment	47.7	48.4	47.8	55.3	37.1	45.2
- from retirement and disability pensions	33.1	38.2	34.3	48.8	25.6	35.6
- from other non-profit sources	6.9	8.5	7.5	10.0	6.8	8.5

[a] Sum of income shares obtained by a household may exceed 100, since there may be several sources of income in a household

Source: Own compilation based on data in Table 1 (Tabs. 3-4).

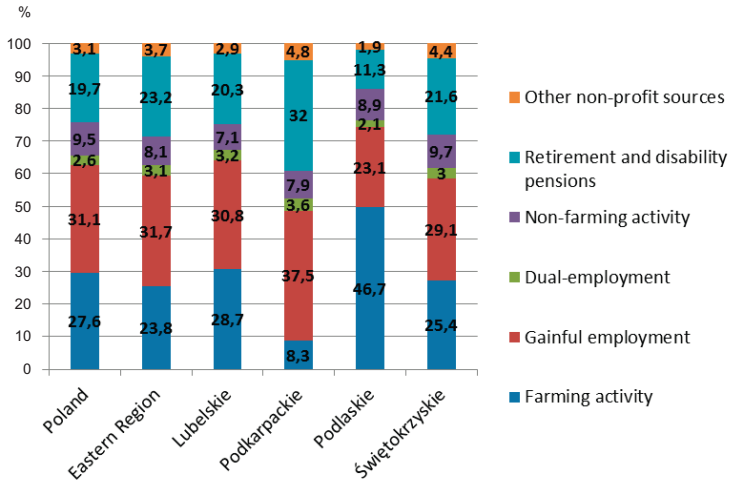

Figure 4. Structure of households with farm users according to the predominating source of livelihood (%)

Table 4

Economic indicators of farms

Specification	Poland	Eastern Region	Lubelskie	Podkarpackie	Podlaskie	Świętokrzyskie
SP per farm (EUR)	9,185	6,108	6,488	2,791	13,622	5,747
SGM per farm (EUR)	3.43	2.26	2.42	0.79	5.64	2.05
SP per ha	1,295	1,146	1,113	1,011	1,206	1,272
SP per AWU	8,444	5,799	5,923	3,196	11,019	4,912
SGM per ha	0.48	0.42	0.42	0.29	0.50	0.45
SGM per AWU	3.15	2.14	2.21	0.91	4.56	1.75

The standard production of an average farm in the Podlaskie Voivodeship is 48% higher than the national average and as much as 4.9 times higher than the average for the Podkarpackie Voivodeship. In parallel, the volumes in case of standard gross margin amount to 64% and 7.1 times, respectively. Farms of the Eastern Region are characterised by a lower land productivity (approx. 12%) and a lower economic efficiency of labour (also approx. 12%). The Podlaskie Voivodeship also makes a positive mark on these grounds, but the Podkarpackie Voivodeship notes negative results. The value of standard production per 1 ha of UAA in the Podlaskie Voivodeship is, however, lower by 7% compared to the national average. Meanwhile, economic efficiency of labour in the Podlasie region is higher by 45% compared to the national average and 5 times compared to the average for the Podkarpacie region[3].

2. Dynamics of change in the period 2002–2010

In 2002 (individual) farms of the Eastern Region comprised 31% of the total number of statistically registered farms pursuing and not pursuing farming activities in the country, and in 2010, even more – since it was almost 34%. Given the farms conducting farming activities, these proportions are even higher since they amount to 33.3% and 35.2%, respectively. The given numbers point out the fact that the number of farms in the Region are decreasing slower than in the country as a whole. This refers to all voivodeships of the Region, but the decrease is the slowest in the Podlaskie Voivodeship (Table 5).

Table 5

Number and changes in farms in the period 2002–2010

Years	Farms	Poland	Eastern Region	Lubelskie	Podkarpackie	Podlaskie	Świętokrzyskie
2002	Total	2,928.6	909.5	305.7	311.7	119.9	172.2
	Active	2,174.0	724.1	263.6	235.9	96.0	128.6
2010	Total	2,273.3	764.2	257.1	261.3	103.9	141.9
	Active	1,886.9	663.5	233.4	223.1	92.2	114.8
Changes (in thousands)	Total	655.3	145.3	48.6	50.4	16	30.3
	active	287.1	60.6	30.2	12.8	3.8	13.8

[3] We should note that the Podlaskie Voivodeship significantly lags behind the Wielkopolskie and Kujawsko-Pomorskie Voivodeships in regard to leading economic efficiency. As for land productivity (SP per ha) the value of the applied indicator in the Podlaskie Voivodeship is lower by 31% (EUR 1,750) compared to the Wielkopolskie Voivodeship, and by 18% (EUR 1,465) compared to the Kujawsko-Pomorskie Voivodeship. Meanwhile, in the field of the labour economic efficiency indicator (SGM per AWU), the value of the applied indicator in the Podlaskie Voivodeship is lower by 22% (5.86 ESU) than in the Wielkopolskie Voivodeship and by 24% (5.97 ESU) in the Kujawsko-Pomorskie Voivodeship.

Years	Farms	Poland	Eastern Region	Lubelskie	Podkar-packie	Podlaskie	Święto-krzyskie
Changes (2002=100)	Total	77.6	84.0	84.1	83.8	86.7	82.4
	active	86.8	91.6	88.5	94.6	96.0	89.3

Source: Developed on the basis of data [*CSO* 2003; *CSO* 2012].

A decrease in the number of farms took place in area groups up to 30 ha, while in area groups of larger farms the number of farms increased. This happened in the entire country including the Eastern Region, except for Świętokrzyskie Voivodeship, where the number of farms also increased in the 15-30 ha group. However, changes on such scale have not contributed to a new quality – the agrarian structure is still extremely fragmented. But positive changes occur and that refers to all of the aforementioned spatial units (Fig. 5). As for the agrarian structure in both years, the Podlaskie Voivodeship made a positive mark (Table 6).

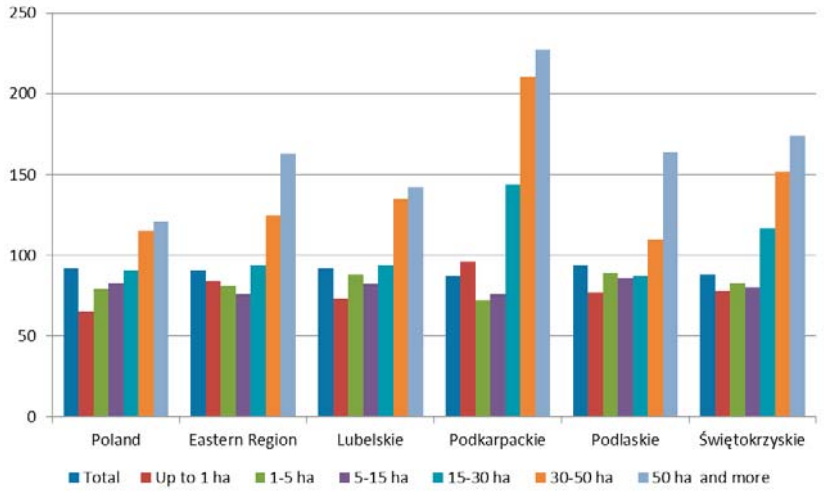

Figure 5. Changes in the area of UAA in farms according to area groups in the period 2002–2010 (%)

Table 6

Area structure of farms

Specification	Year	Area groups of farms (ha of UAA)					
		Up to 1	1-5	5-15	15-30	30-50	≥50
Poland	2002	33.4	39.1	20.8	5.0	1.1	0.6
	2010	31.4	37.9	22.2	5.9	1.6	1.1
Eastern Region	2002	28.9	44.2	21.9	4.1	0.7	0.2
	2010	31.5	41.4	21.2	4.5	1.0	0.4

Specification	Year	Area groups of farms (ha of UAA)					
		Up to 1	1-5	5-15	15-30	30-50	≥50
Lubelskie	2002	27.0	39.5	28.2	4.3	0.7	0.2
	2010	26.2	39.9	27.6	4.8	1.1	0.5
Podkarpackie	2002	36.3	51.3	10.0	0.4	0.1	0.1
	2010	44.5	45.6	8.7	0.7	0.2	0.2
Podlaskie	2002	16.9	26.6	36.3	16.6	3.0	0.6
	2010	17.3	24.9	36.4	16.5	3.8	1.1
Świętokrzyskie	2002	27.0	48.8	22.3	1.6	0.2	0.1
	2010	27.3	48.5	21.5	2.1	0.4	0.2

Source: Own compilation based on the data in Table 5.

A slightly slower decrease in arable land, but still very significant, is amounting in the entire region to as much as 1.2 million ha, including 356,000 in the Eastern Region (Lubelskie, 125,000 ha; Podkarpackie, 97,000 ha; Podlaskie, 61,000 ha; and Świętokrzyskie, 73,000 ha), than a decrease in the number of farms resulting in a certain increase in the average area (UAA) of farms, but these are not impressive and in the case of the Podkarpackie Voivodeship no such increase has been noted (Fig. 6). But what is in progress is the process of deepening diversification resulting from the polarisation of farms. A group of economically strong farms is emerging and, simultaneously, the group of medium-sized and small farms is weakening. This is a common phenomenon, but it is most clearly marked in the Podkarpackie Voivodeship.

Standard gross margin (SGM) expressed in Economic Size Unit (ESU) has been calculated for farms conducting farming activities (named active farms). This structure in the Eastern Region is less favourable than in the entire country, but Podlaskie Voivodeship distinguishes itself *in plus* (Table 7).

The specialisation process is one of three processes, along with concentration and intensification, typical for industrialisation of agriculture or, in other words, industrial model of agriculture. This process progresses faster in Polish agriculture than changes in the agrarian structure [Zegar 2009; Józwiak, Ziętara 2013]. The percentage of farms with a fixed production type has significantly increased within the period between censuses and this refers to all of the aforementioned spatial units. In 2002 the production type was set for 63% and in 2010 it was set for 94% of farms in Poland. In the Eastern region a similar percentage was formed at the level of 64% and 93%; in the Lubelskie Voivodeship it amounted to 67% and 95%; in Podkarpackie to 52% and 89%, Podlaskie to 78% and 96%, and in the Świętokrzyskie Voivodeship to 69% and 95%.

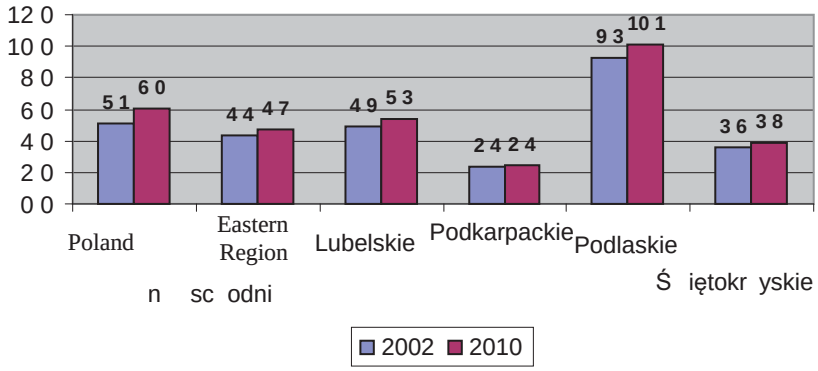

Figure 6. Average area of a farm in 2002 and 2010 (ha of UAA)
Source: Own compilation based on the data in Table 5 (Figs. 6-7).

Table 7

Structure of farms according to the Standard Gross Margin (%)

Specification	Year	Economic classes of farms according to the SGM (ESU)				
		up to 4	4-8	8-16	16-40	≥40
Poland	2002	78.7	11.0	6.9	2.9	0.5
	2010	80.5	8.8	6.1	3.7	0.9
Eastern Region	2002	83.7	10.1	4.7	1.3	0.2
	2010	86.3	7.2	4.1	2.1	0.4
Lubelskie	2002	80.9	13.2	4.7	1.0	0.2
	2010	84.4	9.4	4.3	1.6	0.4
Podkarpackie	2002	96.8	2.4	0.6	0.2	0.1
	2010	96.9	2.1	0.7	0.3	0.1
Podlaskie	2002	57.5	19.6	16.4	5.9	0.5
	2010	65.3	12.0	12.5	8.9	1.2
Świętokrzyskie	2002	84.9	10.8	3.5	0.7	0.1
	2010	86.5	8.9	3.5	1.0	0.2

Source: Own compilation based on the data in Table 5.

In regard to the farms for which the production type has been set, their structure was calculated in line with these types. The data are included in Table 8. This structure shows a movement for the benefit of the type "Field crops" and "Animals fed with concentrated feed" at the expense of the type "Mixed – different crops and animals", "Mixed – different crops" as well as – but to a lesser extent – "Mixed – different crops

and animals" and "Animals fed with roughage". As for the latter, a different situation took place in the Podlaskie Voivodeship where specialisation develops in the direction of breeding type, namely dairy cows. This is a reasonable behaviour of farmers that brings good results. The same refers to decreasing the number of farms of the type "Animals fed with roughage" in the Podlaskie Voivodeship.

Table 8

Structure of farms according to production type (%)

Specification	Year	A	B	C	D	E	F	G	H
Poland	2002	18.4	2.7	3.7	12.8	5.8	9.4	20.9	26.2
	2010	42.5	2.6	4.6	10.4	6.0	4.4	7.4	22.1
Eastern Region	2002	17.1	1.6	3.6	11.6	2.6	12.9	20.8	29.7
	2010	41.7	1.8	6.1	8.6	5.0	6.3	6.5	24.1
Lubelskie	2002	22.5	1.5	5.3	5.4	3.3	17.0	17.4	27.7
	2010	40.8	1.9	8.9	4.8	4.6	8.3	6.2	24.5
Podkarpackie	2002	10.2	1.2	1.4	14.6	1.7	9.3	24.8	36.8
	2010	45.8	1.6	4.1	4.1	6.9	5.7	5.7	26.1
Podlaskie	2002	13.5	1.0	0.8	25.3	3.2	5.6	29.7	21.0
	2010	39.0	0.8	1.1	32.0	2.6	1.3	9.0	14.3
Świętokrzyskie	2002	19.0	2.9	5.7	8.3	2.0	16.0	14.9	31.2
	2010	38.4	2.7	8.0	5.3	4.3	7.4	6.4	27.4

Key: A – specialising in field crops; B – specialising in horticultural crops; C – specialising in permanent crops; D – specialising in farming of animals fed with roughage; E – specialising in farming of animals fed with concentrated feed; F – mixed – different crops; G – mixed different animals; H – mixed different crops and animals.

Source: Own compilation based on the data in Table 5.

Agriculture has lost some significance in regard to sources of livelihood for the families actively using a farm, but these changes are insignificant. In this respect, the Podlaskie Voivodeship clearly stands out, as the farm is the predominant source of livelihood for almost half of farms there and the Podkarpackie Voivodeship, where this percentage does not exceed 1/10 (Fig. 7).

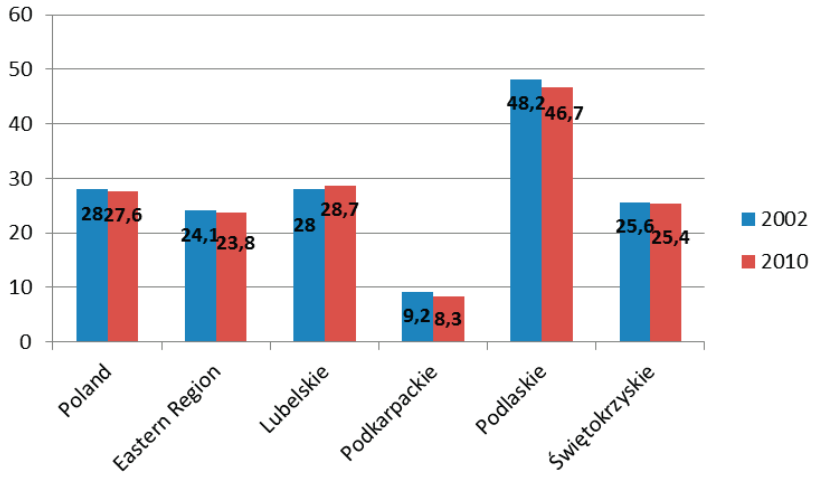

Figure 7. Agricultural income as a predominating source of livelihood (% of farms)

Conclusion

Agriculture forms a more significant part of the economy of the Eastern Region than the average for the country. At the same time, this agriculture is more fragmented in terms of agrarian structure and it is more traditional. But, within this scope it does not differ greatly from the national average. However, it is not a homogenous agriculture; on the contrary it is bi-polar. On the one hand, farms from the Podlaskie Voivodeship are ranked significantly above the national average, while farms from the Podkarpackie Voivodeship are much below the average. The Lubelskie region, in this regard, is closer to Podlasie; and Podkarpacie is closer to Świętokrzyskie.

The demographic situation points to the possibility of accelerating the agrarian changes more significantly in the Eastern Region in the coming years than in other regions of the country [*US* 2013]. This will take place by a further increase of larger and economically stronger farms and a decrease in the number and significance of smaller farms, presently considered medium-sized farms. However, the area differentiation of farms will continue and this should not be assessed as negative altogether.

As for sustainable development of agriculture, which becomes one of the major problems of the contemporary world [Zegar 2012], farms from the Eastern Region are better prepared thereto. This follows from a family character of agriculture [Woś, Zegar 2002] as well as a predomination of non-industrial forms of agricultural production. The main problem in the field of environmental sustainability is maintaining soil fertility. Unfortunately, in this respect the situation cannot be considered satisfactory, since in the country as a whole the balance of organic matter in the soil is slightly

positive (0.03 t/ha), in the Eastern Region it is slightly negative (-0.1 t/ha), and in the Podkarpackie Voivodeship it is even more significantly negative (-0.26 t/ha), while in the Podlaskie Voivodeship it is positive (0.04 t/ha).

Farms from the Podlaskie Voivodeship have had their chance – namely the demand for dairy products, benefiting from the natural conditions for the purpose, but probably also – in the face of rather not-existent alternative methods to generate income–their orientation at farming activities. They have also used the possibilities provided by the Common Agricultural Policy in a better way. This is evidenced by the percentage of farms participating in the RDP and the Agri-environmental Programme[4].

Undoubtedly, the case of agriculture in the Podlasie and Podkarpackie Regions requires a detailed analysis in the context of opportunities and threats as well respective actions.

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[4] According to data from the NAC 2010, 7% of farms in the country, 6.8% in the Eastern Region and 11.1% in the Podlaskie Voivodeship and only 3.5% in the Podkarpackie Voivodeship participated in RDP. In parallel, percentages in regard to participation in the agri-environmental programme amounted to 5.7, 5.9, 8.4 and 3.2%, respecitvely.

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