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Proceedings of the International Scientific conference

"ECONOMIC SCIENCE FOR RURAL DEVELOPMENT"

Finance and Credit Diversification

№ 11

Jelgava

2006

TIME SCHEDULE OF THE CONFERENCE:

- Preparation from – September 2005 to April 2006;
- Process – the 26th and 27th April 2006

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Izdots ar Latvijas Republikas Zemkopības ministrijas atbalstu

Iespiests Jelgavas tipogrāfijā
ISBN 9984-784-06-1

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Rakstu autoriem recenzenti ir anonīmi.

Sekojošie 55 recenzenti no sešu valstu 18 zinātniskām un akadēmiskām institūcijām, uzrakstīja 127 recenzijas.

Each article included into the Proceedings was subjected to a scientific, including international review.

All reviewers are anonymous for the authors of the articles.

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Doktorantu zinātniskie vadītāji iesniedza vērtējumus par savu doktorantu iesniegto darbu zinātnisko kvalitāti un ieteikumus to publicēšanai:

.

Evaluation of the Scientific Advisors

The scientific advisors of PhD students submitted the evaluation on the scientific quality of the papers presented by their PhD students and recommendations for the publication of these papers:

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Jānis ĀBOLIŅŠ,	Dr.phys., profesors

Pateicības

Pirmā un īpašā pateicība Latvijas Republikas Zemkopības ministrijas valsts sekretārei, ekonomikas doktorei Laimdotai Straujumai un ministram Mārtiņam Rozem par starptautiskā zinātniskā pasākuma ***Ekonomikas zinātne – lauku attīstībai*** augsta līmeņa nepieciešamības izpratni, atbalstu un personīgu piedalīšanos.

Pateicība ministrijas un Lauku atbalsta dienesta personālam, kuri atsaucīgi pildīja savas funkcijas atbalsta īstenošanas procesā.

Pateicība LLU Lietu pārvaldniekam Jānim Spruktam par veicinošu attieksmi starptautiskā pasākuma sagatavošanā.

Pateicība ekonomikas doktorei Gunitai Mazūrei par palīdzību starptautiskās konferences sagatavošanā.

Par atsaucīgu darbu zinātnisko rakstu kvalitātes veicināšanā sevišķa pateicība recenzentiem – ekonomikas doktorei Īrijai Vītolai, ekonomikas doktorei Veronikai Buģinai, ekonomikas doktorei Anitai Auziņai, ekonomikas doktorei Ainai Muškai, ekonomikas doktorei Ingrīdai Jakušonokai, ekonomikas doktoram Jānim Kaktiņam, lauksaimniecības doktoram Voldemāram Strīķim un pārējiem recenzentiem Varšavā, Rīgā, Vīnē, Kauņā, Venēcijā, Padovā, Krakovā, Jelgavā, Minskā, Ščecinā, Siguldā, Barnovičos, Ulbrokā, Poznaņā.

Pateicība doktorantei Linda Jancei un maģistrantei Agnesei Radželei par centīgu, perfektu, radošu darbu starptautiskā pasākuma un zinātniskās konferences sagatavošanas maratonā

Pateicība visiem citiem Ekonomikas fakultātes darbiniekiem un pakalpojumu firmu personālam, kuri apzinās savu perfektu darbu sev uzticēto pienākumu veikšanā starptautiskā pasākuma sagatavošanas procesā.

Programmas komitejas vārdā
- starptautiskā zinātniskā pasākuma atbildīgais koordinators, prof. K.Špoģis

Acknowledgements

The first and special gratitude to Dr.oec. Laimdota Straujuma, a secretary of State of the Ministry of Agriculture and Mārtiņš Roze, the Minister for Agriculture, the Republic of Latvia for the understanding of the necessity of a high level international scientific event Economic Science for Rural Development, support and personal participation.

Thanks to the staff of the Ministry of Agriculture and Rural Support Service who were responsive in the support implementation process.

Thanks to Jānis Sprukts, a manager of Latvia University of Agriculture for the promoting attitude in the arrangement of the international event.

Thanks to Dr.oec. Gunita Mazūre for the rendered help in the arrangement of the international conference.

The conference organisers would like to express a special gratitude to the reviewers – Dr.oec. Īrija Vītola, Dr.oec. Veronika Buģina, Dr.oec. Anita Auziņa, Dr.oec. Aina Muška, Dr.oec. Ingrīda Jakušonoka, Dr.oec. Jānis Kaktiņš, Dr.agr. Voldemārs Strīķis and the other reviews from Warsaw, Riga, Vienna, Kaunas, Venice, Padua, Kracow, Jelgava, Minsk, Scecin, Sigulda, Baranovichi, Ulbroka, and Poznan for the responsive work promoting the quality of scientific papers.

Thanks to Linda Jance, a PhD student and Agnese Radžele, a Master's student for the diligent, perfect, and creative work during the Marathon of the arrangement of the international event and scientific conference.

Thanks to all the staff of the Faculty of Economics and employees of the service companies who acknowledge their perfect work in the implementation of their duties under the arrangement process of an international event.

On behalf of the Programme Committee
- Kazimirs Špoģis, a professor, coordinator-in-charge of the international scientific conference

Priekšvārds

Starptautiskās zinātniskā daudzu valstu augstskolu un vairāku zinātņu akadēmiju agrāro ekonomistu un vadības zinātnes speciālistu konference Jelgavā, Latvijas Lauksaimniecības universitātes Ekonomikas fakultātes telpās, jau kļuvusi par stabilu, regulāru ikgadēju, aprīļa mēneša pasākumu.

Šajā – septītajā pasākumā piedalās zinātniskā un akadēmiskā personāla pārstāvji – profesori, doktori, doktoranti, aspiranti, zinātņu kandidāti, docenti, pētnieki, akadēmiķi, korespondētājlocekļi, asistenti, maģistranti un maģistri no daudzām augstskolām un zinātniskiem institūtiem:

- Latvijas Republikas Zemkopības ministrijas;
- Latvijas Lauksaimniecības universitātes;
- Latvijas Universitātes;
- Lietuvas Lauksaimniecības universitātes;
- Austrijas Lauksaimniecības ekonomikas federālā institūta;
- Itālijas – Padovas universitātes;
- Baltkrievijas nacionālās zinātņu akadēmijas;
- Latvijas lauksaimniecības un meža zinātņu akadēmijas;
- Kauņas Tehnoloģiskās universitātes;
- Varšavas Lauksaimniecības universitātes;
- Krakovas Lauksaimniecības universitātes;
- Ščecinas Lauksaimniecības universitātes;
- Baranoviču Valsts Lauksaimniecības universitātes;
- Poznaņas Lauksaimniecības universitātes;
- Eiropas Padomes, Briselē;
- Venēcijas universitātes;
- Baltkrievijas valsta lauksaimniecības akadēmijas;
- Latvijas Valsts agrārās ekonomikas institūta;
- Latvijas Lauksaimniecības mehanizācijas institūta;
- Latvijas Lauksaimniecības statūtsabiedrību asociācijas;
- Lauku atbalsta dienesta.

Konferences programmas starptautiskā komiteja noteica augstas prasības referātu kvalitātei. Lai to sasniegtu katrs iesniegtais referāts tika pakļauts neatkarīgai, zinātniskai, tai skaitā starptautiskai recenzēšanai. Lai panāktu iespējami objektīvu, principiālu, neatkarīgu katra referāta vispusīgu izvērtēšanu pēc desmit kritērijiem, recenzenti referātu (rakstu) autoriem bija anonīmi, izņemot retus, atsevišķus gadījumus, kad recenzents vēlējās

Foreword

The international scientific conference attended by agrarian economists and management specialists from many universities and several academies of science and held in April, the premises of the Faculty of Economics, Latvia University of Agriculture, in Jelgava has already become a stable, regular, and annual event.

This – the seventh conference is attended by the representatives of scientific and academic staff – professors, doctors, PhD students, research students, candidates of science, assistant professors, researchers, academicians, corresponding members, assistants, graduate students, and Masters of Science from many higher education and scientific institutions:

- *Ministry of Agriculture Republic of Latvia*
- *Latvia University of Agriculture*
- *Univeristy of Latvia*
- *Lithuanian University of Agriculture*
- *Austria Federal Insitute of Agricultural Economics, Viena*
- *Università di Padova*
- *Center of Agrarian Economy of Institute of Economy of National Academy of Science Belarus*
- *Academy of Agricultural and Forestry Science of Latvia*
- *Kaunas University of Technology*
- *Agricultural univeristy of Warsaw*
- *Agricultural University of Krakow*
- *Agriculture University of Szczecin*
- *Барановичский государственный сельскохозяйственный университет*
- *Agricultural University of Poznan*
- *Cauncil of Europe*
- *University Ca Foscari of Venecia*
- *Belarussian State Agricultural Academy*
- *Latvian State Agrarian Economy Institute*
- *Research Insistute of Agricultural Machinery*
- *Assotiation der Landwirtschaftsbetriebe Lettlands*
- *Rural Support Service*

The international conference programme committee has set high requirements for the quality of papers. Therefore each submitted paper was subjected to an independent, scientific, including international, review. To achieve the possibly un-biased, fundamental, independent, and detailed evaluation of each article according to *ten criteria, the reviewers were anonymous to the*

autoram paskaidrot savus ieteikums raksta kvalitātes uzlabošanai.

Ievērojot un izpildot recenzentu ieteikumus daudzu rakstu saturs un noformējums tika būtiski uzlabots.

Objektīvo recenzentu ieteikumu un stingro starptautisko prasību neizpildes dēļ vairāki referāti (raksti) netika iekļauti šajā starptautiskajā zinātniskajā izdevumā „Ekonomikas zinātne – lauku attīstībai".

Starptautiskā redkolēģija publicēšanai pavisam pieņēma 83 autoru 65 rakstus.

Visi raksti sakārtoti divos laidienos: laidienā Nr. 10 ievietoti raksti – pētījumu rezultāti par agrāro un reģionālo ekonomiku, bet laidienā Nr.11 – finansēšanai un diversifikācijai veltīto pētījumu rezultāti.

Kopumā par šo zinātnisko rakstu starptautiskā izdevuma abiem laidieniem var teikt, ka tie atbilst augstākajiem standartiem:

- programmas komitejā ir 6 valstu augstskolu pārstāvji;
- visi izdevumā ievietojamie referātu pilnie teksti gatavoti atbilstoši vispārpieņemtiem zinātnisko rakstu sagatavošanas noteikumiem;
- izdevumā ievietojamie raksti starptautiski anonīmi recenzēti, t.i., autori recenzentus nezina;
- 55 recenzenti no sešu valstu astoņpadsmit augstskolām un zinātniskiem institūtiem veikuši 127 recenzijas;
- izdevumam ir starptautiska redkolēģija, kurā darbojās konferences dalībvalstu augstskolu zinātnieki;
- izdevums ir regulārs un laidieni tiek numurēti: - šogad tiek izdoti 10. un 11. laidieni;
- izdevumā dominē angļu valodā gatavoti raksti, bet citās valodās iesniegtiem rakstiem angļu valodā ir dublēti kopsavilkumi, virsraksti un tabulu vai attēlu teksti;
- šogad izdevums ir arī elektroniskā formā, ievietots konferences mājas lapā un izmantojams visā pasaulē.

Ceram, ka šie abi zinātniskie izdevumi noderēs arī praktiskajiem lauksaimniekiem, konsultatīvo dienestu darbam, studiju procesā, pētniecības tālākā darbā.

Starptautiskā redkolēģija

authors of the articles (papers), with the exception of rare and individual cases when the reviewer wanted to explain his/her proposals to the author of the paper to improve its quality.

The observance and fulfilment of the recommendations of the reviewers allowed to improve significantly the content and design of many articles.

Due to un-biased recommendations of the reviewers and non-fulfilment of the high international requirements several papers (articles) were not included into the proceedings of the international scientific conference "Economic Science for Rural Development".

Totally the international Editorial Board accepted for the publication 64 papers by 80 authors.

All the papers are arranged in two volumes: Volume 10 comprises the papers – the research results on agrarian and regional economy, and Volume 11 includes the research results on financial and diversification aspects.

In general the two Volumes of the Proceedings comply with the highest standards:

- *the Programme Committee comprises the representatives of higher education institutions from 6 countries;*
- *all the proceedings to be published in the edition are prepared in compliance with generally accepted requirements set for scientific papers;*
- *the papers to be published in the edition are internationally and anonymously reviewed, i.e., the authors do not known the names of the reviewers;*
- *55 reviewers from 18 higher education and scientific institutions of six countries have written 127 reviews;*
- *the edition has an international Editorial Board consisting of the scientists from the universities of the conference member states;*
- *the edition is regular and the volumes are numbered: Volumes 10 and 11 are published this year;*
- *the papers written in English prevail in the edition, while the papers submitted in other languages give the English version for the summaries, titles and texts for tables and/or figures;*
- *this year the edition is available also electronically on the conference web site, thus it can be used worldwide.*

We hope that the two scientific editions are useful also for farmers, consulting services, studies and research.

International Editorial Board

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FINANCE AND CREDIT

Experience and Provisional Impact of Direct Support Payments in Latvia

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Abstract

The article represents results of research on state support payments and EU direct payments interaction and synergy in the years 2003 and 2004, as a result of which amount of financial support significantly changes and its impact on the regions in Latvia may also change.

Article shows calculations and results of analysis at the level of territories of nine regions of the Rural Support Service between the level of utilized agriculture area and amount of agricultural products produced by farmers, and received amount of financial support, in comparison to the total state and EU direct payments available in Latvia after accession to the EU.

More detailed analysis has been made to assess general situation in Latvia, as the amount of support dynamically increases and in 2005 it exceeds the amount received in 2003 by 4,3 times and that in 2000 many times. It has been found that after accession to the EU, support amount for each ha of utilized agriculture area in regions of Latvia is equalizing, but it increases in the regions with low intensity of agricultural production.

Key words: State support, EU direct payments, Single Area Payment, Complementary National Direct Payments.

Introduction

After accession to the EU, for Latvia as well as for other new Member States, the types of support, conditions, as well as support priorities and amounts paid out in subsidies in agricultural sector significantly changes [8]. The term 'EU direct support' comprises different types of payments, such as single area payment (SAP), complementary national direct payments for agricultural crops, livestock, milk quota, seeds, support for potato starch growers, producer organizations etc.[3,4,5]

Increasingly significant share in the farmers' incomes is coming from support measures of the Rural Development Plan, such as support for less favorable areas and other agro environmental measures, support for semi-subsistence farms, support for meeting EU standards, etc.

Until accession to the EU, in Latvia as it is known, only national state support was available which was foreseen by Agriculture and rural development law at the level of 2.5% from the state basic budget expenditure and EU pre-accession support for agriculture and rural development (SAPARD). After accession to the EU the types and sources of financial support for agriculture have expanded and opened up not only different direct payments, but also RDP measures and support from two structural funds, as well as, specific state support measures.

In total these measures increased available funding by 4,3 times. This fast and radical change in the opportunities of farmers and rural areas requires specific research on the effectiveness of the support.

Those considerations also determined the main aim of the article - to analyze whether and how EU direct payments have changed amount of support and its impact on agriculture development within regions of Latvia.

Within the scope of this aim, the following tasks are solved:

- to compare the levels of direct support measures one year before accession with the first year after accession to the EU;
- to analyze and evaluate support levels in regions of Latvia in connection with utilized agriculture area and the amount of produced goods.

At the outset of this research, authors have developed main hypothesis: accession to the EU provides a variety of possibilities for farmers to receive support, but due to financial support of direct payments the intensity of received support and as a result the impact of the support at the level of regions is changing.

Materials and methods

This research has been carried out on the basis of legal texts of the Republic of Latvia, data from the Central Statistical Bureau and EUROSTAT, Rural Support Service data, as well as the annual reports on agriculture issued by the Ministry of Agriculture and research materials about support programs and impact of direct payments on the agricultural products market [6,16,17]. Although direct area payments are very significant part of decoupled support framework of the Common Agricultural Policy of the EU, especially so in Latvia, their impact on production and market is not fully clear as the available data is scarce and with short history [6, 16].

Following methods have been applied to carry out this research: overall method of analysis, data grouping, dynamic time line analysis, descriptive statistics and logical constructive methods, the calculation of the correlation indicators, as well as experts' evaluations and opinions.

In order to perform the research, the following assumptions were adopted:

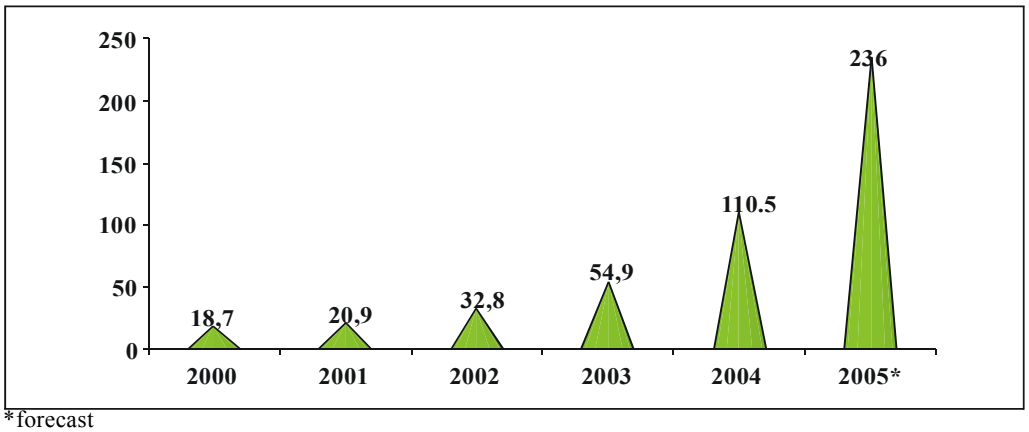
- the term 'EU direct support payments' encompasses all European Agricultural Guidance and Guarantee Fund (EAGGF) guarantee financed measures in 2004 [3,4,5];
- SAPARD and structural funds financed activities are not taken into account because their main objective is to promote structural changes in agriculture, fisheries, forestry and rural development mainly through investments;
- in using Rural Support Service operational information all data has been grouped at the level of nine regional agriculture departments of the RSS:
  - Austrumlatgale regional agricultural department (RAD) – Rēzekne and Ludza districts;
  - Dienvidlatgale RAD – Daugavpils, Krāslava and Jēkabpils districts;
  - Viduslatvija RAD – Preiļi and Madona districts;
  - Ziemeļaustrumi RAD – Gulbene, Balvi and Alūksne districts;
  - Ziemeļvidzeme RAD – Valka, Valmiera, Cēsis and Limbaži districts;
  - Lielrīga RAD – Aizkraukle, Ogre and Rīga districts;
  - Zemgale RAD – Bauska, Dobele and Jelgava districts;
  - Ziemeļkurzeme RAD – Talsi, Tukums and Ventspils districts;
  - Dienvidkurzeme RAD – Liepāja, Kuldīga and Saldus districts;
- by using the data for 2003 of the Central Statistical Bureau of Latvia, produced goods has been expressed in the money value – in the case of grain according to established intervention price on 1st November 2005, for dairy and meat products according to Market & Price Review for October 2005 [1,11,14];
- RSS data on state and EU direct payments in the regions are used; nevertheless no data for year 2005 are taken into account, due to the fact that in the 9 months of 2005 only 44% of the year's estimated payments have been executed [15].

Results

1. Aggregated support indicators and areas

State financial support policy for agriculture development in Latvia was started in 1994 with the allocation of national subsidies. Initially support was insignificant and fragmentary, but with the adoption of Agricultural law in 1996 a specific system was established and foreseen, that support amount can not be less than 3% from the annual basic budget expenditure [9]. Later in 2004 Article 5 point 3 of the adopted Agriculture and Rural Development law established that state support in subsidies can not be less than 2,5% from annual basic budged expenditure [10]. Since 2002 in addition to state subsidies, farmers in Latvia are receiving payments from projects carried out within the SAPARD program, but from the year 2004 different types of EU support are made available. The dynamics of total support amount from the year 2000 is presented in figure 1.

In total in the period from 2000 until the accession to the EU, the available support for farmers in



*forecast

Source: *RSS operational information [15]*

Fig. 1 **Total amount of support for agriculture and rural development in the period 2000 – 2006, in mill. LVL**

Table 1

Proportion of Latvia's regions of the total UAA, value of the agricultural produce and amount of support

Region	Share (%)			
	UAA	Value of products in 2004	Support payments in 2003	Support payments in 2004
Austrumlatgale	8,2	5,8	4,7	7,7
Dienvidkurzeme	13,9	15,3	14,4	12,3
Dienvidlatgale	13,1	11,2	10,4	14,4
Lielrīga	9,5	12,1	12,2	8,7
Viduslatvija	9	7,4	7,7	9,4
Zemgale	13,8	20,3	17,7	15
Ziemeļaustrumi	8,7	5,8	5,5	7,6
Ziemeļkurzeme	9,8	8,9	10,4	10,7
Ziemeļvidzeme	14	13,2	17	14,2
Total	100	100	100	100

Source: *Authors' calculations from CSB and RSS data [1,11,14,15]*

Latvia has tripled and it has reached 54,9 mill LVL, where 20,8 mill LVL was SAPARD financing. The turning point was 2004, when total support amount doubled in comparison to 2003, due to the available EU direct payments, Rural Development Plan payments and structural funds. From calculations it can be seen that in 2005 these payments could once more double and reach 236 mill LVL or be 4,3 times more the respective amount in 2003. This amount is composed by following:

- final payments to farmers for area applications of 2004 season (rules foresee to carry out payments for applications of the corresponding year from December 1st until April 30th next year);
- advance payments for area applications of 2005 season – 100% rate for single area payments (SAP), 80% - for Complementary National Direct Payments, 100% for RDP Agro environmental measures;
- payments under RDP measures for the year 2005 – support for semi subsistence farms, support for meeting EU standards, etc;
- first payments under common market organization measures – support for producer groups, beekeeping national program etc;
- payments for market support measures.

2. Regional structure and proportionality of national and EU support payments

In order to evaluate the distribution of received financial support by regions, authors have chosen four indicators – utilized agriculture area, value of produced production and amount of received total support in 2003 and, in order to estimate the differences also in the year 2004.

All these calculations are summarized in Table 1.

From the results of these calculations following conclusions can be drown:

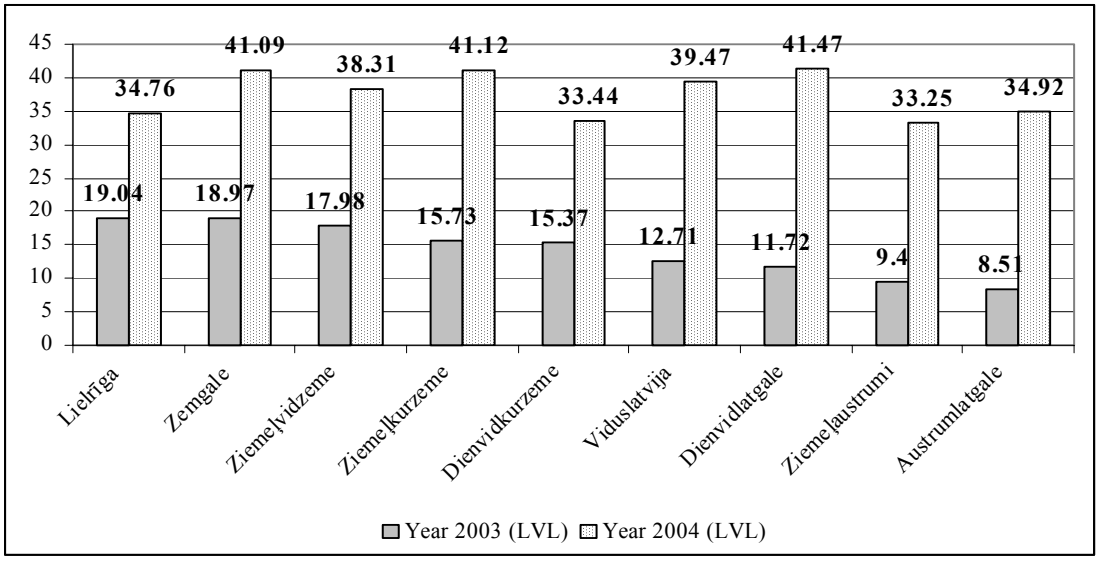
- intensity of land utilization in regions is very different;
- share of production value in Zemgale is 1,5 times bigger than share of used land;
- share of production value substantially exceeds share of used land also in Dienvidkurzeme and Lielriga regions;
- in total 37% of land is used in these three regions, but they produce almost a half (48%) of all agriculture production in Latvia;
- specifically ineffective land use cane be observed in Ziemeļaustrumi and Austrumlatgale regions;
- the greatest share of support payments in 2004 in comparison with the products value, were received by farmers in Ziemeļkurzeme and Ziemeļvidzeme regions;
- low value of produced goods directly correlates with low share of support in Austrumlatgale, Viduslatvija and Ziemeļaustrumi regions;
- the regional distribution of support has changed substantially in line with significant increase in the total amount of support in 2004:
  - support for Zemgale region is significantly less than its value of produced goods;
  - notably lower support can be seen also for Dienvidkurzeme and Lielrīga regions;
  - share of support in Dienvidlatgale, Ziemeļkurzeme and Viduslatvija regions is not only significantly higher than the share of produced goods value, but also share of utilized land area.
- in total support for agricultural production in less intensive regions exceeds the value of produced goods;
- by analyzing trends it can be concluded that allocated share of support for agricultural production decreases, but increases the amount of support for farmers, who produce little or even less of agricultural production.

In total the amount of support received in regions in 2003 was 27,2 mill LVL and in 2004 was 69,3 mill LVL, which is respectively 50% and 60% of the total support paid out in the country.

The absolute amount of support paid out per 1 ha of UAA is given in Figure 2.

This figure shows certain trends in 2003 and sharp changes in 2004. Analyzing trends of 2003 it can be concluded that:

- the greatest amount of support has been received by main commercial agricultural districts and regions – Zemgale, which gives largest share in crop production and Ziemeļvidzeme, where modern diary production develops;
- Ziemeļaustrumi and Austrumlatgale regions with little number of farms but with absolute dominance of natural and semi subsistence farms have received twice less of support;



Source: *authors' construction and calculations from RSS and CSB data [1,11,14,15]*

Fig. 2 **Amount of support per 1 ha of UAA in regions in 2003 and 2004 (LVL)**

- the aggregated amount of support per 1 ha is 14,82 LVL/ha, and it has fluctuated from 8,51 LVL/ha in Austrumlatgale up to 19,04 LVL/ha in Lielrīga, so the difference is almost 125%.

After accession to the EU, amount of support has increased on average by 2,5 times, reaching 37,76 LVL/ha and has substantially reduced the differences between highest and lowest rate of support:

- the difference between the highest and the lowest rate of received support has decreased to 25%;
- the largest amount has been received by farms in Dienvidlatgale, where support amount has risen 3,5 times;
- the smallest increase in support has been seen by agricultural enterprises and farms in Lielrîga, Zemgale and Ziemeļvidzeme regions;
- after accession to the EU the levelling of average rates of support between the regions of Latvia has taken place;
- the greatest rise in support rate per 1 ha has been seen in Austrumlatgale – 4,1 times.

Further we have performed analysis using the grouping method of agricultural holdings, as a parameter using the area of agricultural land claimed for support.

From Table 2 it can be observed that almost one third of all support (~30,5%) was granted to natural or semi subsistence farms, where UAA is less than 20 ha. Small (50-99 ha) commercial farms have received on average 3700 LVL each, which enables them to continue development. Large scale (more than 100 ha) agricultural enterprises have received in total 40% from the total support amount, or 27,7 mill LVL. Well planned utilization of this money creates a real base to increase their competitiveness.

The total amount of support allocated for farms, which cultivate area up to 200 ha, and which account for 99 % from the total number of farms, accounts for ~70% of all EU direct support.

3. Effectiveness of support in regions of Latvia

In order to measure potential and actual effectiveness of the support, we have chosen to use the correlation indicator between used support and obtained production (Figure 3). As can be seen, the situation is completely opposite to previously described correlation with UAA. Differences between support intensity per each production LVL among the regions in 2003 were insignificant – in Zemgale, where farmers produced the most value of production from each ha, amounting 206 LVL from each ha, support amount has been the same as in Austrumlatgale – 9 santimes per each 1 agriculture production LVL, but there the value of produced agricultural goods was only 98 LVL/ha. In Lielriga, where they produce goods in the value of 180 LVL per 1 ha, farmers in 2003 received support of 10 santimes for each LVL of

Table 2

Structure of beneficiaries according to declared UAA and amount of direct payment support received in 2004 in Latvia

Submitted for support area groups (ha)	Support recipients within the group	Share from total number of support recipients	Received support in respective group (LVL)	Share from total amount of support (%)
0,3 – 9,99	40 320	60,29	10 456 494	15,31
10,0 – 19,99	14 891	22,27	10 318 292	15,11
20,0 – 29,99	4 699	7,03	5 801 913	8,50
30,0 – 39,99	2 014	3,01	3 548 755	5,20
40,0 – 49,99	1 191	1,78	2 748 948	4,03
50,0 – 99,99	2 095	3,13	7 747 865	11,35
100,0 – 199,99	948	1,42	7 191 644	10,53
200,0 – 499,99	485	0,73	8 496 621	12,44
500,0 and more	229	0,34	11 976 935	17,53
Total	**66 872**	**100,00**	**68 287 468**	**100,00**

Source: *Authors' calculations from RSS data [15]*

produced goods that is the same amount which was received by farmers in Viduslatvija, where the value of produced goods was only 117 LVL per 1 ha. Likewise, support amount in Dienvidkurzeme was 10 santimes, which was the same as for farmers in Ziemeïaustrumi and Dienvidlatgale, but the value of produced goods were respectively 1,7 and 1,3 times more.

Situation changes substantially in 2004, because the largest amount of support was received by regions, with the lowest level of produced goods from ha. In Viduslatvija, Dienvidlatgale, Ziemeïaustrumi and Austrumlatgale support was 0,34 – 0,36 LVL for each sold production LVL. In the highly intensive agricultural production regions – Zemgale, Lielriga and Dienvidkurzeme the amount of support was only 0, 19 – 0, 22 LVL, or almost 2 times less.

4. Discussion

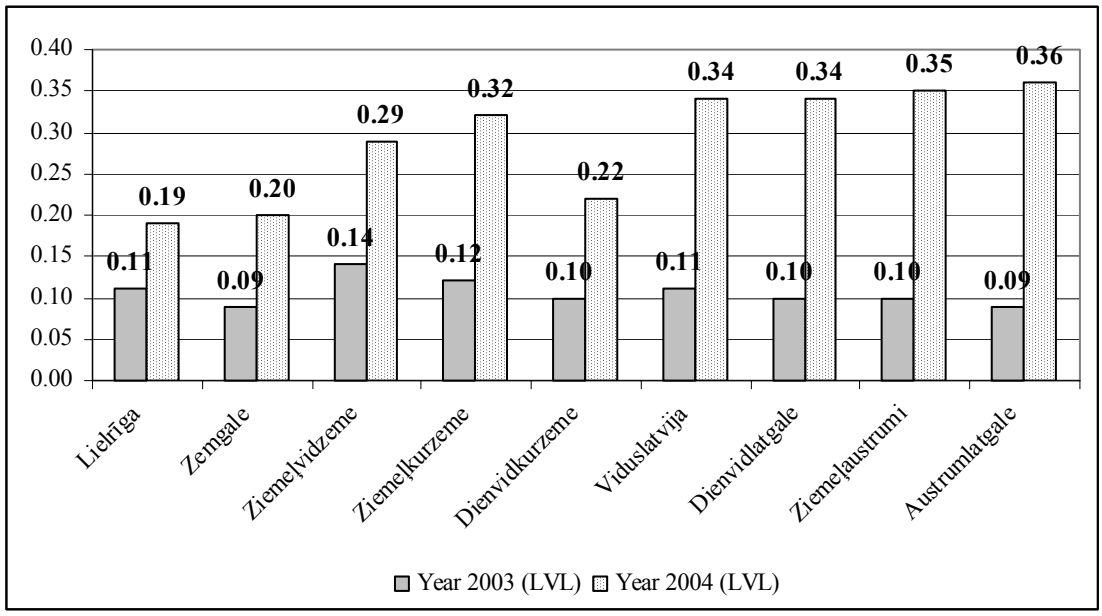
Taking into account the calculations and data analysis presented in Figure 3, it is difficult to agree with authors Daina Saktiņa and William H.Meyers conclusion presented in the research paper „EU co-financed and national rural support programs in Latvia: in preparation for new programming period" that „in total it can be concluded that in the state created rural and agriculture support policy, up to now the larger winners were farmers living and working in state's central part and its bordering regions. As the policy uses very little differentiation of support rates and measures and, in general, the requirements to apply for support are similar for competitive enterprises and for the less successful companies, the amount of limited available support first of all, reaches more active and competitive entrepreneurs, who possibly, could develop their farm also without the help of support" [7].

Therefore in the situation when:

1. agriculture is only sector, where the amount of GDP decreased in 2003 [12];
2. productivity of employees in agriculture is very low [12,13];
3. calculating the added value for one employed person in agriculture, this was less than 10% of the average of EU Member States [13],

it is very important to balance out different support options – both national programs and state support, and EU payments, in order to effectively integrate needs and opportunities of agricultural production and rural development.

The new EU financial perspective for the period from 2007 to 2013 is approaching. The United Kingdom during its presidency in the beginning of November 2005 tried to resume negotiations



Source: *authors' construction and calculations from RSS and CSB data [1, 11, 14, 15]*

Fig. 3 **Amount of disbursed support in LVL per 1 LVL of manufactured agricultural produce in 2003 and 2004**

about the EU budged, but Member States still have different positions on the principles, which should be considered in order to agree the budget for the 2007 – 2013 period [2]. Besides, the delays in the budget approval might influence the implementation of support measures in the next period, because EU has agreed to reform the so called 2nd pillar or support for rural development of the Common Agricultural Policy (CAP). Besides, new Member States not later than by the year 2009, have to implement the reform of direct payments which was adopted in 2003, and which is implemented by old Member States already in 2005 and 2006. In these conditions it is important to balance out different types of support and to target them for the development of agriculture as sector, as well as for the comprehensive development of integrated rural economics and environment. Policy makers and also farmers should also consider first experience of EU direct payments, which comprise significant proportion of farmers' income.

Conclusions

1. Total amount of support within last two years have significantly increased, however further increase will be slow and gradual, which will mainly depend from the budget priorities of the new financial perspective;
2. Amount of State support per 1 ha of UAA before accession to the EU substantially differed among regions – on average 2 times more of support was received by regions, with more intensive production of agriculture goods;
3. Amount of State support in the regions, calculating on the basis of produced agriculture goods before accession to the EU, was more equalized and differed on average by 20 – 25%;
4. Implementation of EAGGF support measures in Latvia reduces the differences among regions when estimating support amount for each ha of UAA, therefore current support level is not directly linked with the value and amount of produced goods;
5. After accession to the EU support intensity substantially increases in the regions, where farmers produce small amount of agriculture products, therefore support payments by in substance do not promote further development of agriculture sector, but could create directly opposite effect;
6. During the preparation of Rural Development Plan for the next programming period and selection of support measures, it would be necessary to evaluate also the experience of direct payments, in order to match the possibilities of further development of agricultural sector competitiveness and maintenance of rural environment and landscape.

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Проблемы стандартизации бухгалтерского учета и возможные их решения
The Problems of Accounting Standardization and Possibilities for their Solution

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Abstract

The observance of international and national standards of accounting is necessary for keeping accounting and making financial and tax accountability. The implementation of the standards cause a lot of problems, the relevance of which is influenced by non-existence of adequacy between accounting methodology and methods.

In order to harmonize methodological regulations of accounting (laws, principles of accounting, accounting theory and formation of accountability) firstly it is necessary to set accounting methods. The information necessary for making accountability should be gathered in compliance with the systematised accounting methods.

Prior to setting accounting methods it is necessary to consider that the formation of financial and tax accountability is regulated by different laws. It complicates theoretical and practical solution, since each economic subject has only one general accounting, based on general chart of accounts and the same documents. However, accountability differs both in form and economic rates, and application of different laws.

The aim of the article is to evaluate the possibilities for harmonization of accounting methodology and accounting methods under the standardization of accounting system.

***Key words**:* accounting, standardization, methods, methodology.

Введение
Introduction

С внедрением международных стандартов учета (МСУ) и переходом на национальные стандарты учета (НСУ) возникают проблемы стандартизации всей системы бухгалтерского учета. Актуальность исследуемой проблемы состоит в поиске методов согласованности между методологическими требованиями и методикой их осуществления, так как в стандартах устанавливаются отражения в учете расходов и доходов и определения финансовых результатов, состав финансовой отчетности и их показатели и т.д., а основной методический документ – план счетов бухгалтерского учета разрешается подготовить и утвердить руководителям самых предприятий.

Авторами данной статьи установленно, что стандартизация основных учетных положений и форм финансовой отчетности а также их показателей не может создать единого понятия о показателях отчетной информации, если различается методика их учета.

Кроме того исследования организации бухгалтерского учета показывают, что полную стандартизацию можно создать при необходимой сочетании методологии и методики учета. Это означает, что методологической основой являются МСУ или НСУ и нормативные акты, а методической основой – план счетов бухгалтерского учета, а также регламентированая корреспонденция счетов всех хозяйственных операций и их отражение в учетных регистрах.

Кроме того в положениях МСУ и НСУ разрешается и рекомендуется руководителям предприятий на основании МСУ создать еще один нестандартный документ.

Из выше сказаного видно, что отчетные показатели могли быть более тождественными по методическому определению и сравнивыми между фирмами внутри страны и в более

широком пространстве, если не только принципы но и методика учета была стандартизирована.

Основная сложность при стандартизации учета возникает в том, что существует разная отчетность (финансовая, налоговая, статистическая а также так называемый управленческий учет) в каторой расходится принципы и признания в учете расходов, оценка имущества и запасов и т.д.

Анализ основных методических элементов учета – плана счетов бухгалтерского учета, документов и учетных регистров, регистрирующих хозяйственные операции, а также анализ учетных показктелей финансавой, налоговой и статистической отчетности (управленческая отчетность отсутствует) показывает, что во всех предприятиях существуют одинаковые объекты учета, единая система бухгалтерского учета, применяется единый план счетов бухгалтерского учета, хозяйственные операции регистрируются в единых документах и возникает только один, но очень сложный вопрос, как методически подготовить систему учета.

Вопрос методики учета осложняется в том, что различается методология учета:

- в финансовой отчетности финансовые показатели и результаты надо показать придерживаясь положений МСУ или НСУ и других нормативных актов,
- в налоговой отчетности (и в декларации по налогам) на основании закона о налогах от прибыли выделяются штрафы, пени, неустойки, недостачи и т.д., которые незачитываются в затраты, а также существуют даходы, каторые не облагаются налогами и т.д.;
- для составления статистической отчетности тоже необходимо в системном порядке (т.е. в регистрах учета) регулярно накапливать информацию, что бы не пришлось выбирать этих данных из первычных документов.

Кроме того суть накапливания всесторонней информации по составлению всех видов отчетности зависит от заранее подготовленной методики:

1) от точного определения объектов учета. Ведь с начала года каждое предприятие должно установить калькуляционные объекты, по каторым уже в первычных документах, регистрирующих хозяйственные операции, эти объекты должны указываться;

2) от составления списка прямых и косвенных затрат, которых должен знать любой работник предприятия, оформляющий хозяйственных операций бухгалтерскими документами, в них должен и указывать.;

3) от составления списка расходов, которых, по закону о начислении налога от прибыли, не разрешается минусовать из доходов при определении прибыли, облагаемого налогами;

4) от составления списка доходов, которые по закону о начислении налога от прибыли, налогами не облагаются;

5) от подготовки учетных показателей для накопления информации по так называемому управленческому учету. Ведь не смотря на множественные суждения об управленческом учете, как самастоятельном объекте, такой самастоятельный учет не существует (нету отдельных документов и нет отдельного плана счетов). По этому всю информацию по управленческому учету необходимо накапливать в расширенном аналитическом учете, т.е. в этих самых учетных регистрах, только при ввдении дополнительных показателей. Это надо определить тоже с начала года, что бы при составлении первичных документов и их регистрации в учетных регистрах, эти показатели можно было бы выделить.

Система учета осложняется и тем, что не смотря на то, что в целях международной интеграции, в финансовых, торговых, производственных сферах разрабатываются единые стандарты оценки хозяйственных явлений, которые на основе стандартизации учета, позволяют произвести сравнительный анализ этих явлений, но в этих стандартах существуют лишь принципы и абстрактные определения.

Цель работы - установить возможность согласованности методологических требований для накопления информации по составлению всех видов отчетности с методикой их осуществления в связи с стандартизацией всей системы бухгалтерского учета.

Одинаковые объекты учета – основа стандартизации

Homogeneity of accounting - the basis for standardization

Основные вопросы при стандартизации учета (сущность самых стандартов учета здесь не исследуется) возникают в том, что положения и принципы оценки имущества и запасов, признания в учете расходов и доходов, модели определения финансовых результатов или состав показателей финансовой отчетности стандартами строго регламентировано, но применение составных частей методики (планы счетов бухгалтерского учета, методика учета производственных затрат и калькулирования себестоимости продукции и ряд других важных методических вопросов по сочетании их со существующей методологией) оставлены на усмотрение и утверждение самим предприятиям.

Наши исследования вопросов методики организации учета показывают (Genienл M. ir kt., 2004), что при изучении системы учета и его регламентирования почти во всех странах, а одновременно и во всех предприятиях (это уже результат стандартизации) встречаются:

1) одинаковые объекты учета т.е. денежные средства, имущество (всех видов), производственный процесс и переработка, процесс снабжения, процесс реализации, строительство и ремонт, учет труда (оплата труда), услуги, управленческие операции, операции учета доходов, операции расчетов, финансовые и инвестиционные операции, капитал, резервы, финансовые результаты;

2) состав финансовой отчетности и их показатели также почти одинаковы (согласованы с существующими стандартами);

3) в каждой стране отличаются налоговые законы, налоговая отчетность, правовые решения и методика расчета налогов.

Обзор показателей финансовой отчетности во Франции, Германии, Японии, в центральной и восточной Европе показали, что существует почти одинокая классификация объектов учета, статьей баланса и даже основные принципы учета. Различия этих показателей в отдельных странах проявляются в том, что они обычно изложенны по другому порядку. Но тат как эти показатели являются носителями информации, информация будет аналогична.

Учетные формы и показатели управленческого учета, каторых не регламентируют МСУ и НСУ разрешено определить по нужде и усмотрению самых предприятий. Для методики управленческого учета в экономической литературе и периодической печати постояно ведутся дискусии о том, требует ли этот учет самостоятельного учета или показателей, определяющих уровень его эфективности, а также можно ли извлечь этих показателей из информационных данных системного учета.

Профессор И. Мацкевичюс (Mackevičius J., 2003) исследуя систему управленческого учета, приводит множество мнений разных автаров из многих стран. Некоторые из них указывают, что нужно вести отдельный извлеченный учет на отдельных счетах, а другие утверждают, что такой самостаятельный учет искажал бы единую систему учета. Из этого видно, что нет единного мнения, так как нет и самостаятельного управленческого учета и отчетности. Специфически управленческий учет может отличаться в том, что более подробно или обобщенно можно классифицировать затраты, устанавливать нормативы, более и регулярно контролировать производство, реализацию и т.д. На это большое внимание уделяет Колин Друри (Друри и др., 1994), предлагая многообразную классификацию. Американские исследователи Нидлз Б., Андерсон Х., Когдуэлл (Нидлз Б. И др., 1994) констатируют, что существуют общие методы учета затрат и методы калькулирования себестоимости, которые обосновываются на двух концепциях: заказным и фазовым методами учета себестоимости.

По нашему мнению такие методы неозначает отдельного и самастоятельного управленческого учета. Это отражается в том самом системном бухгалтерском учете предприятия, где более детализирован аналитический учет, направлен на анализ и контроль хозяйственной деятельности, чего не требует финансовый учет.

Международные стандарты учета (МСУ) а также и НСУ предназначены для определения финансовых результатов и

составления финансовой отчетности. Хотя в их положениях регламентируется необходимость и значимость переоценки имущества, продукции и запасов по ценам возможной реализации, что в отдельных стандартах устанавливается порядок учета расходов и доходов, составление финансовой отчетности и т.д., но как методически это сделать и как увязать с налоговой или статистической отчетностью не указывается.

Научное исследование практического применения МСУ или НСУ осложняется и тем, что МСУ или НСУ являются юридической основой для составления финансовой отчетности и даже нет возможности полемизировать с какими бы либо авторами, анализировать и предложить их мнение, если она не совпадает с регламентом этих стандартов и других юридических актов. С другой стороны мало есть и таких авторов, которые посмели бы противостоять юридическим догмам. Однако и в этой статье почти нет возможности изложить мнение других авторов:

- во-первых потому, что МСУ или НСУ только что стали применятся и нет научных исследований;
- во-вторых, что о методике учета почти во всей экономической литературе отсуствует такая тематика.

В этой статье проблема методики стандартизации учета поднимается по тому, что авторы по своей практической, педагогической и научной работе убедились в том, что в системе бухгалтерского учета и отчетности на одном субъекте не может существовать отдельный и самостоятельный: финансовый учет, налоговой учет, управленческий учет, статистичеслнй учет, оперативный учет и т.д.

Кроме того самастоятельный учет обезательно должен иметь:

а) отдельный план счетов бухгалтерского учета;

б) отдельные бухгалтерские документы;

в) отдельные регистры для регистрации этих хозяйственных операций. Однако на любом самастоятельном юридическом субъекте существует только один план счетов, а также единые документы и регистры.

На основании выше изложеного можно констатировать, что для любого вида хозяйственного субъекта, независимо от его юридического статуса и вида собственности, существует система единого бухгалтерского учета, из информационных данных которого надо составлять отдельные виды отчетности. Но эта работа осложняется тем, что каждый вид отчетности есть наделен отдельными юридическими требованиями, которые и создают впечетление, что существует не только отдельная отчетность, но и отдельный самастоятельный учет.

Управленческий учет – проблемы и суждения

Managerial accounting - problems and solutions

В настоящее время имеется множество научных работ и монографий, доказывающих необходимость ведения отдельного управленческого учета, даже возвышая его до такой степени, что вести его рекомендуется только специалистами учета самой высокой квалификации.

Разумеется, управленческий учет, если есть поставлена цель определить, как работает каждое хозяйственное звено, сколько стоит каждый вид продукции не только в целом по предприятии но и по отдельным подразделениям и какие причины влияют на их результаты, разработка методики учета этих явлений довольно сложна. Однако управленческий учет не разрывно связан со всей системой хозяйственной деятельности и никак не может отрываться от общей системы учета. На основании этого можно констатировать, что:

1) ведения управленческого учета не является самостоятельной системой учета,

2) что управленческий учет – это системный отбор и учет экономических показателей, существующих в общей системе учета юридического субъекта, каторых можно определить при специальной разработке и размещении в аналитических счетах системного учета. Разумеется, что можно разработать такую методику, что каждое подразделение составляя точный отчет по затратам и выходу продукции или другого вида отчетность в подобии баланса и отчета по результатам, но это не будет какой то отдельный самастоятельный учет. Этот отчет будет составлен руководствуясь общим планом

бухгалтерских счетов, а хозяйственные операции будут оформленны общими документами и т.д.

При такой организации управленческого учета внутри предприятия, хозяйственые операции в целом по предприятию не будут дублироватся, а данные составленного выше указанного подразделенческого отчета будут сводится и обобщаться в общем балансе и в другой общей отчетности.

Такая методика ведения управленческого учета по подразделениям или по точкам ответственности ведет к децентрализации. Хотя при сегоднящнем оснащении компютерской техникой такой децентрализованный учет можно вести в любом месте.

Методика ведения управленческого учета во внутри предприятия по точкам ответственности или подразделениям разрабатывается очень давно. К. Валужис, предлагая методику управленческого учета по подразделениям или точками ответственности, не только показал, как определить результаты, но на основе точных учетных данных и глубокого анализа причин, влияющих на результаты, разработал систему материального поошрения работников этих подразделений (Valužis K., 1999; Valužis K., 2000; Valužis K., 2001; Valužis K., 2005). Однако и такой сложный учет не является самастоятельным, так как эти данные учитываются в аналитическом учете и включаются в общий баланс хозяйства.

3) тат как нет ни какой специальной и утвержденной отчетности по управленческому учету, каждое предприятие разрабатывает систему экономических показателей, которые извлекаются из общей системы бухгалтерского учета. А это и означает , что не существует и не может существовать самостоятельный вид упраленческого учета.

Единый план счетов – основа стандартизации бухгалтерского учета во всех странах

Chart of accounts - the basis for standardization of accounting in all the countries

Исследования показывают, что применения стандартов учета без отражения их установок в учетной системе они стали бы бумажными догмами. Но это отражение – признание доходов и расходов в учете, оценка имущества, определение финансовых результатов и т.д., не проводя их данных через учетную систему т.е., без проведения их через лабиринт бухгалтерских счетов был бы не возможен.

Если, образно говоря, стандарты учета можно приравнивать дорогам, по которым разъезжаются все хозяйственные операции, то план счетов бухгалтерского учета можно приравнивать дорожным знакам. И если знаки точно расставленны, а участники дорожного движения строго их соблюдают, никогда не может произойти дорожное произшествие.

Однако в юридрческих установках в любых стандартах учета не указывается, как одни или другие операции, не только формально, но и методически должны отражатся в системе учета через корреспонденции бухгалтерских счетов.

Трудно предвидеть, какую выгоду (экономическую, практическую и психологическую) дало бы стандартизированный план счетов бухгалтерского учета:

- стандартизированный план счетов стал бы азбукой или дорожными знаками, которых может понять бухгалтер любой страны; по указанным номерам бухгалтерских счетов можно было анализировать финансовую отчетность любого предприятия и любой страны;
- при компютеризации учетных операций, можно было разработать всеобщую программу, которую можно было применять по всюду. Это составило огромную экономию средств;
- при существующим единым планам счетов несколько раз облегчалась бы подготовка специалистов бухгалтерского учета. В Литовской Республике сейчас сущестиуют 7 отдельных примерных планов счетов. А каждое предприятие в своей политике учета утверждает свой план. Потому новым работникам учета, аудиторам или контролерам, перед началом работы, требуется много времени для ознакомления с системой учета.

Самое главное, что никак нельзя научно обосновать, что эти разные планы счетов по классификации и сущности, и даже по

названию есть почти одинаковые, так как объекты учета тоже одинаковы, только их номерация (цыфровое кодификация) частично отличается.

Вопросы стандартизации обсуждаются на научных конференциях и в экономической печати. Богатырева У.И. добывается и научно доказывает, что планы счетов были приспособлены для учета в любых предприятиях (Богатырева У., 2003).

Единный план счетов во всех предпринимательных компаниях Франции уже применяется с 1947 года (Козельцева Е., 2003).

Соколов Я. В. высказывается о том, что планы счетов содержали бы как можно больше информации. В этом вопросе он затрагивает структуру и классификацию планов счетов в Англии, США, Германии, Франции и в других странах Европы, в которых мнения различаются (Соколов Я., 1996).

В экономической литературе, видимо среди ученных теоретиков существуют суждения, что планы счетов могут различаться для учета в разных производствах (Atrill P. и др., 1993). Однако такое мнение было выражено в 1993 году, когда еще не сушествовало всеобщее мнение о стандартизации учета.

Анализ планов счетов и сушности отдельного счета с целью эффективного его применения разрешает зделать следующие выводы:

- при описании сушности любого счета, должно указываться, какие объекты в нем учитываются, какие могут быть с ним корреспонденции, и как данные отражаются в балансе. Желательно, что указывалось, как ведется и аналитический учет, какую информацию можно в нем собрать для разных форм отчетности;
- во-вторых, когда план счетов строится на основе стандартов бухгалтерского учета, то при описании сушности счета, желательно, что бы указывалось для каких операций, выраженных в стандартах, этот счет предназначен.

Исследуя содержание стандартов, например, по учету запасов, можно заметить, что при оценке приобретаемых запасов, в их стоимость рекомендуется включить не только покупную стоимость, но и расходы по их доставке, складированию, подготовке для пользования, уплату налогов и сборов и т.д. Здесь возникает методическая сторона учета. Ведь запасы в учете учитываются по количеству, качеству, сорту и стоимости, а также по месту хранения и ответственному лицу. Но так, как аналитический учет запасов не предназначен для калькуляции, по этому собрать отдельные затраты из разных документов и разных корреспондирующих счетов искажает эту методику. В методике по учету имущества долголетного пользования в плане счетов сейчас появились новые счета по названию «Подготовка для пользования». В них собираются все дополнительные затраты. Когда предмет подготовлен к передачи эксплоатацию, в этом счете определяется его стоимость и он передается в эксплоатацию на имущественный счет. Но для учета запасов таких дополнительных счетов нет. По этому, если в стандарте намечаются новые суждения и указания, они одновременно должны быть отражены в системе учета, с указанием и их методики учета. И только при подобной методике, применяемой и для других счетов, можно стандартизировать систему учета.

Из выше сказаного возникает не только суждения, но и требования, что стандартизирование планов бухгалтерского учета по всей вероятности может облегчить и ускорить стандартизацию всей системы учета. Но для этого предстоит большая и очень ответственая работа для подготовки вей методики учетных процессов.

Однако наше практика и проведенные исследования показывают, что планы счетов и универсально подготовленный аналитический учет (учетные регистры), а также точная корреспонденция счетов при сочетании требований к составлению всех видов отчетности, может помочь легко осуществить и все требования стандартов и принципов учета.

Выводы
Conclusions

1. Стандартизация бухгалтерского учета в международном маштабе – это неоценимое достижение, влияющее на всю экономическую жизнь:

1) для получения на одинаковых принципах подготовленную экономическую информацию по всем отраслям производства, торговли, строительства, транспорта и финансам;

2) облегчала бы подготовку специалистов учета финансов и создала им возможность устроиться на работу в любой строне;

3) удешевила подготовку компютерских программ и облегчила их внедрение.

2. Для указанных целей одновременно необходимо подготовить и внедрить не только стандарты по учету, но подготовить и принять в систему учета единный план счетов бухгалтерского учета, а для эффективного применения этого плана, одновременно надо разработать положения о сушности каждого счета и учитываемых в нем объектах и возможные корреспонденции счетов. Кроме того, должно быть указано к какому стандарту он относится, какие показатели необходимо учесть в аналитическом учете (какие показатели должны быть отраженны в его регистре), которые должны служить как информационный источник для составления любой отчетности.

3. Исследования также показали, что практически самостоятельно не существует финансовый, налоговый и управленческий учет. Отдельные названия существуют только по обще принятой договоренности. Финансовый учет назван потому, что в стандартах есть утверждена финансовая отчетность. Налоговой учет тоже назван для обезательного составления декларации по налогам от прибыли.

4. В статье доказано, что отдельный и самостоятельный управленческий учет практически не возможен, так как он не имеет отдельно плана счетов и отдельных документов, которые определяет самостоятельность учета. Однако, на основании практической работы элементы управленческого учета можно реализовать на подразделениях, по точкам ответствености или накапливая информацию в аналитическом учете, то есть в регистрах учета. Отдельные подразделения могут вести полный учет и составлять нужную отчетность плодь до баланса. Но это все делается на основании тех самых документов, применяя нужные балансовые счета из общего плана счетов. Данные из составленного отчета сводится в общую систему предприятия. Такие же данные можно собирать в счетах аналитического учета в разрезе по подразделениям или точкам ответственности. Такая методика ведения управленческого учета привела бы к окончанию безконечных споров экономистов и бухгалтеров. Однако эти аналистические данные этой подразделенческой отчетности никогда не будут равны данным предприятия, так как многие хозяйственные операции делаются централизованно.

5. Стандартизировать учет в международном маштабе можно и необходимо и потому, что формы отчетности и их показатели почти полностью совпадают. Одновременно и объекты учета, которые отражаются в балансах и в планах счетов, тоже совпадают. Только существует одна неувязка, что в планах счетов цифрами кодифицирования счета в одном плане, не всегда означает тот самый счет в другом плане. По этому стандартизация планов счетов является не избежной.

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Common Agricultural Policy – finance aspects of integration of Poland with EU

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Abstract

The paper presents conditions and results of integration of Poland with the European Union for agriculture and rural areas. There will be described effects of structural changes in agriculture caused by the accession process and position of Polish agriculture on the background of EU with special consideration of direct payments realization, structural programs and market intervention after 01.05.2004. The paper will concentrate on estimation of expenses' structure in next 7-years long perspective (2007-2013) what was proposed by the European Commission.

Key words: integration, rural areas, financial sources, structural programs, direct payments.

Introduction

Homegrown country dimension of integration is not only a Common Agricultural Policy and direct subsidies, but first of all multilateral policies aimed at the mobilization of the social economy of whole rural areas. The motivating activities which are known by different names in the EU: regional policy, structural policy, cohesion, has gained, in the last few years, outright priority. Not only in the political declarations sphere but also by considerable financial reinforcement because means were doubled, the so called structural funds, which was found elementary instruments financing of policy of balanced development of rural areas.

For the new member states from central Europe who joined in 2004, programs were worked out and enacted, which aimed at preparing the agriculture of these countries for full integration and for the assumption of this sector by complete instrumentation of the CAP. During the pre-accession period, the agriculture and food processing industry was assumed special programs of the EU: PHARE or SAPARD. After entry into the EU in the years 2004-2006 special programs for the agriculture: a development of rural areas plan and sectoral operation program "the restructuring and modernization of the food sector and of rural areas development.

The scale of changes in agrarian policy, which is conducted in Poland, which occurred with the ascension to the EU is huge. CAP was introduced in Poland and is still a subject of hopes and fears among farmers and other people who have become interested in the country's agriculture. It aroused controversy in EU countries when accession negotiations were conducted and when it got close to the moment of expanding the Union. That is why legitimate is a question about direction, scale and scope of the opportunities for the effect of CAP on Polish agriculture and rural areas, to guarantee their development.

Current position of Polish agriculture against the background of EU

In respect of agrarian production levels, Poland is high on the list among EU countries. In milk production, Poland is fourth on the list among EU countries with a total of 12.6 million litres. In grain production for 2004, Poland is third with a total of 29 million tons. However, Poland is distinguished by considerably poorer grain crops compared with 15 countries of the EU. Crop amounts average 30 dt/ha (the last recorded year-35.5 dt/ha), whereas in the 15 EU countries, crop amounts averaged 70-80 dt/ha.

Realization of policy towards villages and agriculture is being done by the Agency for Restructuring and Modernization of Agriculture and Agricultural market, which has the status of a paying agency.

The Agricultural Market Agency functions as a paying agency for market operations (production quota ting, market intervention and the in-

strument of trade policy) required by law, full accreditation to all operations. In comparison, the Agency for Restructuring and Modernization of Agriculture also functions as a second paying agency and carries out direct subsidies and operations in the scope of a development plan for rural areas, accreditation takes place in stages. As a priority in implementation and accreditation accepted direct subsidies on account of the fact that available means are allocated for one year which in practice means that unused units of means for the prevalent year will stay in the EU budget (KUźmiuk Z., 2005).

According to the treaty of Accession, the level of payments in Poland amounts to 25%, 30% and 35% respectively in the years 2004, 2005, 2006 in comparison with the level of agriculture support, which took place in the EU on 30th April 2004. Subsidies in this amount are fully funded by the EU's means. The treaty of Accession predicts opportunities for raising the level of subsidies (supplementary surcharge) payments respectively to 55%,60% and 65% this level of payment has to be obeyed by Poland. Direct surcharges payments were carried out in the period from October 2004 until the end of April 2005. For the year 2004, surcharges for 1,386 farmers for the amount of 6 billion, 329 million zloty were realized.

Together with these subsidies, subsidies in virtue of farming areas with adverse conditions were paid (a so called support in virtue, ONW) for the amount 1 billion, 142 million zloty for 626 thousand farmers. These amounts should be supplemented with subsidies for starch potato planters (almost 36 million zloty) and payments for tobacco growers (over 145 million zloty).

The completion date for direct subsidies payments was unified and obliges all member states. For 2005, payments are redeemed in the period from 1st December to 30th June next year.

The Polish agriculture market was involved in structures of uniform EU market in a relatively steady way. All community instruments of interventions on the agricultural market, administered by the Agricultural Market Agency was enforced, in particular: quota ting of production (milk, tobacco, starch), an intervention purchase (mostly grain), instruments of trade policy (community, customs system and surcharges for export) and the other instrument stabilized market (for example, surcharges for store housing and dairy products consumption). The highest rise in prices to take note of on the agricultural market on which the only one or dominant form of aid in the EU is price support (sugar, beef, milk).

In the first year of community, notice was taken of a record high harvest of grain and soft fruits, which created a drop in price for those products. But considerably deeper seated was the drop in prices of soft fruits.

The experiences of the first year show among other things that a durable solution to the problem of an upturn in the functioning Polish grain market as part of a joint agrarian policy will be dependant on the possibilities of developing structural grain surplus through the export of grain to third world countries, mainly in North Africa and the Near East. This export can take place by applying the export's refund from the open market or by selling grain at reduced prices from intervention reserves.

The meat market was a positive development. In the first year of community, it should be admitted that the situation of the Polish pork sector is favorable. The purchasing prices in the period from May 2004 to the end of March 2005 was on a higher level than the year before. The drop in prices in April 2005 was connected with a relatively low domestic demand, an increased supply of imported meat and problems with the export of pork, mainly to Russia. At the moment, prices of pork are a little lower than those in Germany, Hungary or the Czech republic but higher than those in Denmark. The main instrument of support for this market is export subsidies for pork products. Since 1st May 2004 in virtue of these subsidies almost 1 million zloty has been paid for the export of 4,500 tones, mainly of tinned ham to the USA (Kobyłecki J., 2005).

On the beef market, the basic support is export refunds. Since 1st May 2004 over 14,500 tones of beef has been exported from Poland. The subsidies amounted to 27.5 million zloty(almost 7 million euros)

The profitability of poultry production increased after the accession. The main instrument of support is export refunds for poultry meat, eggs and chicks. The prices in this market are closely correlated with the price of feed. Those prices are quite stable on the poultry market and are decreasing in the egg market, although the price of eggs is higher in Poland than in Germany, Slovakia and Spain.

The first year of Poland's presence in the EU has been very good for our dairies. Specialization of farms, an upturn in daily milk, the yield of cows and an increase in milk production have been observed. The demand for milk products increased after the accession. It was caused by possibilities of the community market. In 2004 export refunds were realized mainly to milk powder in the amount of 31.8 million zloty and also for the current year a sum of almost 27 million zloty.

The current regulations guarantee profitability of crop cultivation and sugar beet growing, among others, through a guaranteed minimum price for beets, which farmers get as part of the right to cultivate and supply sugar beets (46.72 euro/tones of beets A and 32.42 euro/ tones of beet B). There is a market for the products of sugar producers, which is guaranteed as part of granted produced amounts for them. It is the Agriculture Market Agency's duty to buy quotas of sugar at emergency prices.

Thanks to favorable market circumstances, export values in the period of May 2004 to April 2005 amounted to 5,792 million euro and was about 38.3% higher than in analogous period of 2003-2004. The import value amounted to 4,698 million euro and was again about 27.2% higher than the previous year. In this situation, the credit balance considerably increased by over twofold to 1,093 million euro.

Generally, the largest part in regard to value in the Polish export of farm and food products was for products in the following groups: meat and giblets, dairy, fruit preserves, tinned vegetables, fresh vegetables and fruit, chocolate and sugar, bread. Poland imported most of the following groups of goods: fruit, feed, fish and seafood. On the day of accession to the EU 1705 production units became entitled to market animal products (Kuźmiuk Z., 2005).

At present about 2000 factories are entitled to trade with the EU. It should be mentioned that about 2300 factories comply with production on the domestic market and nearly 500 factories have qualifications for so called direct selling.

Good results were achieved in the realization of the SAPARD program last year. Over 31 thousand motions were submitted to the Agency for Restructuring and Modernization, a sum total of over 6 billion zloty which considerably exceeded the available means (4.1 billion zloty). Financing was guaranteed to all motions which were made out correctly and submitted on time. Payments were made to almost 20 thousand subjects for a total that exceeded 3.3 billion zloty which reduced financial limits by 70%. Since 1 August 2004 there have been motions for structural pensions. Over 28 thousand farmers (exactly 28,224)submitted motions to receive these benefits. The Agency has already decreed 19,600 decisions, 18,400 people have received benefits, on average, in the amount of 1,450-1,500 zloty. Almost 34 million zloty has been paid in support of ecological farms to 3,525 farmers.

As part of the Sect oral Operation Program "Restructuring and Modernization of the food sector and rural areas development" Polish agriculture has at it's disposal 1,784 million euro(about 7,330 million zloty)to use until 2006. All operations of the program have been implemented. Farmers submitted 45,500 motions.

Structure of expenses in New Finance Perspective (NPF) 2007-2013 – European Commission proposal and elements of Polish negotiating strategy

Finance perspective is 7 years long plan of allocation of financial sources for European Union's targets realization. It estimates maximal level of expenses in branches of EU budgets in the way that actual expenses (payments) may not be higher than those written in financial perspective.

As it is presented in table 1 the sources for liabilities in 7 years period are 1,025 billion euro. The European Commission proposes the following structure of expenses (fig. 1). In the branch 1a called as a competitiveness for development and employment covering 5 areas (research and development, education, transeuropean transport and energetic nets, competitiveness, single market and social policy) the European Commission proposes sources in 132,8 billion euro (Mickiewicz A., Mickiewicz P. 2005)

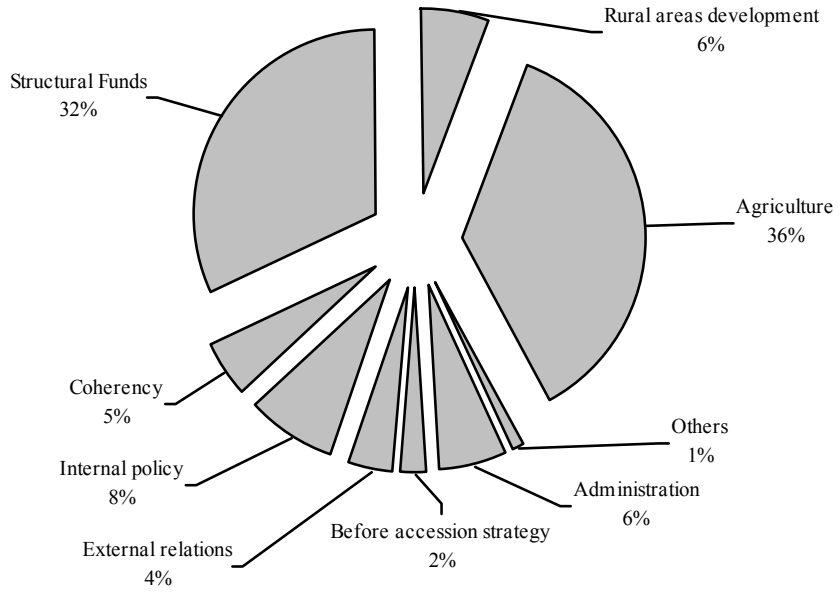
Poland should demand to take under consideration sources for minimalization of tech-

Table 1

Total sources in years 2007-2013

Kind of sources	Years								Average 2007/ 2013	Sum 2007-2013
	2006	2007	2008	2009	2010	2011	2012	2013		
Sources for liabilities (bill. euro)	12.07	133.6	138.7	143.1	146.7	150.2	154.3	158.5	14.6	1025.0
Sources for liabilities (% DNB UE)	1.15	1.23	1.25	1.26	1.26	1.26	1.27	1.27	1.26	
Sources for payments (bill. euro)	114.7	124.6	136.5	127.7	126.0	132.4	133.4	143.1	132.7	928.7
Sources for payments (% DNB UE)	1.09	1.15	1.23	1.12	1.08	1.11	1.14	1.15	1.14	
Difference of liabilities according to EC proposals 1% DNB UE	15.4	25.3	27.7	29.1	30.0	30.9	32.9	34.1	30.0	209.9

Source: *materials of Committee of European Integration. Warsaw 2005*

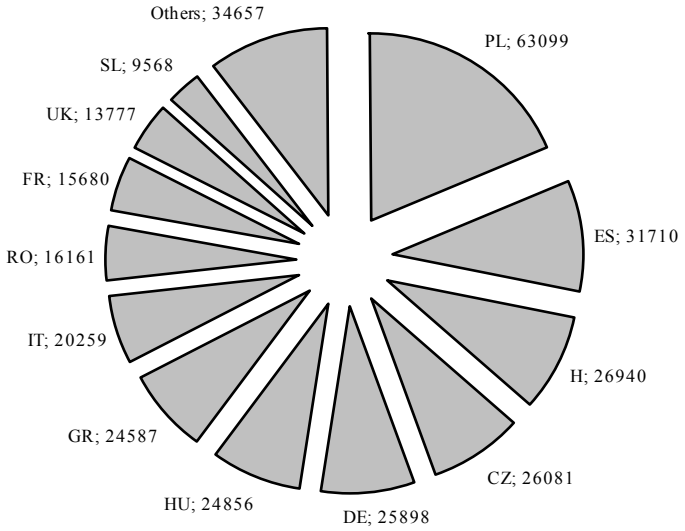


Source: *materials of Committee of European Integration. Warsaw 2005*

Fig. 1 **Structure of liabilities in New Finance Perspective**

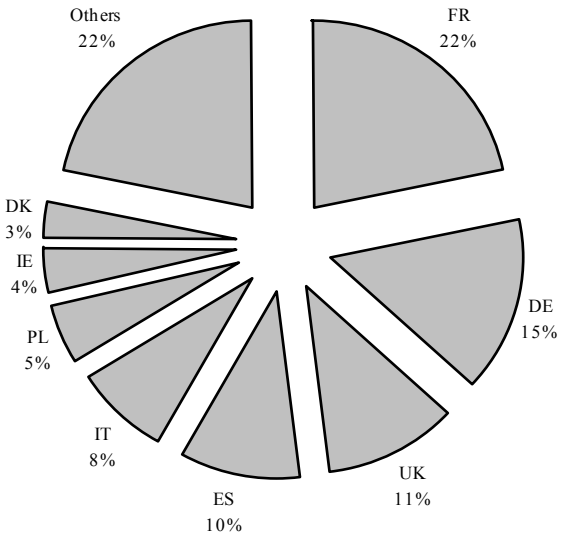
nological disproportion between old and new countries of EU. If in these sources there will not be rated the separate fund the most of sources will be taken by the most developed countries of EU and technological distance will be increased.

The branch 1b called coherency for development and employment, included sources for poorer countries and regions is to be, according to proposals of the European Commission, contributed of 338,7 billion euro in the next 7 years. If the share for those targets was relied on present rules Poland would be its biggest beneficiary.



Source: *materials of Committee of European Integration. Warsaw 2005*

Fig. 2 **Quota expenses structure in branch 1b (mln euro)**



Source: *materials of Committee of European Integration. Warsaw 2005*

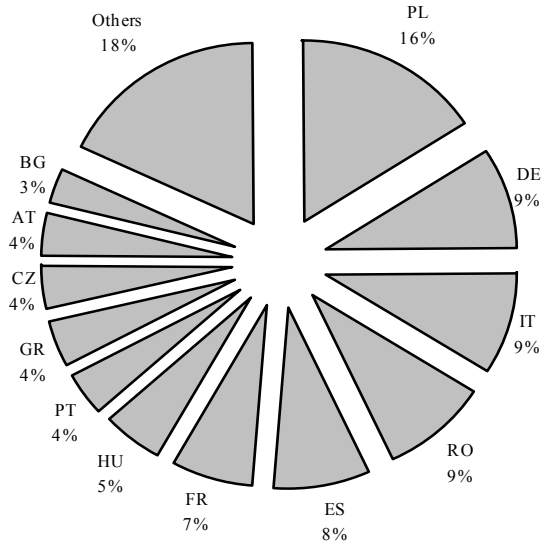
Fig. 3 **Percentage share of UE countries in allocation of I branch CAP (direct payments and market interventions) in 2007-2013**

That is the basic part of sources, which Poland will get for its development. They will be expended based on National Development Plan.

Branch 2 of financial perspective is protection and management of natural resources. Here are sources for Common Agricultural Policy (direct payments, market interventions, rural areas development) and sources for fishery and environment protection. The European Commission proposes 404,7 billion euro, direct payments and market interventions will cost about 300 billion euro (73%) and development of rural areas 80 billion euro (22%). These proposals considering share of sources are presented on figure 2.

On the figure 4 there is presented structure of expenses for rural areas development.

Besides that in case of direct payments Poland will posses only 5%, the quota of payments will be 15 billion euro, taking under consideration that sources for Polish rural areas development are 16% but in quota only 12 billion euro. It would be profitable for our country if government did



Source: *materials of Committee of European Integration. Warsaw 2005*

Fig. 4. **Percentage structure of expenses for rural areas development in 2007-2013**

not pay attention only to percentage values and did not agree for reduction only from that reason that we take part in share of 5% sum.

Conclusions

The chances are that the financing assignments of the EU will take place based on financial means in the amount of 880 billion euro to 850 billion euro for a period of 7 years, which is to say the budget proposal of the EU or the budget based on settlements accepted for the year 2006. These proposals are clearly worse than the budget proposal of the European commission but clearly an improvement on Luxemburg's proposals or the proposals of the so-called "six".

Moreover, both the European parliament's proposal and the budget based on the amounts from 2006 are projected in a special way that highlights two of the most important policies of the EU: the Common Agriculture Policy and the Cohesion Policy.

The cohesion policy in a parliamentary version of the budget had to be allotted over 336 billion euro, which is to say the exact amount the European Commission wanted to allot for this aim in it's "big" budget.

The CAP in a parliamentary version was to be given a sum of over 322 billion euro, that is to say the means not much smaller than that wanted by the European Commission. That means that there should be no risk for a steady financing of district subsidies in the new member states. The EU will fulfill the obligations for sure and will finance the increase of direct subsidies in those countries from 55% in 2004 to 100% in 2013.

Recently there has been criticism of the effectiveness of expenses for the CAP, a step up in particular for financing direct subsidies, but we do not think we can question it. It has two unquestionable assets - it ensures self suffiency in food for the EU countries and gives possibilities for keeping alternatively low prices for food, which is particularly important for countries such as Poland, where a majority of households spend a large part of their earnings on food. Moreover, the main beneficiaries of the direct subsidies are France - 22% the entire subsidies and Germany - 15% subsidies. These countries refuse to resign from this instrument of support for the agriculture union.

Under special protection are also the means for rural areas development. The expenses for this aim can be between 80 and 90 billion euro for the next seven years. According to rough distribution, Poland would be the main benefactor of means for this goal. Her participation would amount to about 16%, which is to say, the minimum size is about 12 billion euro for seven years. The means will be several times

larger than those which Poland received for this goal between 2004-2006 and considerably improved preparations of the governmental structures, autonomy structures and farmers. It also demands considerable simplification of domestic regulations, which regulate disbursements of those means. If we do not make changes, it could mean that in spite of huge needs in the rural environment, the majority of financial means, may unfortunately be unused.

At present, it should be admitted that in spite of the expected and realized reforms of CAP, it is the most durable of the union's policies hence it is difficult to imagine that it's future was questioned. Also the financing for this policy, despite risks and insecurity, is relevant to the EU budget for the period 2007-2013. It seems to be on such a level that all obligations, which occur as part of it, should be covered.

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Latvijas mājsaimniecību ienākumu un izdevumu analīze
The Analysis of Income and Expenditure of Latvian Households

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Abstract

The goal of this article is to analyse how the living standard of Latvian households has changed within a period of 5 years - from 1998 till 2003. In order to analyse the living standard, data about the expenditure level and structure of disposable income and consumption of Latvian households are examined. In data analysis, the main attention has been paid to differences between towns, rural area and Riga, as well as to differences between households of different prosperity levels. The analysis is performed using the household budget survey data and results of Central Statistical Bureau of Latvia about the years 1998 and 2003.

Key words: household budget, living conditions, social stratification.

Ievads
Introduction

Raksta mērķis ir analizēt, kā mainījušies Latvijas mājsaimniecību rīcībā esošie ienākumi un patēriņa izdevumi, ja salīdzina 1998. gadu un 2003. gadu. Mūsu galvenā interese ir, kā šo piecu gadu laikā mainījušies lauku un pilsētu rīcībā esošie ienākumi un patēriņa izdevumi: vai atšķirības starp laukiem un pilsētām samazinās, vai tieši pretēji – palielinās. Tāpat mēs vēlējāmies saprast, vai un kā mainās ienākumi un patēriņš dažādas labklājības mājsaimniecībām – sabiedrības nosacīti turīgākajiem un trūcīgākajiem iedzīvotājiem. Lai analizētu šos rādītājus, izmantoti Latvijas Republikas Centrālās Statistikas pārvaldes organizētā Latvijas mājsaimniecību budžeta pētījuma dati un rezultāti.

Ja atskatāmies vēsturē, tad redzam, ka cilvēku interese par savas ģimenes budžetu ir bijusi jau sen. No viduslaikiem atrodamas rakstiskas liecības par ģimenes ienākumu un izdevumu pierakstiem. Sākotnēji šī informācija lietota tikai privātām vajadzībām un nav rādīta ārpus ģimenes. Vēlākos laikos ģimeņu budžeti tika apzināti, iegūtā informācija apkopota un rezultāti darīti zināmi plašākam lokam. Agrīnajos ģimeņu budžetu pētījumos informācija tika vākta no tām ģimenēm, kuras bija ar mieru šo informāciju sniegt. Šos datus nevarēja izmantot, lai droši secinātu par kādas valsts vai valsts reģiona iedzīvotāju dzīves līmeni. Tikai XIX gadsimtā, attīstoties statistikai, zinātnieki sāka pievērst uzmanību arī tam, kā atlasīt objektus, no kuriem ievākt analīzei nepieciešamos datus. Tomēr būtisks pavērsiens notika tikai pēc Otrā pasaules kara, kad tika izstrādātas jaunas metodes un novērtējumu ieguves tehnikas (Bāliņa, 2000).

Latvijā pirmais mājsaimniecību budžetu pētījums bija pirmās brīvvalsts laikā 1926./ 27. gadā un to organizēja Valsts Statistikas pārvaldes Iekšējās tirdzniecības un darba statistikas nodaļa. Šā pētījuma mērķis bija iegūt informāciju par strādnieku un ierēdņu ģimeņu ienākumu un patēriņa izdevumu līmeni, kā arī nodrošināt reālu bāzi dzīves dārdzības indeksa aprēķināšanai - nosakot preces un to svarus (Dāvidsons, 1939). Sākotnēji tika plānots, ka paralēli vispārīgai informācijai, tādai kā ģimenes sastāvs, dzīvokļa labiekārtojums un nodarbošanās, veselu gadu katru mēnesi no mājsaimniecībām tiks saņemta informācija arī par ienākumiem un izdevumiem, kā arī par pārtikas produktu atlikumiem uz nākamā mēneša pirmo datumu. Ģimeņu pieteikšanās novērojumam bija brīvprātīga, taču cilvēku atsaucība no mēneša uz mēnesi samazinājās,

kā rezultātā, publicējot pētījuma rezultātus, tika pieņemts lēmums iegūto informāciju apstrādāt atsevišķi pa mēnešiem. Tādējādi nebija iespējams šos datus izmantot, lai iegūtu vispārīgu priekšstatu par visas valsts mājsaimniecību dzīves līmeni visā aplūkotajā laika posmā.

Nākamais ģimeņu budžetu pētījums Latvijā notika 1936./1937. gadā, un arī šim apsekojumam pieteikšanās bija brīvprātīga. Novērojumā bija paredzēts iekļaut tirdzniecības un rūpniecības strādniekus, ierēdņus, valsts un pašvaldību iestāžu kalpotājus, privātos uzņēmējus un laukstrādniekus. Bija noteikts, kāds skaits katras grupas mājsaimniecību jāiesaista pētījumā Rīgā, pilsētās un citos saimnieciskajos centros. Tā kā pētījums bija brīvprātīgs un neizdevās saglabāt sākotnēji noteiktās proporcijas mājsaimniecību sadalījumā, tad visi statistiskie rādītāji bija aprēķināti atsevišķi fizisko un garīgo darbu strādājošajiem un netika aprēķināti vidējie rādītāji par valsti kopumā. Pēckara periodā ģimeņu budžetu pētījumi tika uzsākti 1952. gadā bijušās PSRS Centrālās statistikas pārvaldes sistēmas ietvaros. Atšķirībā no pasaulē plaši izmantotās teritoriālās izlases veidošanas metodes šajā laikā tika lietots tā saucamais nozaru izlases princips: pētījumu organizēja tā, lai nodrošinātu visu galveno ģimeņu tipu pārstāvniecību tādā proporcijā, kādā tie pārstāvēti ģenerālkopā pa tautas saimniecības nozarēm.

Latvijai atgūstot neatkarību, līdz pat 1995. gada rudenim turpinājās padomju varas gados iesāktais pētījums, taču šis pētījums nespēja atspoguļot izmaiņas, kas norisinājās sabiedrībā: bezdarba pieaugums, privātās uzņēmējdarbības attīstība, iedzīvotāju noslāņošanās, un šī pētījuma rezultātus nevarēja uzskatīt par reprezentatīviem. Visu iepriekš minēto iemeslu dēļ 1995. gada rudenī tika uzsākts jauns mājsaimniecību budžetu pētījums, kura galvenais mērķis bija novērtēt visu Latvijā esošo mājsaimniecību (kā arī to administratīvi teritoriālo un sociālo grupu) ienākumu, izdevumu un patēriņa līmeni un struktūru. Pētījums bija izlases apsekojums, kurš noritēja nepārtraukti un kurā informāciju no mājsaimniecībām ieguva visu gadu. Pētījuma izlase tika veidota tā, lai varētu iegūt reprezentatīvus novērtējumus gan par valsti kopumā, gan arī par galvenajām administratīvi teritoriālajām un sociālajām grupām (LR Centrālā statistikas pārvalde, 1999).

Darba hipotēze: dzīves līmenis pilsētu un lauku mājsaimniecību grupās ir palielinājies, tajā pašā laikā – jo augstāks ir urbanizācijas līmenis, jo lielāks ir dzīves līmeņa pieauguma temps.

Darba mērķa sasniegšanai un hipotēzes pārbaudei tika ***izvirzītie*** šādi ***uzdevumi***:

- salīdzināt teritoriālās un nozaru izlases veidošanas metodes ģimeņu budžetu pētījumos;
- veikt dzīves līmeņa analīzi dažādas labklājības mājsaimniecībām, izmantojot kvintiļu grupas;
- veikt patēriņa izdevumu struktūras analīzi dažādu labklājības grupu mājsaimniecībām;
- pēc ienākumiem un izdevumiem salīdzināt noslāņošanās indikatorus.

Materiāli un pielietotās metodes: izstrādājot darba uzdevumus, atbilstoši izvirzītajam darba mērķim izmantoti valsts normatīvie akti, speciālā literatūra, LR Centrālās statistikas pārvaldes (CSP) veiktā Mājsaimniecību budžeta pētījuma dati, CSP atbildīgo darbinieku, zinātnieku un citu speciālistu publikācijas, raksta autoru personīgie pētījumi un uz tiem balstītās atziņas, statistikas pārvaldes izdevumi un informācija.

Pilsētu un lauku mājsaimniecību ienākumu un patēriņa izdevumu analīze

2001. gada maijā tika uzsākts jauns pētījums, kurā tika pilnveidota esošā metodoloģija un kurš lielākā mērā nekā līdz tam pamatojās uz pasaules praksē aprobētu analoģisku pētījumu pieredzi (LR Centrālā statistikas pārvalde, 2003). Jaunajā pētījumā bija divas galvenās izmaiņas.

Pirmkārt, tika uzlabots izlases pārklājums – jaunajā pētījumā izlase vienmērīgi pārklāj visu valsts teritoriju. Arī līdz tam tika nopietni domāts par to, lai izlase pēc iespējas labāk pārklātu visu valsts teritoriju, taču viens no ierobežojošiem faktoriem bija izlases izveidei nepieciešamo sarakstu jeb reģistru pieejamība. Tikai pēc 2000. gada Tautas skaitīšanas reģistru izveides un turpmākas tā uzturēšanas un aktualizācijas bija iespējams mainīt izlases izveides

procedūras, uzlabojot izlases vispārējo pārklājumu (Lapins, 2002).

Otrkārt, tika būtiski izmainīti informācijas ieguves rīki un metodoloģija –izstrādāts jauns patēriņa izdevumu reģistrācijas dienasgrāmatas dizains, kas uzlaboja datu kvalitāti un veicināja respondentu aktivitāti un ierakstu intensitātes pieaugumu. Tāpat datu kvalitāti uzlaboja retrospektīvo jautājumu par pēdējiem 12 mēnešiem ieviešana. Tādējādi var rasties jautājums – vai ir iespējams salīdzināt 1998. gada un 2003. gada mājsaimniecību budžeta pētījuma datus, ja reiz ir notikušas tik radikālas izmaiņas pētījuma organizācijā un metodoloģijā. Viennozīmīgas atbildes uz šo jautājumu nav, tomēr nav pamata domāt, ka izmaiņas pētījuma metodoloģijā varētu ietekmēt tikai lauku vai tikai pilsētu mājsaimniecību atbildes, vai arī tikai trūcīgo vai tikai turīgo mājsaimniecību atbildes. Tādējādi mēs uzskatām, ka metodoloģijas izmaiņas neietekmē veiktās analīzes rezultātus. Vispirms aplūkosim, kādi bija rīcībā esošie ienākumi uz vienu mājsaimniecības locekli 1998. un 2003. gadā vidēji Latvijā kopumā, kā arī vidēji pilsētu, lauku un Rīgas mājsaimniecībās (skat. 1. tabulu).

Mūsu galvenā interese ir nevis par absolūtajiem lielumiem, bet gan par vidējo pieauguma tempu – par cik procentiem vidēji ir palielinājušies rīcībā esošie ienākumi uz vienu mājsaimniecības locekli vidēji mēnesī Latvijā, kā arī pilsētu, lauku un Rīgas mājsaimniecībās. Lai aprēķinātu ienākumu pieauguma vidējo tempu, ir izmantots nevis rīcībā esošais ienākums faktiskajās atbilstošā gada cenās, bet gan 2000. gada vidējās cenās, kā diskontējošo reizinātāju izmantojot patēriņa cenu indeksu PCI (PCI 2000. gadā ir 100).

Pēc 1. tabulas datiem redzams, ka valstī kopumā mājsaimniecību rīcībā esošie ienākumi ir palielinājušies vidēji par 4.3% gadā, kas atpaliek no iekšzemes kopprodukta uz vienu iedzīvotāju

1. tabula / *Table 1*

Rīcībā esošie ienākumi pilsētu un lauku mājsaimniecībām 1998. un 2003. gadā

(Vidēji uz vienu mājsaimniecības locekli mēnesī, Ls)

Disposable income for urban and rural households in the years 1998 and 2003

(Average per household's member per month, LVL)

	1998. gads		2003. gads		Vidējais pieauguma temps
	Faktiskajās cenās	2000. gada vidējās cenās	Faktiskajās cenās	2000. gada vidējās cenās	
Latvija	62.33	65.54	86.88	80.82	**4.3%**
Pilsētas	67.26	70.73	98.46	91.59	**5.3%**
Lauki	51.40	54.05	63.61	59.17	**1.8%**
Rīga	76.39	80.33	125.23	116.49	**7.7%**

Avots: *LR Centrālās statistikas pārvalde, autoru aprēķini.*

2. tabula / *Table 2*

Patēriņa izdevumi pilsētu un lauku mājsaimniecībām 1998. un 2003. gadā

(Vidēji uz vienu mājsaimniecības locekli mēnesī, Ls)

Consumption expenditure for urban and rural households in the years 1998 and 2003

(Average per household's member per month, LVL)

	1998. gads		2003. gads		Vidējais pieauguma temps
	Faktiskajās cenās	2000. gada vidējās cenās	Faktiskajās cenās	2000. gada vidējās cenās	
Latvija	61.54	64.71	100.38	93.38	7.6%
Pilsētas	67.06	70.52	113.66	105.73	8.4%
Lauki	49.29	51.83	72.53	67.47	5.4%
Rīga	76.04	79.96	143.18	133.19	10.7%

Avots: *LR Centrālās statistikas pārvalde, autoru aprēķini.*

vidējā pieauguma tempa, kas laikā no 1998. līdz 2003. gadam bija 7.2% (IKP salīdzināmās cenās uz vienu iedzīvotāju 1998. gadā bija Ls 1761.1, bet 2003. gadā – Ls 2489.4). Tajā pašā laikā pilsētu mājsaimniecību rīcībā esošie ienākumi uz vienu mājsaimniecības locekli ir palielinājušies vidēji par 5.3%, bet laukos tikai par 1.8% gadā. Vislielākais rīcībā esošo ienākumu pieauguma temps bija vērojams Rīgā – vidēji 7.7% gadā.

2. tabulā ir apkopota informācija par patēriņa izdevumiem uz vienu mājsaimniecības locekli atbilstošajās mājsaimniecību grupās (faktiskajās un salīdzināmās cenās), kā arī šo grupu patēriņa izdevumu vidējie pieauguma tempi.

Pēc 2. tabulas datiem redzams, ka valstī kopumā patēriņa izdevumu pieauguma temps šo piecu gadu laikā vidēji ir bijis 7.6% gadā, tai skaitā pilsētās – 8.4%, laukos – 5.4% un Rīgā – 10.7%. Ja salīdzinām rīcībā esošo ienākumu un patēriņa izdevumu pieauguma tempus, tad redzam, ka ienākumu pieauguma temps visās grupās ir mazāks nekā atbilstošais patēriņa izdevumu pieauguma temps. Turklāt 1998. gadā ienākumi bija lielāki par izdevumiem, bet 2003. gadā visām aplūkotajām mājsaimniecību grupām patēriņa izdevumi pārsniedz rīcībā esošos ienākumus. Šādam fenomenam var būt vairāki izskaidrojumi, bet kā galvenos var minēt šādus:

- palielinās mājsaimniecību pieeja kredītresursiem, ko apliecina arī Latvijas Bankas dati;
- ilglietošanas preču iegādei mājsaimniecības izlieto uzkrātos iepriekšējo gadu ienākumus;
- nereti mājsaimniecības locekļi noklusē daļu no ienākumiem, bet daudz brīvāk runā par patēriņu (LR Centrālās statistikas pārvalde, 2004).

Abu tabulu dati rāda, ka atšķirība starp pilsētu un lauku mājsaimniecību dzīves līmeņiem, bet vēl jo vairāk starp Rīgas un lauku mājsaimniecību dzīves līmeņiem, šo piecu gadu laikā ir palielinājusies. Neraugoties uz to, ka dzīves līmenis kopumā visām šīm mājsaimniecību grupām ir uzlabojies, tajā pašā laikā – jo augstāks ir urbanizācijas līmenis, jo lielāks ir dzīves līmeņa pieauguma temps.

Ja aplūko lauku un pilsētu mājsaimniecību rīcībā esošo ienākumu attiecību, redzams, ka 1998. gadā lauku mājsaimniecību rīcībā esošais ienākums bija 76% no pilsētu mājsaimniecību rīcībā esošā ienākuma, savukārt 2003. gadā – tikai 65%, kas norāda uz aizvien pieaugošu noslāņošanos starp pilsētām un laukiem. Vēl drastiskāka šī attiecība ir, ja salīdzina rīcībā esošos ienākumus Rīgas un lauku mājsaimniecībās. Ja 1998. gadā lauku mājsaimniecību rīcībā esošais ienākums bija 67% no Rīgas mājsaimniecību rīcībā esošā ienākuma, tad 2003. gadā – vairs tikai 50%. Veiktā analīze rāda, ka noslāņošanās starp pilsētām un laukiem šo piecu gadu laikā ir palielinājusies.

Mājsaimniecību patēriņa izdevumu struktūras analīze

Otrs jautājums, kas mūs interesēja, ir – kā šo piecu gadu laikā ir mainījies dzīves līmenis dažādas labklājības mājsaimniecībām. Lai raksturotu dzīves līmeni dažādas labklājības mājsaimniecībās, izmanto kvintiļu grupas, kur grupēšanas pazīme ir rīcībā esošais ienākums uz vienu mājsaimniecības locekli. Viens no rādītājiem, kas raksturo mājsaimniecības labklājības līmeni, ir patēriņa izdevumu struktūra. Trūcīgās mājsaimniecības ir spiestas visus ienākumus tērēt elementāro vajadzību apmierināšanai – pārtikai un mājokļa uzturēšanai. Jo turīgāka ir mājsaimniecība, jo mazāku savu ienākumu daļu tā tērē šī patēriņa izdevumu grupām. 3. tabulā ir apkopoti dati par izdevumiem pārtikai un kopējiem patēriņa izdevumiem salīdzināmās cenās visu piecu labklājības grupu mājsaimniecībām.

3. tabulā redzams, ka patēriņa izdevumi ir palielinājušies visu piecu kvintiļu mājsaimniecībās. Tajā pašā laikā, rēķinot salīdzināmās cenās, pārtikas izdevumi ir palielinājušies tikai pirmās kvintiles mājsaimniecībās, savukārt pārējo kvintiļu mājsaimniecībām šie izdevumi ir pat samazinājušies. Tas nenorāda uz to, ka mājsaimniecības lietotu mazāk pārtikas, drīzāk gan uz to, ka cenu kāpums pārtikai šo piecu gadu laikā ir bijis mazāks nekā pārējām patēriņa precēm.

1. attēlā parādīts, kā šo piecu gadu laikā ir mainījusies patēriņa izdevumu daļa, ko mājsaimniecības lieto pārtikas produktu iegādei. Attēlā redzams, ka visās labklājības grupās pārtikas iegādei atvēlētā daļa 1998. gadā bija lielāka nekā 2003. gadā. Tas netieši norāda uz to, ka dzīves līmenis visām labklājības grupām ir palielinājies.

3. tabula / *Table 3*

Patēriņa izdevumi un izdevumi pārtikai mājsaimniecību labklājības grupās 1998. un 2003. gadā

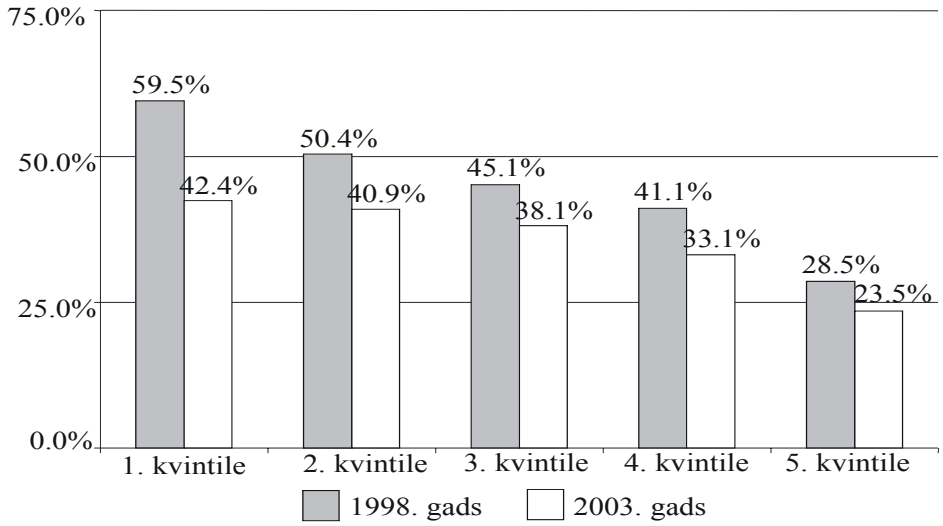
(Vidēji uz vienu mājsaimniecības locekli mēnesī, Ls, 2000. gada cenās. Vidēji uz vienu mājsaimniecības locekli mēnesī, Ls)

Consumption expenditure and food expenditures for households of different prosperity levels in the years 1998 and 2003

(Average per household's member per month, LVL, at prices of 2000, Average per household's member per month, LVL)

Labklājības grupa[1]	1998. gads		2003. gads		Patēriņa izdevumu vidējais pieauguma temps
	Izdevumi pārtikai	Visi patēriņa izdevumi	Izdevumi pārtikai	Visi patēriņa izdevumi	
1	19.86	33.38	20.42	48.19	7.6%
2	28.04	55.62	26.32	64.28	2.9%
3	33.36	73.93	30.03	78.76	1.3%
4	39.87	97.08	33.54	101.34	0.9%
5	50.88	178.26	43.76	186.36	0.9%

Avots: *LR Centrālās statistikas pārvalde, autoru aprēķini.*



Avots: *LR Centrālās statistikas pārvalde, autoru aprēķini.*

1. att. **Pārtikas izdevumu īpatsvars privātajā patēriņā mājsaimniecību labklājības grupās 1998. un 2003. gadā**

Fig. 1 ***Percentage of food expenditure in consumption's expenditure for households of different prosperity levels in 1998 and 2003***

Vistrūcīgākās mājsaimniecības, kas atrodas 1. kvintilē, 1998. gadā pārtikai tērēja gandrīz 60% no visiem patēriņa izdevumiem, bet 2003. gadā – 42%. Savukārt visturīgākās (5. kvintiles) mājsaimniecības 1998. gadā pārtikai tērēja 28.5% no visiem patēriņa izdevumiem, bet 2003. gadā – 23.5%.

Diskusija

Ja aplūko patēriņa izdevumu (salīdzināmās cenās) vidējo pieauguma tempu dažādu labklājības grupu mājsaimniecībām (skat. 3. tabulu), tad redzams, ka vislielākais patēriņa pieaugums – vidēji 7.6% gadā – ir bijis pirmās kvintiles

[1] kvintile pēc rīcībā esošā ienākuma uz vienu mājsaimniecības locekli *(quintile grouping by disposable income per capita)*

mājsaimniecībās, savukārt piektās kvintiles mājsaimniecībām patēriņa izdevumi ir palielinājušies vidēji tikai par 0.9%. Tas norāda uz to, ka dzīves līmenis straujāk ir uzlabojies nosacīti trūcīgākajās mājsaimniecībās. Līdzīgus secinājumus var iegūt, ja aplūko, cik reizes turīgāko mājsaimniecību patēriņa izdevumi pārsniedz trūcīgāko mājsaimniecību patēriņa izdevumus. Tā, 1998. gadā šī attiecība bija 5.34, kas nozīmē, ka turīgāko mājsaimniecību vidējais patēriņš vairāk nekā 5 reizes pārsniedza trūcīgāko mājsaimniecību vidējo patēriņu. 2003. gadā šī attiecība bija vairs tikai 3.87 – turīgāko mājsaimniecību vidējie patēriņa izdevumi ir nepilnas 4 reizes lielāki par trūcīgāko mājsaimniecību vidējiem patēriņa izdevumiem.

Varam secināt, ka patēriņa līmeņa atšķirībām starp pirmās un piektās kvintiles mājsaimniecībām ir tendence samazināties. Ja turpretī mēs aplūkojam labklājības grupu mājsaimniecību rīcībā esošos ienākumus, tad situācija ir atšķirīga (skat. 4. tabulu).

4. tabulā redzams, ka rīcībā esošie ienākumi ir palielinājušies visu piecu kvintiļu mājsaimniecībās. Tajā pašā laikā ir vērojama tendence, ka vislielākais rīcībā esošo ienākumu pieaugums ir piektās kvintiles mājsaimniecībām un tas vidēji ir 5.4% gadā. Otrs lielākais rīcībā esošo ienākumu pieauguma temps ir pirmās kvintiles mājsaimniecībā – 4.1%.

Ja savukārt aplūko, cik reizes turīgāko mājsaimniecību rīcībā esošie ienākumi pārsniedz trūcīgāko mājsaimniecību rīcībā esošos ienākumus, tad 1998. gadā šī attiecība bija 5.8, kas nozīmē, ka turīgāko mājsaimniecību vidējie rīcībā esošie ienākumi gandrīz 6 reizes pārsniedza trūcīgāko mājsaimniecību vidējos rīcībā esošos ienākumus. 2003. gadā šī attiecība jau bija 6.17 – turīgāko mājsaimniecību vidējie rīcībā esošie ienākumi ir vairāk nekā 6 reizes lielāki par trūcīgākajām mājsaimniecībām. Ja kā indikatoru izmanto ienākumus, tad redzams, ka noslāņošanās palielinās. Šis rezultāts saskan ar secinājumiem, kādus var izdarīt, analizējot Džini koeficientu: 0,31. 1998. gadā Džini koeficienta vērtība bija 0.31, bet 2003. gadā – 0.36.

Šeit zināmā mērā rodas pretruna: pēc ienākumiem noslāņošanās palielinās, bet pēc izdevumiem – samazinās. Viennozīmīgas atbildes uz šo jautājumu nav, jo jautājums ir: kurš rādītājs (rīcībā esošais ienākums vai patēriņa izdevumi) ir tas, kas labāk raksturo mājsaimniecību dzīves līmeni. Mēs domājam, ka noteicošāka loma varētu būt patēriņa datiem, jo ne vienmēr tiek sniegti visi ienākumu dati. Tā, 2003. gadā pirmās kvintiles mājsaimniecību rīcībā esošie ienākumi 2000. gada cenās bija Ls 29.65, bet patēriņa izdevumi – Ls 48.19.

Secinājumi un priekšlikumi

Analizējot Latvijas mājsaimniecību rīcībā esošos ienākumus un patēriņa izdevumus 1998. un 2003. gadā, secinām:

1) atšķirība starp pilsētu un lauku

4. tabula / *Table 4*

Rīcībā esošie ienākumi mājsaimniecību labklājības grupās 1998. un 2003. gadā

(Vidēji uz vienu mājsaimniecības locekli mēnesī, Ls)

Disposable income per capita for households of different prosperity levels in 1998 and 2003

(Average per household's member per month, LVL)

Labklājības grupa[2]	1998. gads		2003. gads		Vidējais pieauguma temps
	Faktiskajās cenās	2000. gada vidējās cenās	Faktiskajās cenās	2000. gada vidējās cenās	
1	23.05	24.24	31.87	29.65	4.1%
2	44.30	46.58	56.19	52.27	2.3%
3	57.30	60.25	70.25	65.35	1.6%
4	73.97	77.78	94.75	88.14	2.5%
5	133.87	140.77	196.5	182.79	5.4%

Avots: *LR Centrālās statistikas pārvalde, autoru aprēķini.*

[2] kvintile pēc rīcībā esošā ienākuma uz vienu mājsaimniecības locekli *(quintile grouping by disposable income per capita)*

mājsaimniecību dzīves līmeņiem piecu gadu laikā ir palielinājusies;

2) dzīves līmenis visās labklājības grupās ir palielinājies, pie kam visstraujāk tas ir palielinājies trūcīgākajās mājsaimniecībās;

3) patēriņa līmeņa atšķirībām starp pirmās un piektās kvintiles mājsaimniecībām ir tendence samazināties;

4) rīcībā esošo ienākumu pieaugums ir novērojams visu labklājības grupu mājsaimniecībās;

5) vislielākais rīcībā esošo ienākumu pieaugums ir piektās kvintiles mājsaimniecībām, savukārt otrais lielākais pieaugums ir pirmās kvintiles mājsaimniecībām.

No veiktā pētījuma secinājumiem izriet, ka ir zināma pretruna: pēc ienākumiem noslāņošanās palielinās, bet pēc izdevumiem – samazinās. Izskaidrojums šai pretrunai varētu būt meklējams Mājsaimniecības budžeta pētījuma metodoloģijas maiņā, kā arī faktorā, ka ne vienmēr tiek sniegti visi mājsaimniecību ienākumu dati. Tādējādi labklājības pētījumos būtu ieteicams balstīties uz patēriņa, nevis ienākumu datiem.

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Estimation of Cost of Own Capital: Methods and their Application in the Companies of Agricultural Sector

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Abstract

The methods of cost estimation of own capital used in the developed economy countries have some limitations, and their application in the companies of agricultural sector are quite problematic till now. The authors of the paper propose to estimate cost of own capital (retained earnings, personal savings, and new issue) using the method of net profitability modified by the consideration of three indicators: average earnings per share or return on equity in the companies of the same industry; an average capital structure and the capital structure of the company; current risk of the company and the risk of a new investment project. Some problems arise due to the depreciation as a source of finance of long-term investment. The authors of the paper try to answer three questions: is the depreciation a source of finance? If yes, is it expedient to include its cost in WACC? If yes, how the cost of depreciation should be estimated? Latterly grants have become an important source of finance of long-term investments in the agricultural companies and farms, and substitute the own capital in the capital structure of the investment project. Therefore the authors present one of the possible methods for the estimation of the cost of grants.

Key words: cost of capital, own capital, sources of finance, retained earnings, depreciation, grants.

Introduction

With the fast development of technologies and increasing competition in the companies of agricultural sector, the managers and farmers must use the long-term investment to be competitive. A success of the business does not depend only on the right strategy, but also on the amount of investment and the financial decisions. The effectiveness of the investment depends on the future cash flows as well as on the cost of capital. This is obvious when investment appraisal is made using methods based on the time value of money.

The researchers over the world investigate and develop the methodology and methods for the estimation of cost of own capital and limitation of their application for a long time. However, a lot of problems concerning their application in the small and relatively closed security exchange markets, particularly in the business entities of agricultural sector are not yet solved.

For financing long-term investment not only newly formed capital can be used but also such internal sources of finance as depreciation of fixed assets and revenue from the sales of fixed assets. The cost of these sources of finance is poorly investigated.

Integration processes of Lithuania and the other Baltic states into the EU have increased the possibilities of agricultural companies and farmers for support from the public budget, structural and other European funds. Grants become a significant source of finance of investments that are undertaken by the agricultural business entities, and in the most cases replace the own sources of finances. The researchers have not yet investigated the possible methods for the estimation of the cost of grants. From the philosophical and methodological point of view grants are the source of finance, which has a cost, reflecting the minimum required return of its owner – government or international fund – from the concrete investment project. Since the grants are one of the capital types it should be included into the weighted average cost of capital (WACC), and therefore the estimation of its cost is necessary.

The object of the research is the estimation of the cost of own capital.

The aim of the research is to identify the main problems concerning the methods for the estimation of the cost of own capital, limitations of their application in the companies of agricultural sector, and to propose the best suitable methods for the estimation of cost of own capital.

Logical analysis and synthesis were used for the exploration of the methods for the estimation of the cost of retained earnings, depreciation, and grants. The possibilities of application of these methods in the companies of agricultural sector were investigated by means of the analysis of statistical data.

Estimation of the Cost of Retained Earnings

One of the main sources of finance (type of own capital) of long-term investments is retained earnings. In most cases researchers refer to three main methods which can be used for estimation of the cost of retained earnings (Lumby St.,1994; Samuels J.M., Wilkes F.M. ir Brayshaw R.E., 1994; Brealey R.A. & Myers S.C., 2003):

- capital asset pricing model (CAPM);
- discounted cash flow (dividend growth) method (DCF);
- estimation considering the rate of interest on the company's bonds.

The authors of the article penetrate three levels of the limitations of the use of CAPM: 1) limitations which are general both for the developed and developing economy countries; 2) limitations which are concerned with a small, closed and "poor" efficient security exchange market; 3) limitations which are characteristic for the companies whose circulation of shares is closed.

The limitations of the first level are concerned with the exactness of estimation of cost of own capital. If the investment portfolio of the shareholders of the company is not well-diversified they will have a concern in all risk not only systematic (Brigham J.,1998). According to Lumby St. (1994) systematic risk amounts to only about 30% of all risk of a company. So using CAPM for the estimation of cost of retained earnings the risk is measured in part and cost is reasonlessly decreased. Furthermore, using CAPM the present b coefficient is calculated and it is difficult to estimate the expected b coefficient in the future when investment project will be implemented.

The limitations of the second level are caused by a small, closed and "poor" efficient security exchange market. Such the markets exist in all transition economy countries. Due to the lack of statistical data and small number of issuers it is impossible to calculate b coefficient precisely enough. In the developed countries these coefficients are calculated by the market agencies or investment consulting companies. Whereas b coefficients of Lithuanian companies are not yet calculated and published. Nedzveckas J. and Rasimavièius G. (2000) are the first who tried to calculate b coefficients using the statistical data of the shares trade in Lithuanian security exchange market in 1998-1999. They determined that correlation coefficients of the shares prices of different joint-stock companies and LITIN index significantly differ and made a conclusion that the changes in the market situation differently influence the shares market price and at the same time the value of a company. At the end of 1998, when the Russian crisis started, the market prices of shares of those joint-stock companies of agricultural sector which correlation coefficients with LITIN index were the strongest experienced the largest decrease. Nedzveckas J. and Rasimavièius G. (2000) made a conclusion that CAPM better reflects dependences of the shares in the efficient markets in which the changes of shares market prices of one company and decision-making of one investor cannot determine the tendencies of all security exchange market. Therefore, the classical CAPM used for the analysis of the developed capital market recedes while estimating systematic risk of the investment project of a company in a small, closed and "poor" efficient security exchange market.

The limitations of the second level are characteristic for the companies whose circulation of shares is closed. These limitations were investigated by Brigham J. in 1998. He made a conclusion that CAPM is not applicable in the closed joint-stock companies because the shares of these companies are not quoted in the market and suggested to use the so-called "net analogy" CAPM. The essence of "net analogy" is estimation of b coefficient of the company of the same industry and after that its adjustment for a small company. However, Brigham J. envisages a lot of problems which arise while using "net analogy" CAPM: b coefficient should be subjectively modified taking into account different volumes of sales, stability of sales, range of goods and capital structure. The liquidity premium should also be added to the b coefficients of closed joint-stock compa-

nies because their shares are less liquid than the shares of the companies which are quoted on the market. This liquidity premium is also estimated subjectively.

Estimation of cost of retained earnings of agricultural processing companies in Lithuania is limited by the problems of three levels mentioned above because there are a lot of closed joint-stock companies in this sector. There are no joint-stock companies among the agricultural producers, so for the estimation of the cost of retained earnings of these companies even "net analogy" CAPM cannot be used.

The second method used for the estimation of the cost of retained earnings is DCF. This method is based on the statement that the value of the investment depends on the expected cash flows in the future, i.e. time and discount rate. DCF is applicable only for the companies which pay dividends annually and their size is constant or constantly growing. In such cases the potential investors are inured to the constantly growing dividends and financing the investments of the company expect to earn more, i.e. cost of retained earnings directly depends on the dividends growth.

The results of empirical research made by Alekneviėienë V., Jatkûnaitë D. and Þaltauskienë N. (2002, 2003) in Lithuania security exchange show that a lot of Lithuanian agricultural processing companies as well as the companies of other industries were keeping residual dividend policy. The main reason is that globalization of markets increases the competition and in order to keep the level of competitiveness Lithuanian companies need new investment projects. New investment projects require sources of finance and companies use internally generated cash flows, primarily retained earnings. Good investment possibilities decrease dividend payouts. Only two agricultural processing companies (both alcohol production) were keeping stable dividend policy. These companies are now privatized and the authors of the paper can make the presumption that dividends signalize for the market not only in the short but also in the long period. These two companies and other companies which are going to implement stable dividend policy (not dividend growth policy) can use modified DCF method ignoring dividend growth:

$$(1)\quad C_{re} = \frac{D_m}{P_0}$$

where: C_{re} – cost of retained earnings;
D_m – expected annual dividends;
P_0 – value of share in year 0.

Estimation of cost of retained earnings considering the rate of interest on the company bonds is simple but less precise. This method can be used only if the companies issue the bonds. Then cost of retained earnings is estimated adding some risk premium to the interest rate on the bonds. The logic of this method is based on the relation between risk and return: if the investment is more risky the interest rate will be higher. According to Samuels J.M., Wilkes F.M., and Brayshaw R.E. (1994) if interest rate on the bonds is 12%, cost of retained earnings should be 3-5 percentage points higher, i.e. 15-17%. Using this method risk premium is estimated subjectively. The companies of agricultural sector in Lithuania are not issuing bonds yet, so this method cannot be applied for the estimation of the cost of retained earnings.

For the estimation of cost of new issues only DCF can be used, corrected by floatation (registration, advertisement, sale and other) costs. Due to the floatation costs and the difference between nominal and emission value (when the latter is lower) financing by new issue is more expensive in comparison with financing by retained earnings. The application of DCF for the estimation of cost of new issues is limited in so far as for the estimation of cost of retained earnings.

The estimation of cost of own capital using the method of net profitability is suggested by Lypsic I. & Kossov V. (1996). They stated that the method of net profitability was mostly suitable when the company foresaw to pay dividends after some years in the future and when dividend growth was not stable. Net profitability is calculated using the following formula:

$$(2)\quad C_e = \frac{EPS}{P_s}$$

where: C_e – cost of own capital;
EPS – earnings per share;
P_s – share market price.

Earnings per share are the earnings which potential investors should earn trying to avoid the decrease of profitability of the shares of present

investors. Share market price is the total money that could be really earned selling the shares in the secondary market.

The authors of the paper for the meantime suggest using the net profitability method for the estimation of cost of retained earnings as well as for the cost of new issue in the companies of agricultural sector. Using this method it is purposive to relate expected net profitability of the company shares with the present average profitability of the companies shares in the same industry. If the average profitability is higher, the cost of own capital should be increased up to the average because the potential investors react to the changes of risk and return on alternative investments in the market. Closed joint-stock companies whose shares are not quoted in the market should calculate return on equity. These companies should use the book value of own equity instead of the share market price, and net earnings instead of earnings per share.

The authors of the paper suggest the correction of this method considering an average capital structure and the capital structure of the company, also the present company's risk and the risk of the new investment project.

Estimation of the Cost of Depreciation

Approach to the cost estimation problem of depreciation as a source of finance is different. Birman G. & Shmidt S. (1997) do not acknowledge the depreciation as a source of finance; Samuels J.M., Wilkes F.M., and Brayshaw R.E. (1994) acknowledge it as source of finance, but they state that including its cost into the weighted average cost of capital (WACC) is not purposive; Brigham J. (1999) suggests that the cost of depreciation should be estimated as a weighted average cost of retained earnings and low risk debt capital. To solve this problem, we should answer three questions:

- is the depreciation a source of finance?
- if yes, is it expedient to include its cost in WACC?
- if yes, how the cost of depreciation should be estimated?

One of the main problems related to the financing of long-term investment is the unifying of the two concepts – sources of finance and capital. Most of Western European researchers point only to those sources of finance, which are on the right side of the balance sheet, i.e. their origin is directly related to the increase of the capital (Samuels J.M., Wilkes F.M., and Brayshaw R.E., 1994; Lumby St., 1994; Brealey R.A. & Myers S.C., 2003). They analyse only retained earnings, preference and ordinary shares, bonds and long-term loans. St. Lumby states that there are also other long-term sources of finance, from which government grants are the main ones, however the three mentioned above prevail.

Birman G. & Shmidt S. (1997) stated that the fact of including the depreciation expenses when calculating the profit, did not influence the cash inflow, which could be directed for the financing of the investment. Those two values are absolutely independent from each other. The depreciation amount calculated by the accountants and presented for the financial accountability does not influence the amount of the cash inflow possessed by the company. The write-off of the portion of long-term assets value is a conventional accounting of non-cash expenses. As they do not generate cash inflow, they do not change the possessed amount of cash either. According to the opinion of the authors mentioned, the depreciation amount can influence the cash inflow only through the saving of taxes. In some cases, analysts can add the depreciation to the profit, calculating the cash inflow during a certain period. However, the same result will be received if those expenses are not be distracted when calculating profit.

A few counterarguments can be brought to the statements of the mentioned authors. Firstly, the authors do not pay attention to the substantial point that the source of finance is the retained earnings, which is calculated after eliminating depreciation expenses, taxes and dividends. So, calculating the net cash flows, the depreciation expenses should be added to the net earnings. Secondly, the statement that the depreciation is not a capital is not questionable, but that does not mean it is not a source of finance at all. The investments can be financed when the cash is available, but not when the capital has increased.

Pike R. (1999) presents the research results on the ways how the UK companies have financed their investments in 1986-1997. From 33% to 73% of the long-term investments were financed by the internal sources of finance (retained earnings and depreciation). For the most of the companies, as their cash flow statements show, the depreciation is the largest source of finance (Brigham J., 1999).

Even if the direct link does not exist, the depreciation can be used for the specific goals – renovation of the worn out long-term assets (Mott G., 1997).

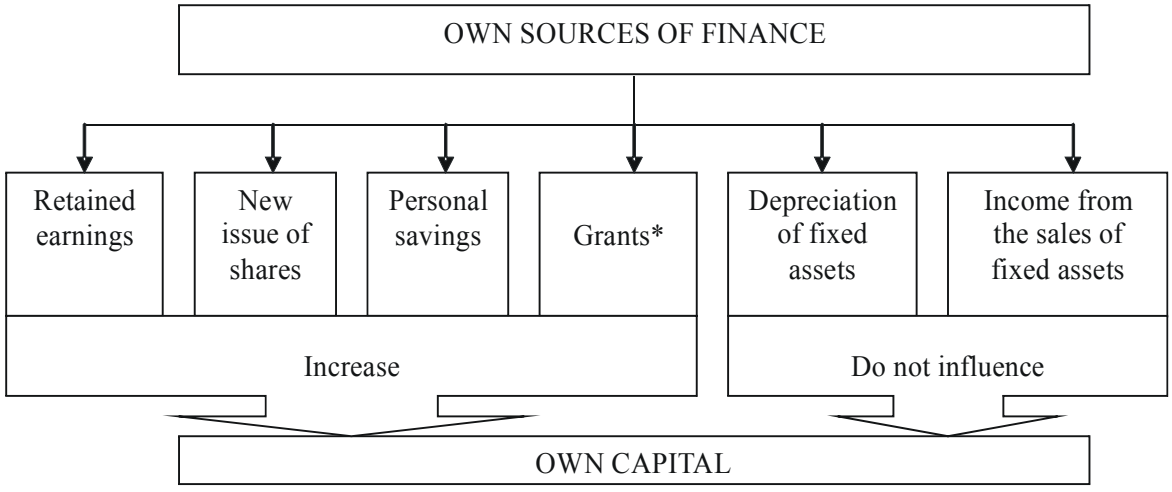
Cash is necessary for the financing of investments. The cash received from the sales or the unnecessary equipment can be used for purchasing new long-term assets. At the same time the earned profit cannot be used as the source of finance till it returns to the company in a form of cash. Capital in the company will increase by the amount of retained earnings, but just part of retained earnings will become the source of finance. Seeking to finance the investment by shares, we will not be able to implement the investment before the owners of shares have not paid for them.

Summarizing, the concept of sources of finance is broader than the concept of capital because not all sources of finance are related to the capital (cash received through depreciation and through sales of fixed assets). Sources of finance are the way of receiving cash, i.e. the source of cash, and capital is the source of all assets. In many cases these two concepts – sources of finance and capital – mean the same, in some cases they do not (Figure 1).

Cost of depreciation as the source of finance of long-term investment was analysed by Brigham J. (1998). He has stated that the cost of depreciation approximately equals the WACC in the interval, which contains the cost of retained earnings and low risk debt capital. The author reasons on the motive, that the cash received through depreciation can be re-invested or returned to investors (shareholders and creditors). Later Brigham J. (1999) suggests a few motives of the reasoning for depreciation cost estimation:

- depreciation means that fixed assets wear out and their value decreases. If the company keeps functioning, a part or all of these sources of finance generated through depreciation should be re-invested in fixed assets;
- a company has a possibility to distribute cash received through the depreciation for its investors – those sources are not necessarily re-invested. Actually, if the company cannot earn at least the investors could, it should pay cash to them;
- a company could distribute the cash accumulated through the depreciation for the owners of ordinary, privileged shares or bonds. If the cash is distributed to the owners only, the debt ratio will increase. This ratio will decrease, if all the cash is allocated to the payment of debt;
- because the cash received through the depreciation can be distributed to all investors of a company, cost of depreciation as a source of finance should represent the alternative cost of all three groups of the sources of finance. Average alternative cost should be estimated according to the same capital structure which was used estimating WACC.

Brigham J. points out that similar reasoning should be applied for the other sources of finance generated internally, such as revenue from the sales of fixed assets.



* - grants as a source of finance has the features of own and debt capital

Fig. 1 **The relationship between the own sources of finance and own capital**

Two last motives of Brigham J. are baseless. Cash accumulated through the depreciation is the outcome of the former investment. If investment was financed by debt capital only, cash has been or will be paid back to the creditors and it will be impossible to use the cash generated through the depreciation for financing of the future investment again. Just the part of cash received through the depreciation will become the source of finance of long-term investment – that part which was received for the previous investment from the owners. So the cost of depreciation will not be equal to the WACC in the interval containing cost of retained earnings and low risk liabilities, but just the cost of retained earnings. The same methodology can be applied for the estimation of the cost of the revenue from sales of fixed assets.

Estimation of the Cost of Grants

Latterly grants have become an important source for finance of long-term investments in the agricultural companies and farms, and substitute the own capital in the capital structure of the investment project. From the philosophical and methodological point of view grants are a source of finance, which has a cost, reflecting the minimum required return of its owner – government or international fund – from the concrete investment project.

For example, SAPARD requirement was that the internal rate of return (IRR) had not be less than an average interest rate on the middle-term loans of the banks of the previous year. So, WACC must be equal or less IRR in order to make investment decision. When the investment project is financed from various sources of finance, WACC depends on the cost of these sources and we can calculate the cost of the grants using the formula of WACC (Alekneviėienė V., 2003):

$$(3)\ \mathrm{WACC} = \frac{C_d i + C_e r + C_g x}{C_d + C_e + C_g} \le i_a\,(\mathrm{IRR})$$

where: C_d, C_e, C_g – accordingly the total of debt capital, own capital and grants;

i, r, x – accordingly the cost of debt capital, own capital and grants;

i_a – average interest rate on the middle-term loans.

Transforming the formula, the cost of grants can be calculated:

$$(4)\ x \le \frac{i_a\left(C_d + C_e + C_g\right) - C_d i + C_e r}{C_g}$$

The methodological problems of estimation of cost of grants arose during the implementation of the research works and consulting the managers of agricultural companies and farmers on the risk management of investment project.

Conclusions

- Three levels of the limitations of the use of CAPM are identified: 1) limitations which are general both for the developed and developing economy countries; 2) limitations which are concerned with a small, closed and "poor" efficient security exchange market; 3) limitations which are characteristic for the companies which circulation of shares is closed. The estimation of cost of retained earnings of agricultural processing companies in Lithuania is limited by the problems of three levels mentioned above because there are a lot of closed joint-stock companies in this sector. There are no joint-stock companies among the agricultural producers, so for the estimation of the cost of retained earnings of these companies even "net analogy" CAPM cannot be used.
- DCF method can be used only by a few companies that have implemented a stable dividend policy. When a company cannot maintain annual dividend growth, DCF method should be modified ignoring dividend growth.
- The estimation of cost of retained earnings considering the rate of interest on the company bonds is simple but less precisely. The companies of agricultural sector in Lithuania do not issue bonds yet, so this method cannot be applied for the estimation of the cost of retained earnings.
- For the meantime it is purposive to use the method of net profitability for the estimation of cost of retained earnings as well as for the cost of new issue in the companies of agricultural sector. This method should be modified by the consideration of three indicators: average earnings per share or return on equity in the companies of the same industry; an average capital structure and the capital structure of the company; current risk of the company and the risk of the new invest-

ment project. Some problems are related to the depreciation as a source of finance of long-term investment.

■ Cash accumulated through the depreciation is the outcome of the former investment. If the investment was financed by debt capital only, cash has been or will be paid back to the creditors and it will be impossible to use the cash generated through the depreciation for financing of the future investment again. Only the part of cash received through the depreciation will become the source of finance of long-term investment – that part which was received for the previous investment from the owners. So the cost of depreciation will not be equal to the WACC in the interval containing cost of retained earnings and low risk liabilities, but just the cost of retained earnings. The same methodology can be applied for the estimation of the cost of the revenue from the sales of fixed assets.

■ From the philosophical and methodological point of view grants are source of finance, which has a cost, reflecting the minimum required return of its owner – government or international fund – from the concrete investment project. Cost of grants can be calculated using the formula of WACC and the minimum required IRR by the owners of grants.

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Customs duties and problematic aspects of financial inventory quantities

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Abstract

Scientific research covers the period between 1995 and 2004 when Latvia developed the concept of national foreign trade and established its customs policy that play a significant role for the development of national economy. The scientific study is based on the national consolidated budget and reveals the impact of customs duty on the fiscal, economic, social and cultural development of the national economy.

The paper focuses on the analysis of customs duty revenues in relation to the export and import turnover by the groups of countries (EU and CIS). The analysis includes the conceptual indicators of foreign trade – impact of export and import negative balance on GDP and the national economy. Main recommendations directed towards the flourishing economy of Latvia are provided.

Keywords: customs, taxes, budget, Latvia, European Union.

Introduction

In any economic system governmental institutions carry out undertakings not only for political and military defence but also for the promotion of the economical development and the social provision of the population. The economical protection is carried out by means of different undertakings – state investment, tax system, customs tariffs and dues, import duties, rate of exchange, certification of production quality, sanitary restrictions and others. Even such undertakings as bureaucratization of imports documents are included, i.e., drawing-up of imports has become a labour-, time- and transport-consuming process and because of it is not economically profitable to import some goods. The economical protection is carried out by more or less concealed methods. In the socialist system of the USSR the foreign trade was the monopoly of state. Under the market conditions as far as possible concealed restrictions of imports are used for the home market protection. Only industrially highly developed countries afford more free imports. The European Union uses strict restrictions of imports as well as pronounced favourable regulations of imports.

The home market protection is only necessary if the price of the article is higher in the world market than in a specific country. Otherwise the article produced in the native country and which is more expensive than that of an equivalent imported article, has no sale possibilities in the home country. It is not possible to sell such an expensive article (having high production costs) outside the republic without exports subsidies.

During 50 years Latvia did not have to solve the customs problems, because export – import matters were settled by the central institutions of the Soviet Union. They were the commercial treaties in which the sale and purchase regulations were set by the agreement of the both sides.

The scientists A. Boruks, B. Arnte, Ī. Vītola, R. Oškalne, etc. have studied the problems related to foreign trade and customs and their impact on the development of national economy of Latvia after it regained its independence in 1994.

Aims, tasks and methods

The aim of this article is to study the functioning of the customs duty, its role in the taxing system and its improvement in conformity with the principles of taxing and their conformity with those of the EU.

To achieve this goal the following tasks are to be carried out to –

1. investigate the role and nature of customs duty;
2. analyse the history of customs duty in Latvia;
3. study and solve economic problems connected with customs duty;

4. elaborate the proposals for the improvement of customs duty in Latvia.

The research is based on the induction and deduction methods, on the analysis of economic and social conditions of the tax, on the monograph method, on the analysis of the law of customs duty in Latvia as well as on its conformity with export - import amount problems in Latvia.

After restoring its independence Latvia had to create its national system of foreign trade. On December 23, 1993 our parliament (Saeima) passed the law on customs tariffs. According to the law import and export custom tariffs were ratified in two levels. Goods, produced in the countries having agreements with Latvia for granting the most favoured nation treatment, had the minimal level of custom tariffs rates. Particular custom dues being of great significance abroad were not introduced.

On May 1, 2004 Latvia joined the EU and thus foreign trade regulations of the EU became compulsory for Latvia. All previous free trade agreements were declared to be void and foreign trade policy was changed essentially. Therefore there was a need to adjust to the new situation and clarify foreign trade balance with the countries outside the EU, as well as with other EU Member States. Consequently these aspects determined the necessity for the current study.

Results and discussions

One of the conditions of the aims of the European Community foundation agreement is the formation of common market and economic union. To reach the aim it was demanded that the participating countries have:

- a common trade policy;
- the home market in which all the participating counties cancel the obstacles limiting a free goods movement;
- a common tax policy.

The administration of customs duties is connected with supplementary difficulties and control undertakings in comparison with the administration of other taxes, because the customs duty unlike the other taxes is determined for every article separately. Therefore the customs duty forms a long list of tariffs in which each article has a definite customs rate or amount of the tax. Besides the description of the article both in national systems of customs duties and in international trade agreements as well as in customs statistics a unified, uniform description of articles having definite figures or code, is used all over the world. In the world the most common and widespread is "The harmonized system of article description and code" which is very often marked with letters "HS" in special literature. The Latvian parliament has ratified the adherence to HS, and it is obligatory since January 1, 1998.

When joining the EU, the EU legislation acts became obligatory as regards the realization of tax policy. Since May 1, 2004 while transporting the goods within the EU, they are not taxed with the custom duty, but for the goods imported from the outside of EU countries, EU definite custom tariffs are used based on the EU juridical acts. In Latvia the income from the customs duty was 17.1 million lats in 2004, which was 9.1 percent less than in 1993. The customs income from the domestic total production was 0.3 percent in 2004, it is in the level of the former 3 years. According to the forecast of the authors and the Ministry of Finances the custom income could slightly grow up to 17.2 million lats in 2005. The increase of the custom duty income is connected with the growth of imports in the country. As stated before the income of the customs duty will be affected in 2005 by:

- the growth of imports from the countries other than the EU participating countries;
- EU average weighted custom duties interest rates.

The custom tariffs are often connected with the quotas of goods. These quotas are widely used all over the world, in the EU too. The quotas are determined in the trade agreements of the partner countries. In Latvia the quota system is proved to be completely right as regards the import quotas for cereals, sugar, alcohol and other goods. Of course, the system should be developed and accommodated to the market situation. In total, the quotas provide definite deliveries of specific production quantities conformable to the market demand and strengthen the stability of the domestic market. It would affect favourably not only the development of agriculture, but that of the industry too. On December 23, 1993 the parliament adopted the

law on "Custom tariffs" which came into force in the end of 1994. Custom tariffs were determined by introducing:

- a specific tariff expressed as a definite rate of a specific article (e.g. in lats) on a unit of the article;
- value tariff (tariff ad valorem) determined as a specific per cent rate from the declared value of the article;
- in separate cases a combined tariff of both kinds of custom was developed by determing both the specific tariff and tariff of the value.

Custom tariffs were maintained in several levels in 1993:

- countries having concluded the free trade agreement as well as having the most favoured nation treatment MFN were included in the first level. It meant that these countries must be provided with no worse conditions than those received by the other countries having MFN regime. Usually, it means zero or a very small custom tariff too.
- countries having no free trade agreement as well as no MFN regime were included in the second level. They have the usual custom tariffs which are divided in two groups or do not produce the relative article in their countries or it has a certain significance in state defence.

Up to 2003 Latvia had concluded the free trade agreement with 29 countries

(Latvia agriculture and rural policy and development in 2003. 2004).

Custom tariff rates were small in Latvia, therefore the income from the custom tariff was small too – 15.3 – 17.2 million lats or 2.1 – 0.7 per cent from the general government budget (Table 1). Moreover, the share of custom duty income demonstrates a falling tendency, it has decreased from 2.1 per cent in 1995 to 0.7 per cent in 2004 and 2005 in the enterprises of general government budget. The income in absolute figures from the custom has decreased for 1.2 million lats in the period from 1995 to 2003, although the imports have increased from 959.6 to 2989.2 million lats during the same time according to data of CSB (Central Statistics Board), it is more than threefold. In the same way during this period the exports has increased 2.4 times too.

The principal reason why the custom income has fallen when the amount of foreign trade grows, is that Latvia concluded many free trade agreements and granted the most favoured nation treatment (MFN) to the contracting countries by extempting them from paying the custom duties and dues.

Collecting specific customs duties is connected with essential enterprises – fixing target prices and import threshold prices for a specific kind of product. Therefore, the basis is the state policy of specific prices practiced in the EU, USA, Canada and other countries.

The custom duty is fixed for each kind of article separately according to the Latvia nomenclature of harmonized goods, formed on the combined nomenclature basis of International goods description and coding harmonized system as well as on that of the EU.

During the years mentioned above the largest tax income has come into the consolidated budget from the indirect tax (value added tax, excise and customs duty) – the indirect tax has increased from 521.3 million lats in 2001 to 853.8 million lats in 2005, i.e., 63.8 per cent more during the above mentioned period. The largest share of the indirect tax is made by the value added tax, then comes excise tax, but the customs tax in the indirect tax income has decreased from 2.9 per cent in 2001 to 2.0 per cent in 2005. (Table 2)

The amount of tax income is largely affected by the state macroeconomical indices. While studying the tax share in IKP (gross domestic product) during the period from 2000-2004, it is possible to draw a conclusion that it has a tendency to fall from 28.1 per cent in 2000 to 27.5 per cent in 2004. It means that the gross domestic product (IKP) grows more quickly than the tax income, and the tax load decreases accordingly. This decrease is also affected by the relation between the direct and indirect tax.

The decrease of the customs duties usually does no result from the decrease of direct budget income. It is compensated by a growing turnover of the foreign trade, thus, the state collects larger value added tax and profit tax, as well as other payments.

An important index is the foreign trade turnover. While decreasing the tax interest rates, the amount of foreign trade turnover increases, and the larger is the trade turnover, the more money comes into the state budget (it must coincide with the Foreign trade conception).

Table 1

Tax income by their kinds in million lats and their share in per cent in the income of consolidated budget from 2001 – 2005

Kinds of tax income	2001		2002		2003		2004		2005	
	Inc.	%	Inc.	%	Inc.	%	Inc.	%	Inc.	%
Income of consolidated budget	1696.9	100	1874.0	100	2107.4	100	2530.1	100	2575.5	100
Tax income from:	1452.3	85.6	1598.5	85.3	1782.5	84.6	2025.7	80.0	2250	87.4
Population income tax	283.8	16.7	319.5	17.0	367.1	17.4	435.5	17.2	466.2	18.1
Corporate income tax	98.4	5.8	109.7	5.9	93.9	4.5	127.8	5.1	149.1	5.8
Social security contributions	481.3	28.4	528.8	28.2	561.9	26.7	641.2	25.3	698.8	27.1
Immovable property tax	46.1	2.7	46.7	2.5	51.9	2.9	56.7	2.2	53.5	2.5
Natural resources tax	10.5	0.6	10.8	0.6	9.8	0.5	8.2	0.3	8.5	0.3
Lottery and gambling game tax	5.3	0.3	7.4	0.4	7.8	0.4	10.2	0.4	11.5	0.5
Value added tax	350.6	20.7	383	20.4	459.2	25.8	486.7	24.0	577.3	22.4
Excise tax	155.4	9.2	171.5	9.2	205.4	9.7	234.6	9.5	259.3	10.1
Customs duties	15.3	0.9	15.1	0.8	18.8	0.9	17.1	0.7	17.2	0.7
Passenger car and motor cycle tax	5.6	0.3	6	0.3	6.7	0.3	7.7	0.3	8.1	0.3

Source: *[2;9]*

Table 2

Changes of indirect tax structures during the period from 2001 to 2005

Kind of indirect tax	2001	2002	2003	2004	2005
Indirect tax together, million Ls	521.3	569.6	683.4	738.4	853.8
Including %: value added tax	67.3	67.2	67.2	65.9	67.6
excise	29.8	30.1	30.1	31.8	30.4
customs	2.9	2.7	2.7	2.3	2.0

While working out the Foreign trade conception in Latvia the principle, that the state trade policy is elaborated by taking into consideration the national interests, was not observed. Customs and tariffs may be decreased and liberated only when the local production is strengthened so that it may assume the competition struggle with the foreign enterprises. On the contrary Latvia foreign trade conception stresses that "the tariff policy is not and is not allowed to be oriented to fiscal aims or to the aims of budget income increase" (Foreign trade conception. 1995). The customs tariffs were envisaged to cancel up to 2000, in Latvia the state assistance was not given to the traditional, wide-spread production, letting to decline such branches as floriculture, horticulture,

Table 3

Share of export-import negative balance to gdp and export value

Year	Total GDP, LVL million	Negative balance of foreign trade		Percentage of foreign trade balance to export value
		LVL million	% of GDP	
1995	2580.1	- 10.5	271.2	39.4
1996	2829.1	- 17.1	483.0	60.7
1997	3275.5	- 18.6	610.7	62.8
1998	3589.5	- 23.2	812.4	76.0
1999	3897.0	- 19.0	715.6	71.0
2000	4685.7	- 17.5	802.6	70.9
2001	5168.3	- 945.2	18.3	75.2
2002	5689.4	- 1088.6	19.1	77.3
2003	6322.4	- 1338.5	21.5	81.1
2004	7359.4	- 1637.5	21.7	76.9
Total 1995-2004	45396.4	- 8705.3	19.2	71.9

Source: *drawn according to Statistical Yearbook of Latvia 1997-2004; Foreign Trade of Latvia # 4, 2005*

local production of vegetables. It was explained while writing into the conception that "The assistance has to be concentrated in narrow, especially perspective sectors while avoiding to support the traditional output production the rate of which has already a large competition (e.g., traditional agricultural products – milk, meat, grain). The same may be said as regards the other kinds of state support – tax policy, credit policy, state purchase policy." (Foreign trade policy. 1995).

The foreign trade conception did not include the coordination of Latvia import with the interests of national economy. Also the free trade agreements were grounded on the fact that they will increase Latvia export possibilities, but did not mention that at the same time the possibilities of foreign imports will largely increase, and the local market will be taken over by the foreign companies. Its result was a continuous and very large increase of import when compared with the export (Table 3).

The turnover of exports and imports of foreign trade has grown very quickly during the period from 1995 – 2004 (10 years period), and generally is similar with the development in the world. Only in 1999 in comparison with the former year, a slight fall of export and import may be observed, which may be connected with the general economical crisis in Eastern Asia and particularly in Russia. Exports decreased rapidly to Russia, and because of it many enterprises were closed or they reduced to turn out the production too; the number of unemployed increased already with the beginning of the crisis in 1998 and 1999. As a result the people had less money for buying food and services, but the enterprises – for continuing their activities and extention – imports decreased, particularly from the largest importer – the EU.

In total, Latvia export increased from 688.4 million lats to 2130.7 million lats or 3.1 times during the 10 years mentioned. The import growth was still larger from 959.6 million lats to 3768.2 million lats or 3.9 times (Table 3).

While taking into consideration the fact that Latvia tried to increase the export only, paying not the necessary attention to coordinate the different branches of import with the interests and needs of our national economy, during the period the negative value of export-import balance (or saldo) of foreign trade grew very rapidly from 271.2 million lats to 1637.5 million lats or 6.0 times. The total negative saldo sum during the 10 year period in actual prices is 8705.3 million lats, i.e., 19.2 per cent of the gross domestic product (IKP) of 10 year sum (Table 3).

It has to be taken into consideration that the foreign trade negative saldo grows absolutely each year. In 1995 it was only 10.5 per cent of the GDP of the relative year, but in 2004 – already 21.7 per cent. It has to be mentioned that the negative saldo is formed mainly with the EU countries. The government has the obligation to think seriously what to do in order to reduce this negative saldo, particularly because since 2005 the trade with the other EU participating countries turns from the foreign trade to the domestic trade.

The negative balance of imports with the EU participating countries is formed by the large import of machines and mechanisms, means of transport, optical appliances, cement and glass articles, plastics and goods of chemical industry, paper and cardboard, foot-wear, flora products, grease and oil, as well as alcoholic and soft drinks and other goods of food industry. Thus we bring in many things (glass, cement, foot-wear, grease, flora products, flowers and others) which we ourselves produced in the past and exported from our republic, but the production of which during the period of our first governments was simply eliminated and done away as unnecessary.

Therefore, there is a question – where do we get the money with which we pay for the large negative saldo with the EU? The prevalence of import over export (negative saldo) is 71.9 per cent of the mutual export value in Latvia during the 10 year period mentioned before. Moreover, the negative saldo shows a rising tendency, in the years 2003-2004 it was 81.1 – 79.9 per cent (Table 3). Money for imports we got partially from:

- services, mainly from the transport of goods from Russia and other NVS (Union of independent countries) countries to our ports, as well as from the transit of industrial goods from our ports to Russia;
- sale of our property, mainly land and buildings, as well as forests, capital parts of industrial, transport and other enterprises to the foreigners;
- investments which foreigners invest in our bank system, formation of supermarket net and other branches.

After Latvia joined the EU in 2004, the situation changed. It was envisaged that the joining process will be a gradual one, lasting for several years, and the consequences will become visible in 2007 - 2009.

In the EU budget and financial policy some changes had taken place. Since January 1, 1975 a new procedure came into force which envisaged the EU financing from its own means, they were the means which were not considered as a part of the finances of separate partner countries, but coming from the EU common aims and interests. It was determined that the EU means are formed from:

- deductions from agriculture;
- customs;
- part of the value added of the partner country.

In 1988 the EU board came to an agreement about coal and steel (EGKS) as well as about customs which are considered as the common EU financial resources, and alongside with the previous 3 financial sources included a 4th one – special their own income which were calculated according to the gross value of the national product, and determined that it is used when the 3 sources mentioned above cannot provide a sufficient amount of income. The common part of payment of participating countries in the EU budget cannot exceed 1.15 per cent, but from 1988 – 1.2 per cent from the gross national product (H. Teske. 1990).

The agricultural addition of price or the changing interest rates of agricultural products realized by means of target prices and import threshold prices were of great significance up to 1995. The target price was the price in which domestic producers were interested as this price covered the average cereal costs and provided for an insignificant profit. The EU import threshold price was a specialized customs duty which made even the

Table 4

EU budget revenues in 1984 and 2004

Type of revenues	1989		2004	
	billion euros	%	billion euro	%
Sugar levy	1.19	2.8	1.20	1.3
Extra charge on agriculture	1.28	3.0	-	-
Customs duty	9.95	23.4	9.85	10.4
Value added tax (VAT)	26.22	61.6	13.32	14.1
Own resources calculated on the basis of national income	3.90	9.2	69.44	73.4
Different, previous year balance	-	-	0.81	0.80
Total	42.54	100.0	94.62	100.0

world market price fluctuations and raised the grain price up to the level in order to protect the local producers from the low world market prices (determined by the grain importer countries, mainly USA, wheat growers of Canada regions, New Zealand and Argentina which grow wheat in the fertile black earth or brown earth and which had a very favourable climate for wheat growing, therefore the wheat costs were very low). The EU import threshold price approached the target price and helped to keep the price on a constant level and on such an elevation that it would be profitable for the producers – the farmers of the EU participating countries – to grow wheat. However, GATT/ WTO demanded the liberalization of wheat costs under the USA pressure and in 1995 the EU was forced to cancel these prices at the same time introducing the EU additional payments at the prices for the areas which the farmers used for cereal growing (and other cultures too) – the so-called hectare additional payments.

Conclusions and recommendations

1. At the beginning Latvia custom duties policy was formed with a condition that it will not be oriented to fiscal aims or the increase of budget revenue.
2. The customs duties revenue in the consolidated budget decrease because since 2004 the trade with the EU participating countries from the foreign trade turns into the domestic trade.
3. The EU budget revenue mainly consist of the payments of the participating countries or the so-called their own resources which in 2004 made up 73.4 per cent from the common budget revenue, but the customs duties – 10.4 per cent demonstrating a falling tendency together with the widening of the domestic market.
4. Customs tariffs are often connected with the goods quotas. Goods quotas are widely used in the world, in the EU too. In total the quotas provide for a definite delivery of a specific kind of production conformable to the market demand as well as strengthen the stability of the domestic market.
5. The quota system must be developed and adapted to the market situation, it must affect favourably both the agricultural and the industrial development.
6. The custom tariffs must be reduced and liberalized only when the local production is strengthened so that it can take part in the competition struggle with the foreign enterprises.
7. The negative saldo of the foreign trade increases both in absolute figures and in per cent. The state must carry out some undertakings to reduce this negative saldo of the foreign trade.
8. The introduction of the EU standards and requirements for the adaption of taxes (including that of the custom) will promote the arrangement and simplification of Latvia tax system.
9. The customs duties policy must be coordinated with the conception of Latvia foreign trade, and it must be created as in the developed countries in the world.

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Финансовый анализ и проблемы его методики
Financial Analysis and Problems of its Methodics

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Abstract

Under market conditions it is difficult for economic subjects to adapt to constantly changing business environment, to form and accept activity management decisions, and assess financial conditions. Economic activity is related to financial activity; in other words they are interdependent. The success of the economic activity depends on the financial state of the economic subject. Analysis is a method for the cognition of a certain object or pro-cess. It allows noticing shortfalls and negative changes in the activity of an economic subject in time, and helps to find ways for its improvement. Therefore the analysis can help to make qualified management decisions.

In its turn the process of the analysis consists of two stages – initial processing of the analytical data processing and estimation of the obtai-ned results. Therefore the methods of logical analysis and synthesis are used in the process of the analysis. In complex investigations when we move from general estimations to the analysis of individual parts and facts the method of logical analysis (deduction) is applied; when it is necessary to form general image and to draw conclusions on the scale of the entire enterprise according to the estimation of the results of separate component activity fields and facts we move to the method of synthesis (induction).

Novelty of the theme. The methodics of the financial analysis of the economic subject has not been broadly investigated, while kinds and types of the analysis have been in-vestigated more broadly.

Research aim – to prepare the methodics of the financial analysis of the economic subject after having analysed the essence of the financial analysis and its methodics, kinds of the analysis, methods of its performance, types and indices.

To pursue the aim the following objectives should be solved: to specify the essence and kinds of the financial analysis; to investigate met-hods and ways of the performance of financial analysis; to perform theoretical analysis of the indices of the economic subject activity; and to develop a model for the financial analysis of the economic subject.

Key words: financial analysis, kinds of analysis, indicators, methods, ways, means.

Введение
Introduction

В условифях рыночной экономики для предприятий довольно трудно приспособится к постоянно изменяющейся среде предпринимательства, квалифицированно сформировать и принять решения по управлению их деятельности б оценивать финансовое состояние. Хозяйственная и финансовая деятельность предприятий тесно взаимосвязаны. Они обусловливают друг друга. Успех хозяйственной деятельности предприятия во многом зависит от его финансового состояния. Анализ является методом познания определенного предмета или процесса. Он же позволяет вовремя подметить недостатки деятельности хозяйственного субъекта, отрицаательные его изменения и помогает найти способы для улучшениия этой деятельности. Поэтому анализ может способствовать квалифицированному сформулированию управленческих решений. Для анализа необходима методика исследования.

Виды и способы финансового анализа деятельности предприятий, исчисляемые показатели в своих трудах рассматривали

ученые Литвы, – Е.Бушкявичюте, И.Мачеринскене (Buškevičiūtė E., etc., 1999), Л.Юозайтене (Juozaitienė L., 2000), В.Квядарайте (Kvedaraitė V., 1995), Й.Мацкявичюс, Д.Пошкайте (Mackevičius J., etc., 1998), А.В. Руткаускас (Rutkauskas A.V., 2000) и пр. а также зарубежные экономисты, – В.Ковалев, О.Волкова (Ковалев В., и др. 2001), Е.М.Четыркин (Четыркин Е.М., 2000). Подбор видов, методов и способов и показателей анализа, по мнению авторов, зависит от целей анализа и содержания анализируемого объекта, однако нередко предопределяемый количеством и качеством имеющейся информации.

Финансовый анализ предоставляет возможность оценить суть деятельности хозяйственного субъекта и предусмотреть перспективы дальнешего хозяйствования. Также имеется возможность проверить потвеждение в прошлом принятых решений и обосновать настоящие и будущие управленческие решения. Ретроспективным анализом устанавливается и оценивается настоящая ситуация хозяйствования, а информация, полученная при перспективном анализе помогает обосновать смысл и эффективность будущих управленческих решений. Финансовый анализ является одним из самых объективных средств для правильной оценки имеющейся ситуации. Основные цели финансового анализа это:

- оценить финансовую стабильность хозяйственного субъекта, эффективность использования ресурсов, выяснить глубинные причины негативных изменений;
- исследовать влияние внутренних и внешних факторов на результаты деятельности, определить возможности улучения хозяйствования;
- оценить эффективность деятельности хозяйственного субъекта, исследовать денежные потоки и прогнозировать тенденции их изменения;
- сформировать нормативную систему показателей, которая позволила бы прогнозировать деятельность хозяйственного субъекта, ее экономическую эффективность и обоснованность, настоящее состояние хозяйственной деятельности.

Одним из главных средств в финансовом анализе является поиск информации, ее накопление и систематизирование.

Чаще всего финансовый анализ производится при использовании данных финансового учета и отчетности. Хозяйственные субъекты, состовляющие финансовую отчетность должны знать, которые из финансовых показателей, представляемых в финансовой отчетности наиболее точно характеризуют оброзовавшуюся ситуацию. Принимаемые решения должны быть обоснованы исследованием и логикой. Временами принимаемые решения могут предопределять качественные факторы, а показатели учета оставаться лишь «материальной базой» для принятия решений.

К другой группе средств анализа относится определение объема, периодичности, последовательности процедур анализа. Их предопределяет цель финансового анализа.

К третьей группе средств анализа относится технические средства анализа.

Новизна исследования. Методика финансового анализа шире не была исследована. Исследовались только виды и способы анализа.

Объект исследования – показатели деятельности хозяйственного субъекта, методы и способы их анализа.

Цель исследования – в результате анализа сути финансового анализа и его методики, видов анализа, методов и способов его проведения, оцениваемых показателей подготовить методику финансового анализа деятельности хозяйственного субъекта.

Для достижения цели исследования предусматривается решить следующие задачи:

- выяснить суть финансового анализа и его виды;
- исследовать методы и способы финансового анализа;
- произвести теоретический анализ показателей оценки деятельности хозяйственного субъекта;
- подготовить модель финансового анализа деятельности хозяйственного субъекта.

Методика исследования:

- при использовании монографического метода, методов дедукции и индукции исследованы виды финансового анализа, методы, способы и средства его проведения,

представленные в научной и методической экономической литературе;

- при помощи статистического метода проанализированы главные показатели деятельности хозяйственного субъекта;
- при использовании метода логического анализа и синтеза подготовлена модель методики финансового анализа деятельности хозяйственного субъекта.

В результате изучения научной и методической литературы экономистов Литвы и зарубежных авторов о видах финансового анализа его методах и способах, проведения логического анализа и синтеза установлено, что для оценки финансового состояния хозяйственных субъектов чаще всего используется горизонтальный, вертикальный и коэффициентный анализ. Для анализа деятельности хозяйственного субъекта применяются сравнительный, индекный, графический и др. способы; для определения изменений и их предопределяющих факторов применяется способ элиминирования, корреляционный и регрессионный анализ.

Виды и показатели финансового анализа
Types and indicators of financial analysis

Анализ – довольно обширное понятие. С научной точки зрения, анализ это выделение сути процесса или явления при установлении и исследовании всех его сторон и составных частей, а также нахождение основы объединяющей составных частей и свойств процесса (явления) в единое целое. Это позволяет определить закономерности развития.

Финансовый анализ можно исследовать в двух аспектах: экономическом и техническом. Первый характеризует содержание, объект, цели и задачи анализа, а второй, который зависит от первого, – это собирание аналитических способов, технических средств и процедур их осуществления.

Объем анализа, его периодичность и последовательность процедур предопределяет цель проводимого финансового анализа. В зависимости от целей, выдвигаемых перед финансовым анализом, анализ класифицируется на виды по разным признакам. Л.Юозайтене виды финансового анализа предлагает выделять по трем признакам – времени, назначению и функции анализа (Juozaitienė L., 2000), в то время, когда Е.Бушкявичюте и И.Мачеринскене – даже по десяти признакам – объему, субъекту, цели, частоте повторений, содержанию аналитической программы, характеру сравнений, направленности исследования, степени охвата объекта анализа, использованию вычислительной техники (Buškevičiūtė E., etc.). В.Ковалев и О.Волкова виды анализа выделяют по шести признакам – широте и доступности привлекаемого информационного обеспечения, анализируемой подсистеме предприятия, временному аспекту деятельности, содержанию анализа, горизонту анализа и объекту анализа (Ковалев В. И др., 2001). Й.Мацкявичюс и Д.Пошкайте выделяют только ретроспективный и перспективный анализ (Mackevičius J., etc., 1998).

Другие экономисты тоже рекомендуют выделить виды анализа по выше упомянутым признакам. Следует обратить внимание на то, что во всех изученных трудах виды анализа выделяются по признаку времени.

В результате обобщения изученной научной и методической литературы, авторы статьи пришли к мнению, что финансовому анализу деятельности хозяйственных субъектов наиболее свойственны следующие признаки: субъект анализа, частота повторений, время, содержание аналитической программы, характер сравнений, направление исследования, степень охвата объекта анализа и объект анализа. Применение вычислительной техники следует отнести не к признакам анализа, а к его средствам. Виды финансового анализа, сгрупированные по выбранным признакам приведены в 1 таблице.

В зависимости от цели анализа выбирается один или другой вид анализа или их сочетание.

Данные финансового анализа могут быть выражены в цифрах, графической форме или описаны. Дла финансового анализа деятельности хозяйственных субъектов, прежде всего, нужна цифровая форма представления результатов анализа. Она может быть обобщена в виде таблиц, схем и диаграмм. Для их составления может быть использовано сочетание абсолютных, относительных и средних величин. Самыми популярными

1 таблица

Виды финансового анализа
Types of financial analysis

Признаки *Indicators*	Виды анализа *Types of analysis*
Субъект анализа	Внешний анализ
	Внутренний анализ
Частота повторений	Периодический анализ
	Единовременный анализ
Время	Ретроспективный анализ
	Перспективный анализ
Содержание аналитической программы	Комплексный аналих
	Тематический анализ
Характер сранений	Внутренний анализ деятельности хозяйственного субъекта
	Анализ деятельности хозяйственных субъектов района
	Анализ деятельности хозяйственных субъектов республики
Направление исследования	Анализ повышения прибыльности
	Анализ снижения затрат
	Анализ снижения материальных расходов
	Прочие направления
Степень охвата объекта анализа	Выборочный анализ
	Комплексный анализ
Объект анализа	Анализ финансового состояния
	Анализ ресурсов деятельности
	Анализ прибыли
	Анализ затрат
	Прочие объекты

являются таблицы разных форм, которые используются для представления, систематизирования и обобщения разных показателей. Графическая форма анализа помогает более наглядно показать представляемую информацию. Описная форма позволяет пояснить полученную информацию и сделать выводы. Эта форма необходима при обобщении результатов анализа.

В рыночных условиях деятельность хозяйственных субъектов рискованная. Поэтому, при ее анализе, на это следует обратить внимание и анализ произвести своевременно. Также важно хорошо изучить отраслевые финансовые показатели.

Выводы токого анализа необходимы при выяснении, какую деятельность целесообразнее развивать хозяйственному субъекту. На основе данных финансового анализа можно сделать выводы о эффективности, прибыльности и перспективности деятельности хозяйственного субъекта. Ссылаясь на приведенные выводы можно более основанно создавать и внедрять новые проекты. Только своевременный и объективный финансовый анализ составляет возможность принятия рациональных управленческих решений на кокой то период времени.

Результаты деятельности предприятий выражаются разными экономическими показателями. Для облегчения анализа они объединяются на группы по объекту и цели исследования – показатели анализа финансового состояния предприятия, оборотных средств, имущества долгосрочного пользования, рынка капитала, труда и заработной платы, затрат, финансовых результатов. При комплексном финансовом анализе исследуются показатели всех групп, а при выборочном (частичном) – одной или выборочно нескольких групп. Анализируются абсолютные и относительные показатели. В финансовом анализе наиболее распространены относительные показатели.

Методы и способы финансового анализа *Methods and types of financial analysis*

За несколько десятилетий в экономической литературе представлено свыше 100 методов исследования (Попович И., 1982). Так случилось потому, что были отождествлены понятия «метод» и «способ».

Слово «метод» происходит от греческого слова “met-hodos” и означает путь исследования (Словарь иностранных слов, 2003). В широком смысле слова метод является совокупностью способов и средств иследования явлений природы и общества (Buškevičiūtė E., etc.). Метод исследования – это система способов для исследования совокупности явления (Попович И., 1982). Теоретический анализ литературных источников показывает, что понятие «метод» шире понятия «способ». Способ исследования включает в себя совокупность операций, выполняемых аналитиком в процессе исследования (Попович И., 1982).

Методика финансового анализа – это система выбора вида финансового анализа, обработки цифровой и логической информации, ее анализа и синтеза с помощью подобранных методов, способов и средств.

Для произведения финансового анализа деятельности хозяйственного субъекта шире всего может быть применен статистический метод, охватывающий большинство способов используемых в финансовом анализе.

В свою очередь, прцесс анализа состоит из двух этапов – первичной аналитической обработки данных и оценки полученных результатов. Поэтому при произведении анализа привлекаются методы логического анализа и синтеза. В комплексных исследованиях, когда от общих оценок переходим к исследованию отдельных частей и фактов, применяется метод логического анализа (дедукции); когда по оценке результатов или фактов отдельных составных частей сфер деятельности нужно сформировать общий образ и выводы в размере всего предприятия, переходим к методу синтеза (индукции).

Практически, все авторы применяют те же способы финансового анализа, одноко их классифицируют на разные группы. Одни из авторов выделяют логические, эконометрические, психологические, графические и прочие (специфические) (Buškevičiūtė E., etc), другие – традиционные и математические (Mackevičius J., etc.), третие - неформальные (логические) и формальные (матаматические) (Ковалев В. И и др.).

Проведенный логический анализ научной и методической литературы позволило прийти к выводу, что способы финансового анализа деятельности хозяйственных субъектов целесообразнее всего разделять на традиционные и математические. Кроме того, для анализа деятельности хозяйственного субъекта нужно отобрать и использовать самые понятные и простые способы и только после этого перейти к более сложным. Способы финансового анализа, которых авторы статьи рекомендовали бы для проведения финансового анализа деятельности хозяйственного субъекта представлены во 2 таблице.

Все способы, приведенные во 2 таблице, относится к статистическому методу. Количество способов, применяемых для проведения финансового анализа деятельности хозяйственного субъекта, их сочетание всегда будет в зависимости от квалификации аналитика и поставленных целей анализа.

В финансовом анализе наиболее распространен *сравнительный* способ. С применением этого способа выясняются отклонения от планируемых (прогнозируемых) величин анализируемых показателей, показателей других предприятий,

2 таблица

Способы финансового анализа
Ways of financial analysis

Analizės būdai Ways of analysis	
Традиционные способы *Traditional ways*	Математические способы *Mathematical ways*
Сравнительный	Регрессионный –корреляционный анализ
Детализирования и обобщения	Дисперсионный анализ
Балансовый	Примечание. Другие матема-тические методы целесообразно использовать для исследования более сложных явлений
Группировки	
Средних величин	
Выделения основных звенъев	
Индексов	
Элиминирования	
Определения удельного веса	
Рядов динамики	
Коэффициентный	
Графический	

занимающихся однородной деятельностью, оценить темпы роста, динамику, тенденции и возможности, контролировать деятельность хозяйственного субъекта, предусмотреть перспективы развития.

Е. Бушкявичюте и И. Мачеринскене (Buškevičiūtė E., etc., 1999) предупреждает, что при применении сравнительного способа анализа, важно не нарушить принцип сравнительности показателей. В противоположном случаее не правильно оценили бы сложившуюся ситуацию. В.Квядарайте (Kvedaraitė V., 1997) утверждает, что для проведения сравнительного анализа целесообразнее обратиться в консултационную фирму. Зарубежные специалисты советуют для анализа отобрать менее друг с другом взаимосвязанные показатели. По нашему мнению, в случае достаточного обеспечения достоверной информацией, сравнительный анализ успешно можно произвести собственными силами специалистов предприятия.

Детализирование и обобщение. Разчленение обобщяющих показателей по разным направлениям (месту, времени, разным факторам) экономисты называют способом детализирования (Buškevičiūtė E., etc., 1999; Пасхавер И., 1979; Четыркин Е., 2000 и др.) или анализом отдельного процесса или явления и утверждают, что основная цель детализирования – определить взаимосвязь между составными элементами исследуемой системы, выяснить вклад отдельных ответственных лиц и подразделений предприятия на окончательный результат, определить место предусматриваемых убытков, финансовый результат продукта деятельности хозяйственного субъекта в разные этапы цикла его существования.

Цель обобщения – объединение исследуемых частичных явлений (процессов) в единое целое и оценка показателей характеризующих эту совокупность.

Балансовое сопоставление помогает определить взаимосвязь между отдельными экономическими явлениями и их принадлежность друг от друга, выяснить материальные, трудовые, финансовые ресурсы и целевое назначение их использования (Mackevičius J., etc., 1998). Балансовые сопоставления могут использоватся при анализе финансового состояния предприятия. Суть балансового способа в том, что связи между анализируемыми факторами отражаются балансовым равенством.

Группировка – это объединение анализируемых показателей в группы по признакам, характерным соответствующей группе (Juozaitienė L., 2000; Genienė M., 2001; Пасхавер И., 1979). Группировка данных помогает установить взаимосвязи между экономическими явлениями, воздействие отдельных показателей на общие.

Способ группировок, по мнению авторов, способствует определению влияния отдельных показателей на общие только в том случае, когда при устонавлении числа групп и оценке их однородности отбирается самый оптимальный критерий для определения численности групп и составления интервалов. С этой точки зрения для выделения качественно однородных групп целесообразно пользоваться алгоритмом группирирования, обосновывающимся методом максимальной вероятности, а при устоновлении длины интервала следует опираться на показатели признаков вариации, во всех случаях определяя критерии достоверности полученных результатов и однородности совокупностей.

Способом *средних величин* исследуются типичные свойства явления. Средние величины определяются при исследовании явлений связанных с деятельностью хозяйственного субъекта за отчетный период. К тому же, как указывает И.Мацкявичюс и Д.Пошкайте (Mackevičius J., etc., 1998), И.Пасхавер (Пасхавер И., 1979) средние велечины, указывая общие характеристики, нивелируют общие результаты и, по этой причине, они чаще всего испоьзуются вместе с группировками.

Выделение основных звеньев в системе исследования является рассмотрением приоритетных областей деятельности предприятия, которые чаще всего связаны с диспропорциями, происходящими или предусматриваемыми в системе исследования. Не вся имеющееся информация одинаково важна. Необходимо анализировать только ту, которая сможет помочь получить ответы на вопросы интересующие аналитиков.

Индексы являются относительными величинами, характеризующими изменение экономического явления с точки зрения времени и места. Они применаются при анализе объема продаж, скопившихся затрат, прибыльности и прочих экономических процессов. С помощью индексов можно выяснить факторы, влияющие на анализируемый показатель, измерить величину их влияния, определить факторы, решающие изменение анализируемого показателя (Genienė M., 2004; Пасхавер И., 1979; Четыркин Е., 2000 и др.).

Однако в научной литературе, при использовании индексов для анализа динамики явлений, часто отсутствует взаимосвязь между применением индексов и рядов динамики (Genienė M., 2004; Ковалев В. И др., 2001). Исходя из того, что каждый ряд динамики можно разделить на две составные части, одна из которых является трендом ряда динамики, а другая – откланения от тренда, по мнению авторов, все индексы анализируемых явлений необходимо разделять на субиндексы, одни из которых показали бы изменение анализируемых явлений во времени из-за их эволюции, а другие – из-за качественных изменений факторов, связанных функциональными связями

Суть метода *элиминирования* (цепных подстановок) составляется в том, что каждый проектный или базовый показатель по очереди меняется фактическим, других показателей оставляя неизмененными. Результат, полученный после каждой подстановки, сравнивается с результатом, полученным до подмены того показателя. Рассчитанное отклонение показывает количественное воздействие соответствую-щего фактора на изменение анализируемого показателя (Genienė M., 2004; Ковалев В. И др. , 2001; Четыркин Е., 2000; Пасхавер И., 1979 и др.). Способ элеминирования ппременяется для определения количественного влияния факторов, взаимосвязанных мультипликационными связями, на результатный показатель.

По мнению Е.Бушкявичюте и И.Мачеринскене (Buškevičiūtė E., etc., 1999) *исчисление удельного веса* того или иного показателя идентично способу вертикального анализа. Вертикальный анализ проводится тогда, когда каждый показатель финансового отчета сопоставляется с валовым базисным показателем того отчета, а полученная величина выражается в процентах. Статистики такой анализ называют

структурным анализом. (Теория статистики, 2002; Пасхавер И., 1979 и др.). При структурном анализе финансовых показателей за несколько лет, можно определить причины их изменения.

Динамические ряды – это ряд абсолютных или относительных величин, характиризующих экономическое явление с точки зрения времени. Каждое отдельное значение ряда динамики называется уровнем показателя, а разница между двумя уровнями – абсолютным приростом (снижением) (Пасхавер И., 1979). С помощью способа анализа рядов динамики, можно рассчитать средние величины показателей: средний уровень показателя или средний абсолютный прирост за определенное время или средний темп роста, а также, в результате подбора подходящего трендового уравнения, количественно оценить тенденцию изменения анализируемых явлений и процессов, прогнозировать их уровень в перспективе. В статистической литературе при подборе наиболее подходящей функции для характеризирования анализируемого явления или процесса, традиционно применяются два способа: 1) графическое изображение ряда динамики и 2) анализ цепных индикаторов ряда динамики (Пасхавер И., 1979; Теория статистики, 2002; Четыркин Е., 2000 и др.).

Первый способ может быть применен только в тех случаях, когда уровни ряда динамики анализируемого явления изменяются незначительно и довольно наглядно. В противоположном случае, когда наблюдается значительное колебание, этому способу отбора функции присущен субъективизм.

Суть способа анализа цепных индикаторов ряда динамики в том, что отбор функции связанно с аналитическими показателями рядов динамики, характеризующими характер изменения разбираемого явления. Именно этими показателями основывается отбор одной из математических функций анализа (Genienė M., 2002). Однако, при выполнении финансового анализа, по мнению авторов, эти способы имеют значительные недостатки так как при отборе трендового уравнения не принимаются во внимание другие функции, за исключением прямой, экспоненти или параболлы, и ими характеризуемые статистические ситуации. К тому же, возможности использования этого способа на практике весьма ограничены так как индикаторы рядов динамики рассматриваемых финансовых показателей только в исключительных случаях бывают стабильными.

Поэтому, при составлении алгоритма отбора математической функции финансовых показателей, по мнению авторов, радом с традиционно используемыми способами необходимо обратить внимание на то, что в динамике экономических явлений можно выделить две компоненти, одна из которых выражает преобладающую тенденцию, а другая – нестохастные откланения от нее. Таким образом, при подборе функций, характеризирующих тенденции изменения финансовых показателей, необходимо обратить внимание на значения параметров, показывающих преобладающее направление изменения явлений и расположение абсолютных откланений вокруг преобладающей тенденции.

Экономисты обращает внимание на то, что способ рядов динамики идентичен способу *горизонтального анализа* (Buškevičiūtė E., etc., 1999). Горизонтальный анализ проводится тогда, когда показатели финансовых отчетов сравниваются с данными прошлых периодов, а отклонения выражаются в абсолютных цифрах или относительных велечинах. Такой анализ показывает динамику показателей, но при его осуществлении невозможно определить причины из-за которых произошли эти изменения. И.Мацкявичюс и Д.Пошкайте горизонтальный анализ называют *анализом динамики* так как он отражает динамику показателей анализируемой отчетности (Mackevičius J., etc., 1998; Juozaitienė L., 2000).

Важным моментом горизонтального анализа является отбор базовых, предназначенных для сравнения, показателей. Однако, когда в отчетности имеются отрицательные или нолевые показатели, нельзя определить процентное их изменение. Это, по мнению авторов, является значительным недостатком горизонтального анализа.

При осуществлении горизонтального анализа выясняется еще один недостаток

горизонтального анализа – при желании определить динамику прибыли от основной деятельности предприятия, необходимы дополнительные расчеты.

Анализируя изменение показателей из года в год сталкиваемся с проблемой, когда установленное увеличение показателя не позволяет делать вывод о том, что достигнут хороший результат. По мнению авторов, к этому состоянию приводит тот факт, что при анализе не оценивается изменение показателей по сравнению их с показателями предыдущих периодов.

При сравнении показателей одного предприятия с показателями другого предприятия или средними данными отрасли, раскрывается еще один недостаток горизонтального анализа – из-за разнообразности деятельности предприятий, даже между предприятиями той же отрасли, трудно удается произвести достоверный горизонтальный сравнительный анализ.

Графический способ иллюстрирует результаты анализа, позволяет установить форму связи между отдельными показателями или факторами, показывает изменение экономического явления в течении времени.

Принимая рискованные решения, можно прибегнуть к SWOT анализу. Функционный – стоимостной анализ (FVA) является методом системного исследования исследуемого объекта, применение которого в предприятиях весьма ограничена из-за отсутствии достоверной информации.

Развитие экономических явлений, их изменения предопределяет не один кокой нибудь фактор, а несколько факторов влияющих разными направлениями и в разной прочности. Такие неполные и строго неопределенные связи называются корреляционными связями. Корреляционные связи проявляются только при определенном количестве наблюдений коррелирующих явлений. *Корреляция* отвечает на вопрос, есть ли связь между признаками, какое ее направление и прочность, а *регрессия* – конкретизирует форму связи (Bartosevičienė E., 2004; Gražytė-Molienė O., 2004; Дрейпер Н. И др., 1986; Ферстер Э. И др., 1983;).

Корреляционный анализ производится поэтапно: 1) устанавливается факт существования корреляционной связи; 2) выясняется ее характер; 3) определяется уравнение связи, которая характеризует взаимное соотношение между значениями признака и средними значениями результатного признака; 4) опрелеляется прочность и достоверность связи (Ферстер Э. И др., 1983).

При исследовании корреляционных связей способами корреляции и регрессии, должно быть удовлетварено несколько важных условий:

1) совокупность, взаимосвязи признаков которой исследуется, должна быть качественно однородной; 2) должно быть достаточно обширное число независимых наблюдений; 3) из множества факторов нужно отобрать основные, которые предопределяют наибольшую часть вариаций значений результативного признака; 4) эти признаки не могут быть взаимосвязаны; 5) все полученные выводы должны быть логически объяснимы и содержать экономический смысл (Ферстер Э. И др., 1983; Genienė M., 2002).

Для познания причин изменения результативного признака нужно глубже познокомится с исследуемым явлением, полагатся на теорию научных исследований в этой области и логическим мышлением.

Вообще, при желании правильно оценить результаты деятельности хозяйственного субъекта и их предопределяющие факторы, недостаточно изолированно применить один или другой способ анализа. Необходимо применять их в наиболее тесной взаимосвязи.

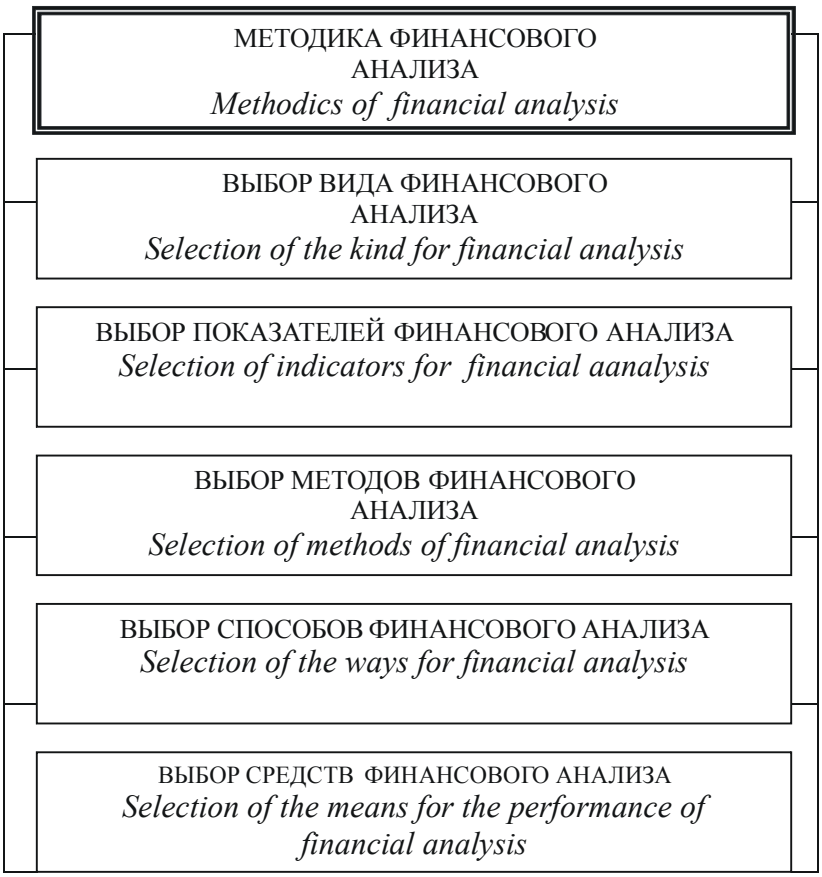
В результате обобщения материала исследования, авторы статьи составили модель методики финансового анализа. (Рис.)

Выводы
Conclusions

1. Теоретический анализ литературных источников позволил прийти к выводу, что экономические категории «метод анализа» и «способ анализа» не тождественны.

2. Способ анализа включает в себя совокупность операций, выполняемых аналитиком в процессе исследования, а метод анализа – совокупность способов, используемых в анализе.

3. «Методика финансового анализа» – это система выбора вида финансового анализа,



Pav.1. **Finansinлs analizлs metodikos modelis**
Fig. 1 ***The model of the methodics of financial analysis***

обработки и оценки цифровой и логической инфомации с применением отобранных показателей, методов, способов и средств анализа.

4. Для проведения финансового анализа деятельности хозяйственного субъекта применяются следующие методы: логического абстрагирования, индукции и дедукции, анализа и синтеза, статистический и др. Шире всех используется статистический метод и его способы.

5. Одним из главных средств финансового анализа является поиск информации, ее накопление, систематизирование и обработка. К другой группе средств относитися определение объема, переодичности и последовательности процедур анализа.

6. В зависимости от целей, выдвигаемых перед финансовым анализом, выбирается один вид финансового анализа или их сочетание.

7. Составление методики финансового анализа – это моделирование процесса анализа, во время которого отбираются вид анализа, экономические показатели, методы, способы и средства исследования.

8. Методика анализа составляется для достижения каждой определенной цели финансового анализа.

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Lauku saimniecību attīstības iespējas Latvijā nacionālā atbalsta apstākļos
Farms Development Possibilities in Latvia under Conditions of National Support

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Abstract

In 2003, an average farm had 21.7 ha of land, including 11.4 ha of used agricultural land and 2.6 ha of unused agricultural land. During 2001-2004, the used agricultural land area increased by 60.3 thousand ha. The arable land area increased by 50.4 thousand ha and accounted for around 61%, and permanent crops accounted for around 0.8% of the total agricultural land area. The total area of pastures and meadows increased in absolute figures by 9.6 thousand ha, but relatively decreased by 0.8% if compared to 2001. The commercial banks like Unibanka, Hansabanka and Hipotçku banka offer loans mostly for the purpose of developing enterprises and starting businesses; real estates are mostly used as a guarantee for loans. The state impacts agricultural production by economic methods. To foster rational agricultural development, the state taking into account particularities of regions and industries applies the following measures: crediting policy, subsidies, taxation a.o. types of payments.

Key words*:* farms, crediting programme, subsidies, taxes.

Ievads
Introduction

Darba tēma par lauku saimniecību attīstības iespējām Latvijā ir aktuāla, jo lauksaimnieciskā ražošana ir jāattīsta arī nākotnē.

2004. g. Latvijas laukos dzīvoja 685.2 tūkst. iedzīvotāju, kas ir par 12.5 tūkstošiem jeb 18% iedzīvotāju mazāk nekā 1999. gadā (Saktiņa D., Meyers W.H., 2005).

Iedzīvotāju samazinājums laukos apdraud lauku apdzīvotību.

Ienākumi uz vienu lauksaimniecībā nodarbināto 2004. gadā bija Ls 1240 gadā, kas ir par 31% mazāk nekā vidējā darba samaksa valstī (Latvijas lauksaimniecība ..., 2005).

Ienākumi ir pārāk zemi, lai veiktu investīcijas un palielinātu labklājību lauku teritorijā. Lauku saimniecību vadītājiem nav pietiekamas zināšanas un pieredze lauksaimnieciskajā ražošanā. Lielā daļā lauku saimniecību ražošanā nav ievērotas vides aizsardzības, dzīvnieku labturības, higiēnas un darba drošības normas, kas ierobežo lauksaimnieku konkurētspēju vai arī izraisa lauksaimnieciskās ražošanas pārtraukšanu.

Kad esam iestājušies Eiropas Savienībā, zemnieku saimniecībām jāpilda dažādi nosacījumi 2005; Latvijas lauksaimniecība un lauki, 2005). Latvijas Republikas Centrālās statistikas pārvaldes dati (Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005; Lauku saimniecību struktūra...,2004), Valsts ieņēmumu dienesta dati. Darbā tika lietotas šādas pētījumu metodes: monogrāfiskā, analīzes, sintēzes, ekonomiski statistiskā, matemātiski statistiskā.

Rezultāti un diskusija
Results and discussion

1. Lauku saimniecību raksturojums
1. Characteristics of farms

Pēc 2003. gada lauku saimniecību struktūras apsekojuma vispārinātajiem rezultātiem, apsekojuma sākumā 131.4 tūkst. ekonomiski aktīvo saimniecību izmantoja 2846.6 tūkst. ha zemes, tai skaitā kopējo lauksaimniecībā izmantojamo zemi – 1835.3 tūkst. ha jeb 64.5 % no saimniecību zemes kopplatības. Ja lauksaimniecībā izmantojamās zemes kopplatība bija 1835.3 tūkst. ha (Lauku saimniecību struktūra, 2004), tad no tās tika izmantota LIZ – 1581.8 tūkst. ha jeb 86.2 %

no LIZ kopplatības (Latvijas lauksaimniecības 2004. g., 2005).

2003. gada 1. jūnijā Latvijā 99.9 % no saimniecību kopskaita bija privātā sektora saimniecības un tikai 0.1 % saimniecību bija valsts, pašvaldību, sabiedrisko un reliģisko organizāciju saimniecības. Zemnieku saimniecības no privātā sektora saimniecību kopskaita veidoja 25.4 % piemājas saimniecības – 70.3 %, personiskās saimniecības – 3.8 % un statūtsabiedrības un individuālie uzņēmumi – 0.4 % (Lauku saimniecību struktūra, 2004).

Latvijā lauku saimniecības iedala 7 ekonomiskajos lielumos (skat. 1.1. att.), lielākajai daļai jeb 83.9 % saimniecību ir līdz 2 ekonomisko lielumu vienībām, 10 % saimniecību ir 2-3 ekonomisko lielumu vienības, un tikai 0.1 % saimniecību ir vairāk nekā 100 ekonomisko lielumu vienības.

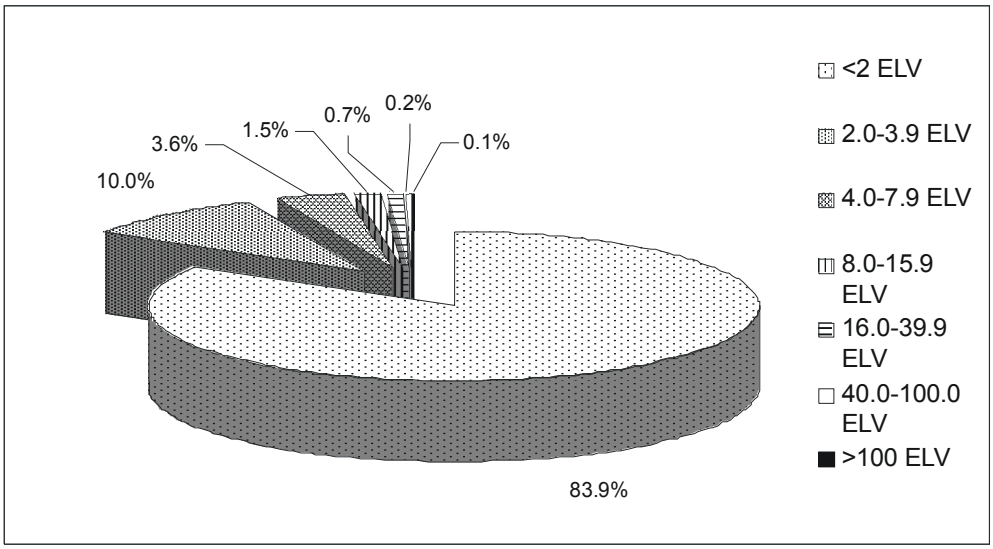
Vienai saimniecībai 2003. gada jūnijā vidēji bija 21.7 ha zemes, tai skaitā 11.4 ha izmantotā LIZ, 2.6 ha neizmantotā LIZ (saimniecību sadalījumu pēc izmantotās LIZ skat. 1.2. att.).

Vislielākās lauku saimniecības laikā no 2001. līdz 2003. gadam bija Dobeles, Saldus un Tukuma rajonā – attiecīgi 23.5 ha, 23.3 ha un 19.5 ha no kopējās LIZ vidēji vienā saimniecībā.

Salīdzinot 2003. gada datus ar attiecīgajiem 2001. gada lauksaimniecības skaitīšanas rādītājiem, struktūras apsekojums liecina, ka saimniecību vidējā kopplatība ir palielinājusies par 1.8 ha un izmantotā LIZ – par 1.2 ha, jo daļa saimniecību bija apvienojušās un zemes noma no neaktīvajām saimniecībām – palielinājusies (skat. 1.3. att.).

Laikā no 2001. līdz 2004. gadam izmantotā LIZ ir palielinājusies par 60.3 tūkstošiem ha. 2004. gadā izmantotās lauksaimniecībā izmantojamās zemes platības ir palielinājušās sakarā ar Latvijas iestāšanos ES un platību maksājumu saņemšanu. Aramzeme palielinājusies par 50.4 tūkst. ha un veido »61 % no LIZ. Ilggadīgie stādījumi kā absolūti, tā relatīvi praktiski nav mainījušies un veido 0.8 % no LIZ. Pļavu un ganību platība analizējamā periodā absolūtos skaitļos ir palielinājusies par 9.6 tūkst. ha, bet salīdzinājumā ar 2001. gadu tā relatīvi samazinās par 0.8 %.

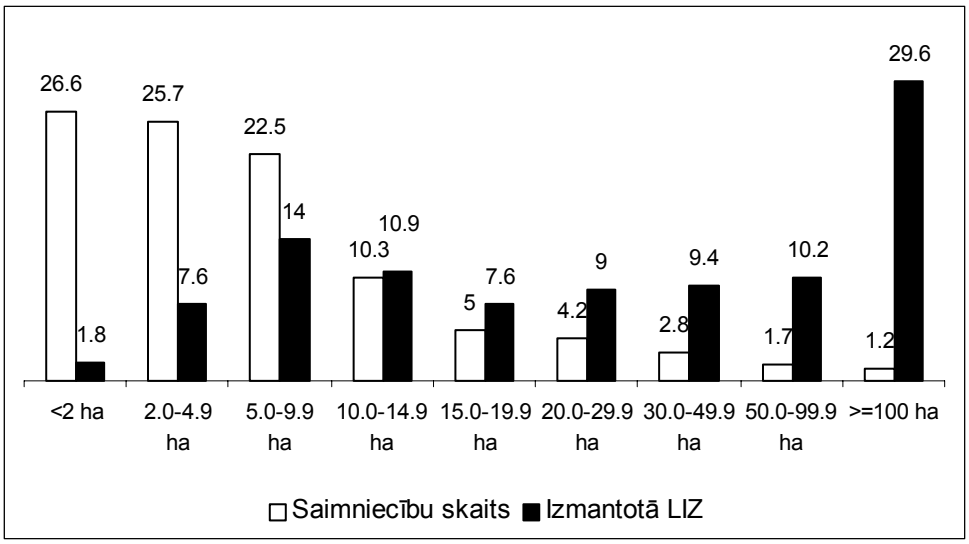
Sējumu struktūrā vislielāko īpatsvaru veido graudaugi. To platība absolūti un relatīvi vislielākā bijusi 2001. gadā – 51% no sējplatības. 2004. gadā tā veidoja 436.7 tūkst.ha. Kā liecina 1.4. attēlā redzamais trends, graudaugu sējumu platībai ir



Avots: *autores aprēķini, izmantojot: Lauku saimniecību struktūra ..., 2004.*
Source: *the author's calculations using: Lauku saimniecību struktūra ..., 2004.*

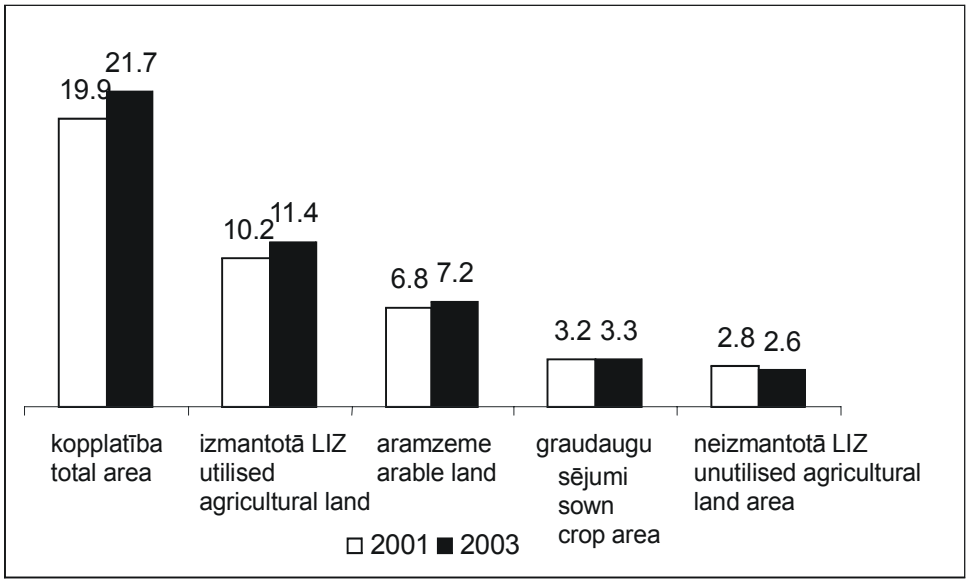
1.1. att. **Saimniecību sadalījums pēc ekonomiskā lieluma 2003. gada jūnijā, %**
Fig. 1.1 ***Farms broken down by their economic size in June of 2003, %***

* Vienai ekonomisko lielumu vienībai (ELV) standarta bruto segums ir Ls 698 jeb 1 ELV =1200 eiro



Avots: *autores aprēķini, izmantojot: Lauku saimniecību struktūra ..., 2004.*
Source: *the author's calculations using: Lauku saimniecību struktūra ..., 2004.*

1.2. att. **Saimniecību skaits un izmantotā LIZ dažāda lieluma saimniecībās 2003. gada jūnijā (% no saimniecību kopskaita un izmantotās LIZ kopplatības)**
Fig. 1.2 ***Number of farms and the used agricultural land area on different size farms in June of 2003 (as % of the total number of farms and of the used agricultural land area)***



Avots: *autores aprēķini, izmantojot: Lauku saimniecību struktūra ..., 2004.*
Source: *the author's calculations using: Lauku saimniecību struktūra ..., 2004.*

1.3. att. **Lauku saimniecību vidējie platību rādītāji, ha**
Fig. 1.3 **Average farms' area indicators, ha**

tendence nedaudz samazināties. Sējumu platības izmaiņas izskaidro nelineārs $y = 9{,}225\ x^2 - 46{,}875\ x + 478{,}98$ regresijas vienādojums. Ar polinomiālo regresijas modeli var izskaidrot 75% no sējumu platību izmaiņām graudaugiem. 1.5. attēlā redzams, ka arī pākšaugu sējumu platība samazinās ļoti maz. Ar lineāro regresijas vienādojumu var izskaidrot 33% no sējumu platību

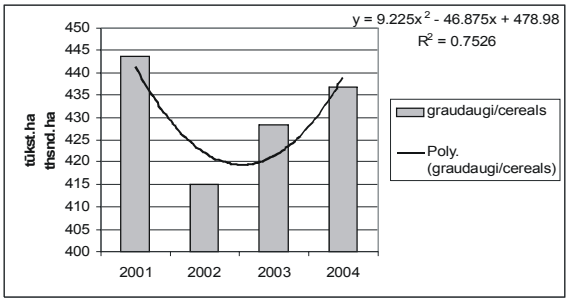
1.1. tabula / *Table 1.1*

Zemes sadalījums pēc zemes lietošanas veidiem visu veidu saimniecībās
Land division by land use kinds on all types of farms

	2001. g.		2002. g.		2003. g.		2004. g.	
	tūkst.ha thous.ha	%	tūkst.ha thous.ha	%	tūkst.ha thous.ha	%	tūkst.ha thous.ha	%
Izmantotā l/s izmantojamā zeme *Utilized agricultural area*	1581.8	100	1595.5	100	1581.8	100	1642.1	100
Aramzeme Arable land	958.2	60.6	972.8	61.0	956.4	60.5	1008.6	61.4
Ilggadīgie stādījumi (neieskaitot zemenes) *Permanent crops (excluding strawberries)*	12.1	0.8	12.2	0.8	12.0	0.8	12.4	0.8
Pļavas un ganības *Meadows and pastures*	611.3	38.6	610.3	38.2	613.0	38.7	620.9	37.8

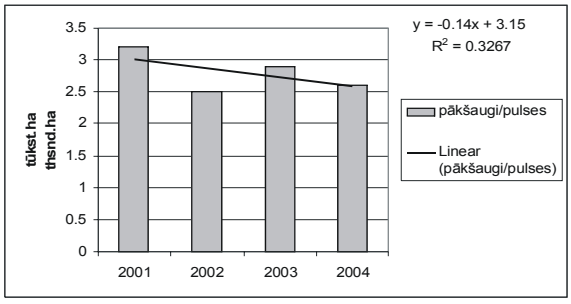
Avots: *autores aprēķini, izmantojot: Latvijas lauksaimniecība, 2004. g., 2005.*
Source: *the author's calculations using: Latvijas lauksaimniecība, 2004. g., 2005.*

izmaiņām. 1.6. attēlā redzams, ka, gadam mainoties par 1 vienību, cukurbiešu platība samazinās par 0,24 tūkst. ha; 11% gadījumu to ietekmē laika faktors. 1.7 attēlā trends liecina, ka lopbarības sakņu sējplatībām ir tendence samazināties par 1,24 tūkst. ha; 94% gadījumu to ietekmē laika faktors. 1.8. attēlā redzams, ka kartupeļu stādījumu platība analizējamā periodā ir samazinājusies no 55 tūkst. ha līdz 49 tūkst. ha; 64% gadījumu to izskaidro laika faktors. Kā liecina 1.9. attēls, dārzeņu platībām ir tendence palielināties: gadam mainoties par 1 vienību



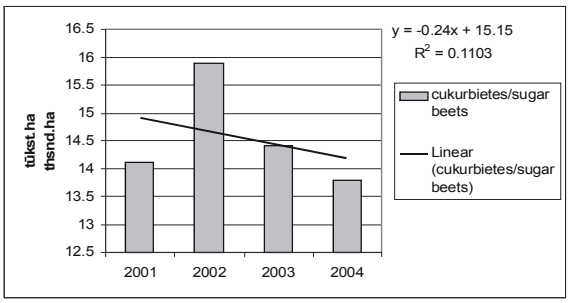
Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.4. att. **Graudaugu sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**
Fig. 1.4 ***Sown area of cereals and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

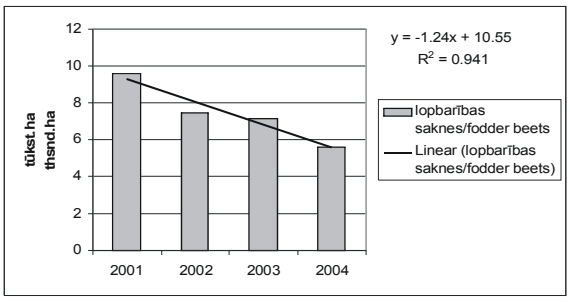
1.5. att. **Pākšaugu sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**
Fig. 1.5 ***Sown area of pulses and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.6. att. **Cukurbiešu sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

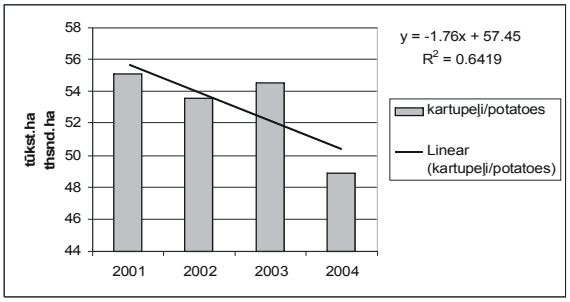
Fig. 1.6 ***Sown area of sugar beets and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.7. att. **Lopbarības sakņu sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

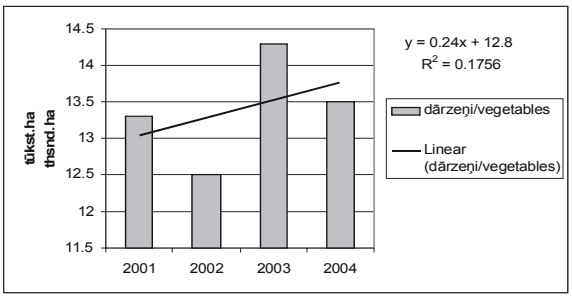
Fig. 1.7 ***Sown area of fodder beets and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.8. att. **Kartupeļu sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

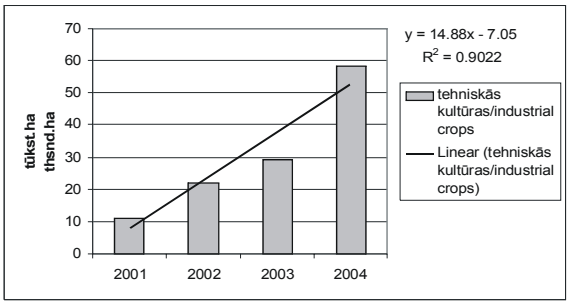
Fig. 1.8 ***Sown area of potatoes and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.9. att. **Dārzeņu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

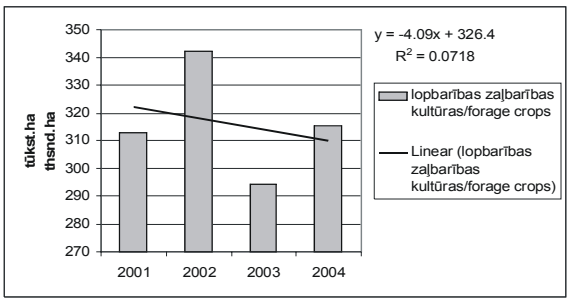
Fig. 1.9 ***Sown area of vegetables and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.10. att. **Tehnisko kultūru sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

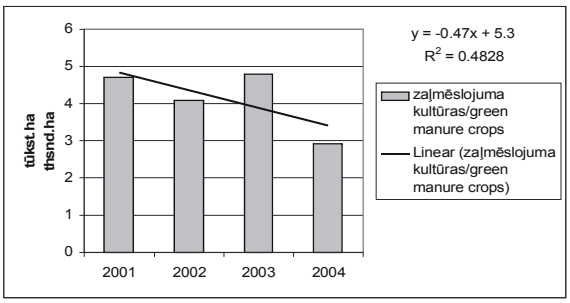
Fig. 1.10 ***Sown area of industrial crops and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.11. **att. Lopbarības zaļbarības kultūru sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

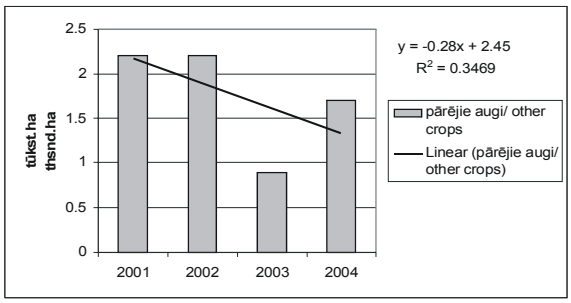
Fig. 1.11 ***Sown area of forage crops and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.12. att. **Zaļmēslojuma kultūru sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

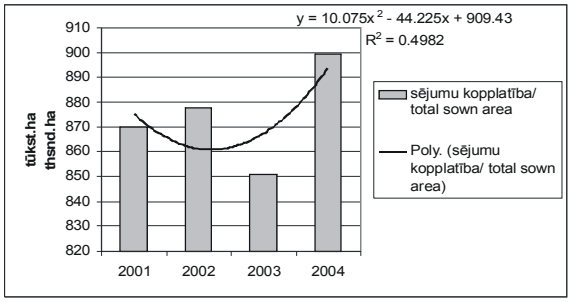
Fig. 1.12 ***Sown area of green manure crops and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.13. att. **Pārējo augu sējumu platība un tās trends lauku saimniecībās 2001.-2004. gadā**

Fig. 1.13 ***Sown area of other crops and its trend during 2001-2004***



Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.14. att. **Sējumu kopplatība un tās trends lauku saimniecībās 2001.-2004. gadā**

Fig. 1.14 ***Total sown area and its trend during 2001-2004***

dārzeņu platība palielinās par 0,24 tūkst. ha 18% gadījumu. Laikā no 2001. līdz 2004. gadam ievērojami (5.3 reizes) palielinājusies tehnisko kultūru sējplatība – 2004. gadā tā bija 58 tūkst. ha (skat. 1.10. att.); 90% gadījumu to izskaidro laika faktors.

Vienu trešo daļu no sējplatības aizņem lopbarības zaļbarības kultūras. Kā liecina 1.11. attēls, lopbarības zaļbarības kultūru sējumu platībai ir tendence samazināties. Kā liecina 1.12. un 1.13. attēls, zaļmēslojumu kultūru sējumu platībai un pārējo augu sējumu platībai ir tendence samazināties. Pēc 1.14. attēla var spriest, ka kopējā sējumu platība lauku saimniecībās laikā no 2001. līdz 2004. gadam ir palielinājusies par 3.4 % un veido 899,2 tūkst. ha. Sējumu kopplatību izmaiņas var izskaidrot ar nelineāru polinomisku vienādojumu. Ar minēto regresijas modeli var izskaidrot apmēram 50% no pazīmes variācijas.

Kā liecina 1.3. tabulas dati, graudaugu kopraža vislielākā bijusi 2002. un 2004. gadā, kad arī ražība bijusi vislielākā. Kopraža 2004. gadā palielinājusies par 14.2 % salīdzinājumā ar 2001. gadu, bet ražība šajā pašā laikā – par 16.3 %. Pākšaugu kopraža analizējamā periodā svārstās no 4.0 tūkst. t līdz 5 tūkst. t. Ražības līmenis ir zems, bet ar katru nākamo gadu tas ir palielinājies un 2004. gadā veidoja 174 cnt no ha.

Linšķiedru kopraža 2004. gadā bija 1.65 tūkst. tonnas: salīdzinājumā ar 2001. un 2003. gadu tā bija palielinājusies divas reizes. Ražība vislielākā bija 2002. gadā; 2003. gadā tā pazeminājās par 50 %, bet 2004. gadā tā palielinājās par 52 %. Linsēklu kopraža vislielākā bija 2002. gadā, kad arī ražība bija vislielākā, sasniedzot 9.4 cnt no ha. 2003. gadā tā samazinājās par 63 %, salīdzinot ar iepriekšējo gadu, bet 2004. gadā salīdzinājumā ar 2002. gadu tā samazinājās par 82 %, attiecīgi ietekmējot arī kopražu.

1.3. tabula/ *Table 1.3*

Lauksaimniecības kultūru kopraža un ražība lauku saimniecībās no 2001. līdz 2004. gadam
Total crop output and crop yields on farms during 2001-2004

	Kopraža tūkst. t/ *Total crop output, thous. tonnes*				Ražība no 1 ha, cnt/*Yield, 100 kg per ha*				Ražības un kopražas korelācijas koeficienti
	2001	2002	2003	2004	2001	2002	2003	2004	
Graudaugi/*Cereals*	928.0	1028.5	932.4	1059.5	20.9	24.8	21.8	24.3	0.941972839
Pākšaugi/*Pulses*	4.0	4.2	5.0	4.5	12.5	16.6	17.1	17.4	0.699295912
Linšķiedra/*Fiber flax*	0.8	1.4	0.8	1.7	6.9	8.4	4.2	6.4	
Linsēklas/*Seed flax*	0.3	1.5	0.6	0.4	2.4	9.4	3.5	1.7	
Cukurbietes/*Sugar beets*	491.2	622.3	532.4	505.6	349	391	370	367	0.938406997
Rapsis / *Rape*	13.0	32.7	37.4	103.6	15.4	17.8	14.4	19.0	0.721429094
Kartupeļi/*Potatoes*	615.3	768.4	739.0	628.4	112	143	135	128	0.893095991
Dārzeņi/*Vegetables*	159.3	148.2	217.5	180.8	111	108	140	122	0.997820371
Lopbarības saknes/ *Fodder roots*	203.0	153.7	158.5	130.1	211	205	224	232	-0.578410476
Ilggadīgo zālāju siens/ *Perennial grass hay*	440.3	395.8	362.8	404.1	27.4	20.5	25.4	24.9	0.366124867
Zaļbarības un skābbarības kultūras (bez kukurūzas)/ *Crops for green feed and silage (excl.maize*)	98.0	98.4	140.3	148.5	118	137	142	150	0.81270249
Kukurūza skābbarībai un zaļbarībai/*Maize for silage and forage*	25.1	25.7	44.3	52.8	253	215	251	182	-0.508204797
Pļavu un ganību siens/ *Hay from grasslands and pastures*	375.8	247.3	346.1	473.0	22.4	17.7	20.0	19.4	0.423429747

Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

Cukurbiešu kopraža vislielākā bijusi 2002. gadā, sasniedzot 622 tūkst. t, kas izskaidrojams ar augsto ražību analizējamajā periodā. Vislielākā rapša kopraža iegūta 2004. gadā: salīdzinājumā ar 2001. gadu tā ir palielinājusies 8 reizes. Uz ražību to var attiecināt tikai nedaudz, jo ražība analizējamā periodā ir palielinājusies tikai par 23 %. Kartupeļu kopraža vislielākā bijusi 2002. gadā, bet 2004. gadā, salīdzinot ar 2002. gadu, samazinājusies par 18 %. Tas skaidrojams ar ražības izmaiņām: vislielākā tā bija 2002. gadā, bet 2004. gadā salīdzinājumā ar 2002. gadu tā samazinājās par 10 %. Arī dārzeņiem kopraža izteikti svārstījusies līdz ar ražību svārstībām.

Lopbarības sakņu kopraža analizējamā periodā samazinājusies par 36 %; tā ir svārstījusies līdz ar lopbarības sakņu platību samazinājumu. Ražība analizējamā periodā ir palielinājusies par 10 %. Ilggadīgo zālāju siena kopraža no 2001. gada līdz 2003. gadam ir samazinājusies par 18 %; 2004. gadā tā palielinājusies par 11 % salīdzinājumā ar iepriekšējo gadu. Ilggadīgo zālāju siena ražības līmenis ir zems, tas svārstījies no 21 līdz 27 cnt/ha, pēdējos divos gados palicis nemainīgs un veidojis 25 cnt/ha.

Zaļbarības un skābbarības kultūru kopraža palielinājusies no 98 tūkst. t līdz 148.5 tūkst. t un svārstījusies līdzi ražības izmaiņām. Arī kukurūzas kopraža katru gadu ir palielinājusies; ražībai ir tendence samazināties. Pļavu un ganību siena kopraža 2002. gadā ir samazinājusies par 34 %, salīdzinot ar iepriekšējo gadu, bet tad ar katru gadu tā ir palielinājusies. Ražības līmenis ir ļoti zems, svārstās maz un veido tikai 18 līdz 22 cnt/ha.

Ļoti cieša sakarība starp ražību un kopražu novērojama tad, ja korelācijas koeficients ir 0,8 līdz 1, t.i., graudaugiem, cukurbietēm, kartupeļiem, dārzeņiem, zaļbarības un skābbarības kultūrām (skat. 1.3. tabulu). Sakarība starp ražību un kopražu ir vidēji cieša, ja korelācijas koeficients ir no 0,5 līdz 0,79, kā, piemēram, pākšaugiem, lopbarības saknēm, skābbarībai paredzētajai kukurūzai. Ja korelācijas koeficients ir mazāks par 0,5, tad sakarība nav cieša un ir citi ietekmējošie faktori, kā, piemēram, ilggadīgo zālāju sienam un pļavu un ganību sienam.

Kā liecina 1.4. tabulas dati, liellopu skaits no 2003. gada ar katru gadu samazinās, slaucamo govju skaits samazinās no 2002. gada, lai gan 2003. un 2004. gadā tas praktiski nemainās. Cūku skaits 2004. gadā salīdzinājumā ar 2002. gadu ir samazinājies par 9 procentiem un veido 436 tūkstošus cūku. Nobarojamo cūku skaits ir samazinājies vēl straujāk, t.i., par 22 % un 2004. gadā veidoja 162.1 tūkst. cūku.

Aitu skaits no 2001. līdz 2003. gadam ir palielinājies par 35 %, bet 2004. gadā salīdzinājumā ar iepriekšējo gadu nedaudz (par 1%) samazinājies. Līdzīgi mainījies kazu skaits.

Analizējamā periodā no 2001. līdz 2004. gadam zirgu skaits ir samazinājies par 21 % un veido 15.5 tūkst. zirgu. Trušu skaitam arī ir tendence samazināties. Mājputnu skaits analizējamā periodā ir palielinājies par 12 % un veido 4050 tūkst. mājputnu. Bišu saimēm ir tendence palielināties.

Saražotās gaļas apjoms analizējamā periodā no 2001. gada līdz 2004. gadam ir palielinājies par 22 % un veido 73 233 tonnas (skat. 1.5. tabulu). Lai gan vidējais piena izslaukums no vienas govs ir palielinājies par 5 % analizējamajā periodā no 2001. gada līdz 2004. gadam (skat. 1.6. tabulu) sakarā ar govju skaita samazinājumu, saražotais piena apjoms ir samazinājies par 7 % (skat. 1.5. tabulu). Vidējā vistu produktivitāte analizējamajā periodā ir palielinājusies par 8 % un sakarā ar mājputnu skaita palielinājumu par 12 % saražoto olu daudzums palielinājies par 17 % un 2004. gadā veido 527.4 miljonus gabalu. Vidējais vilnas nocirpums no vienas aitas laikā no 2001. līdz 2003. gadam palielinājies par 86 %, bet 2004. gadā salīdzinājumā ar iepriekšējo gadu ir pazeminājies par 49 %; vilnas kopieguvei audzējamajā periodā ir tendence pieaugt.

Medus kopieguve svārstās līdzi bišu saimju skaitam (skat. 1.4. tabulu) un 2004. gadā veido 746 t (skat. 1.5. tabulu).

Lauksaimniecībai raksturīgs tas, ka zemnieku saimniecībās var būt arī nealgotais darbaspēks, bet tas ir jāapmaksā. SUDAT aprēķinos par samaksu nealgotajam darbaspēkam ir pieņemta vidējās algotā darbaspēka izmaksas uz vienu pilna laika vienību mēnesī, ieskaitot arī darba devēja sociālo nodokli, un 2003. gadā tās bija Ls 122 (2002. gadā – Ls 103). 1.7. tabulā redzams, ka vismazāko saimniecību grupā līdz 4 ELV jaunradītā vērtība absolūti nesedz nealgotā darbaspēka un ieguldītā kapitāla apmaksu, grupā no 4 līdz 8 ELV netiek atalgots ieguldītais kapitāls un daļēji arī nealgotais darbaspēks, bet grupās, sākot ar 16 ELV, veidojas peļņa, kas palielinās līdz ar ekonomisko lielumu.

1.4. tabula/*Table 1.4*

Mājlopu un putnu skaits lauku saimniecībās no 2001. līdz 2004. gadam, tūkst.
Number of livestock and poultry on farms during 2001-2004, thous.

	2001	2002	2003	2004
Liellopi / *Cattle*	384.7	388.1	378.6	371.1
No tiem slaucamās govis / *Of which dairy cows*	209.1	204.6	186.3	186.2
Cūkas / Pigs	428.7	453.2	444.4	435.7
tai skaitā: nobarojamās cūkas *of which: fattening pigs*	189.9	208.4	200.4	162.1
Aitas / *Sheep*	29.0	31.5	39.2	38.6
Kazas / *Goats*	11.5	13.2	15.0	14.7
Zirgi / *Horses*	19.6	18.5	15.4	15.5
Truši / *Rabbits*	150.4	141.6	149.2	135.5
Mājputni / *Poultry*	3621.2	3882.0	4002.6	4049.5
Bišu saimes / *Bee colonies*	47.9	54.2	45.9	48.4

Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.5.tabula/ *Table 1.5*

Lopkopības produktu ražošana lauku saimniecībās no 2001. līdz 2004. gadam, tonnās
Production of livestock products on farms during 2001-2004, tonnes

	2001	2002	2003	2004
Gaļa (kautmasā)/ *Meat (slaughter weight)*	60262	63250	71078	73233
Piens (ieskaitot kazu pienu) / *Milk (incl. goat milk)*	847962	813643	785678	786353
Olas, milj. / *Eggs, mln. pieces*	452.5	508.6	508.8	527.4
Vilna / *Wool*	61.3	73.2	65.8	76.9
Medus / *Honey*	574.6	759.6	552.5	745.7

Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

1.6. tabula/*Table 1.6*

Lopu un putnu produktivitāte lauku saimniecībās no 2001. līdz 2004. gadam
Productivity of livestock and poultryon farms during 2001-2004

	2001	2002	2003	2004
Vidējais piena izslaukums no vienas govs, kg / *Average milk yield per cow, kg*	4055	3958	4261	4251
Vidējā olu ieguve no vienas dējējvistas, skaits / *Average egg production per laying hen, pieces*	228	200	240	246
Vidējais vilnas nocirpums no vienas aitas, kg / *Average wool fleece per sheep, kg*	2.1	2.5	3.9	2.0

Avots / *Source:* *Latvijas lauksaimniecība ..., 2003; Lauku saimniecības Latvijā ..., 2005.*

Kā liecina 1.8. tabulas dati, bruto pievienotā vērtība lauksaimniecībā, medniecībā un mežsaimniecībā 2000. g. salīdzināmās cenās uz vienu strādājošo ir ļoti zema analizējamajā periodā no 2002. līdz 2004. gadam, palielinoties no 1349 Ls/cilvēku līdz 1566 Ls/cilvēku. Tautsaimniecībā vidēji šis rādītājs ir 3.6-3.7 reizes augstāks (1.8. tabula).

1.7. tabula/*Table 1.7*

Peļņas/zaudējumu veidošanās SUDAT saimniecībās 2003. gadā pa ekonomiskā lieluma grupām, Ls
Formation of profit/loss on SUDAT farms in 2003 broken down by farm economic size groups, LVL

	Vidēji saimniecībā/ *On average per farm*	1-4	4-8	8-16	16-40	40-100	100-250	>250
+ Neto pievienotā vērtība *+Net value added*	3 895	798	2 829	5 144	9 984	27 999	99 110	412 624
-Algotais darbaspēks *-Hired labour force*	1 162	26	360	1 653	1 920	11 988	44 093	218 893
- Nomas maksa *- Rent*	146	28	74	164	359	1 334	3 712	21 345
- Procentu maksājumi *- Interest*	239	22	102	329	865	2 451	5 675	32 456
-Nealgotais darbaspēks *- Not hired labour force*	2 502	2 431	2 743	2 281	2 658	1 651	793	8 516
- Ieguldītā kapitāla apmaksa *-Repayment of principal*	641	359	456	879	1 451	3 719	9 123	29 920
= Peļņa / zaudējumi *=Profit/loss*	-795	-2 067	-906	-163	2 731	6 856	35 714	101 494

Avots/*Source:* *Latvijas lauksaimniecība un lauki 2003: politika un attīstība, 2004.*

Neskatoties uz to, ka nodarbināto skaits lauksaimniecībā, medniecībā un mežsaimniecībā no 2002. līdz 2004. gadam ir samazinājies no 147 tūkst. līdz 132 tūkst., un arī lauksaimniecībā, medniecībā, mežsaimniecībā nodarbināto skaita īpatsvars kopējā nodarbināto skaitā ir samazinājies no 15.2% līdz 13.4%, kā arī samazinājies ir lauksaimniecības, medniecības un mežsaimniecības nozares bruto pievienotās vērtības 2000. gada cenās īpatsvars bruto pievienotajā vērtībā tautsaimniecībā no 4.1% līdz 3.7%, nozares produktivitātes koeficients 2004. gadā palicis iepriekšējā gada līmenī. Tas ļauj secināt, ka pakāpeniski palielinās ražošanas efektivitāte, kas stabilizē nozari.

Iepriekš veiktā analīze liecina, ka lauku saimniecības attīstības līmeņa palielināšanai nepieciešami papildu ieguldījumi.

2. Valsts atbalsts lauksaimniecībai
2. State support for agriculture

2.1. Valsts atbalsts uzņēmumu konsultācijām
2.1. State support for providing consultations for enterprises

1.8. tabula/*Table 1.8*

Darba ražīgums lauksaimniecībā, medniecībā un mežsaimniecībā 2000. gada salīdzināmajās cenās
Labour productivity in agriculture, hunting and forestry at constant prices of the year 2000

	2002	2003	2004
1. Bruto pievienotā vērtība uz 1 strādājošo tautsaimniecībā, Ls *Gross value added per employee in the national economy, LVL*	5002	5251	5661
2. Bruto pievienotā vērtība lauksaimniecībā, medniecībā un mežsaimniecībā uz 1 strādājošo nozarēs, Ls *Gross value added in agriculture, hunting and forestry per employee in industries, LVL*	1349	1470	1566
3. Produktivitātes koeficients *Productivity coefficient*	0.27	0.28	0.28

Avots: *autores aprēķini, izmantojot: Latvijas statistikas gadagrāmata, 2004.*
Source: *the author's calculations using: Latvijas statistikas gadagrāmata, 2005.*

LR Ekonomikas ministrijas izstrādātās „Komercdarbības uzsācēju konsultāciju atbalsta programmas" ietvaros 2004. gadā no 28. novembra līdz 22. decembrim Latvijas uzņēmumi, kas dibināti ne vēlāk kā pirms diviem gadiem, varēja saņemt līdz 50% atlaidi konsultācijām un projektu izstrādei par šādiem jautājumiem:

- finanšu piesaiste, biznesa plānu sagatavošana;
- grāmatvedības un nodokļu jautājumi;
- pieteikuma sagatavošana ES Reģionālās attīstības fonda finansējuma saņemšanai;
- tirgus pētījumu veikšana (Valsts atbalsts uzņēmumu konsultācijām).

2.2. Kredītpolitika
2.2. Crediting policy

Lauksaimniecības ilgtermiņa investīciju kreditēšanas programma (LIIKP).

Straujāku lauksaimniecības uzņēmumu attīstību nodrošinās MK akceptētā LIIKP. Programmas mērķis ir sniegt Latvijas zemniekiem iespēju saņemt lētākus kredītresursus.

Programmas mērķis: veicināt ilgtspējīgu un konkurētspējīgu lauksaimniecības produktu ražotāju veidošanos kapitālietilpīgajās lauksaimniecības nozarēs.

Programmas apakšmērķi.

1. Radīt lauksaimniecības produktu ražotājiem pieņemamu ilgtermiņa finansējuma piedāvājumu.

2. Sekmēt pozitīvas ražotāju struktūras izmaiņas un paātrināt investīciju piesaisti optimāla lieluma lauksaimniecības produktu ražotāju veidošanai.

3. Sekmēt lauksaimniecības produktu ražotāju konkurētspēju palielināšanu.

4. Samazināt nākotnē nepieciešamos lauksaimniecības uzturēšanas izdevumus.

5. Radīt apstākļus ES lauksaimniecības atbalsta programmu pilnvērtīgai izmantošanai pēc iestāšanās ES.

6. Mazināt sociālo spriedzi laukos, ko rada lauksaimniecības produktu ražotāju nespēja atrast finanšu avotus ražošanas attīstībai.

Plānotie programmas rezultāti.

- Projektu ietvaros izveidotie lauksaimniecības produktu ražotāji ražošanas izmaksu pielietojamo tehnoloģiju ziņā būs konkurētspējīgi ar ES uzņēmumiem, tā uzlabojot lauksaimniecības konkurētspēju kopumā.
- Tiks samazināta lauku iedzīvotāju migrācija uz pilsētām, jo daļa lauksaimnieku, kas pašreiz pārvalda maza un vidēja lieluma saimniecības, redzot izaugsmes iespējas, paliks lauksaimniecības nozarē (Par lauksaimniecības ilgtermiņa investīciju kreditēšanas programmu ..., 2004).

LIIKP ietvaros 2004 .g. lauksaimnieki varēja saņemt aizdevumus ilgtermiņa investīciju projektu realizācijai. Aizdevuma termiņš – līdz

20 gadiem ar 6.8 % gada likmi. Kreditēšanas programmas administrēšanu veic VAS „Latvijas Hipotēku un zemes banka".

2004. gadā Kreditēšanas programmas ietvaros tika piešķirti 84 aizdevumi par Ls 3 554 120. Vislielākais finansējums piešķirts ar piensaimniecības attīstību saistīto projektu īstenošanai (fermu rekonstrukcija, iekārtu iegāde). Kā otra lielākā projektu grupa ir graudkopības attīstība (graudu kaltes, glabātavas). Reģionu griezumā attiecīgi visvairāk piešķirto aizdevumu ir Vidzemes un Zemgales lauksaimniekiem.

2004. gada beigās tika uzsākts darbs pie grozījumiem LIIKP, lai pazemināt procentu likmes un radītu papildu atvieglojumus bioloģisko lauksaimniecības produktu ražotājiem un lauksaimniecības pakalpojumu kooperatīvajām sabiedrībām (Latvijas lauksaimniecība un lauki, 2005).

Lauksaimniecībā izmantojamās zemes iegādes kreditēšanas programma (Zemes programma).

Realizējot Zemes programmu, iespējams palielināt LIZ neizmantoto platību apsaimniekošanu, kas garantē ražošanas līdzekļa – zemes – vērtības palielināšanu.

Programmas realizācijā ir iesaistīta Latvijas Hipotēku un zemes banka, kas nodrošina ilgtermiņa (15-25 gadi) kredītu piešķiršanu lauksaimniecības zemes iegādei ar 4% gada likmi.

Programmas mērķis.

Iedarbināt mehānismus efektīvai lauksaimniecībā izmantojamās zemes tirgus funkcionēšanai, radot līdzvērtīgu, ES pieejamu ilgtermiņa finansējuma piedāvājumu lauksaimniecībā izmantojamās zemes iegādei.

Programmas apakšmērķis:

Sekmēt konkurētspējīgu, ES standartiem atbilstošu saimniecību platību attīstību, paātrinot reformas darbaspēka struktūrā un sociālā sektorā lauku teritorijā.

Veicināt efektīvu lauksaimniecībā izmantojamās zemes apsaimniekošanu.

Programmas ietvaros tiek finansēta:

- lauksaimnieciskās ražošanas vajadzībām nepieciešamās zemes iegāde LR teritorijā;
- lauksaimnieciskās ražošanas vajadzībām nepieciešamās zemes iegāde un uz tās atrodošos būvju iegāde (nelauksaimniecības nozīmes būvju kadastrālā vērtība nedrīkst pārsniegt 30% no zemes kadastrālās vērtības).

Citi pamata nosacījumi.

Pērkamās zemes daudzums pamatots ar lauksaimnieciskās ražošanas vajadzībām, t.i., vai nu aizņēmējs zemi ir nomājis un apstrādājis vismaz 3 gadus, vai arī zemes nepieciešamība tiek aprakstīta uzņēmuma darbības pamatojumā.

Priekšroka aizdevumu saņemšanai ir aizņēmējiem, kas pērk zemi īpašuma konsolidācijai.

Programmas realizācija sākās 2003. gadā, bet kredītu izsniegšanas beigu termiņš – jau 2004. gada beigās, programmas realizācijas beigu termiņš – 2023. gadā.

Par programmas īstenošanu atbildīgā institūcija ir Zemkopības ministrija.

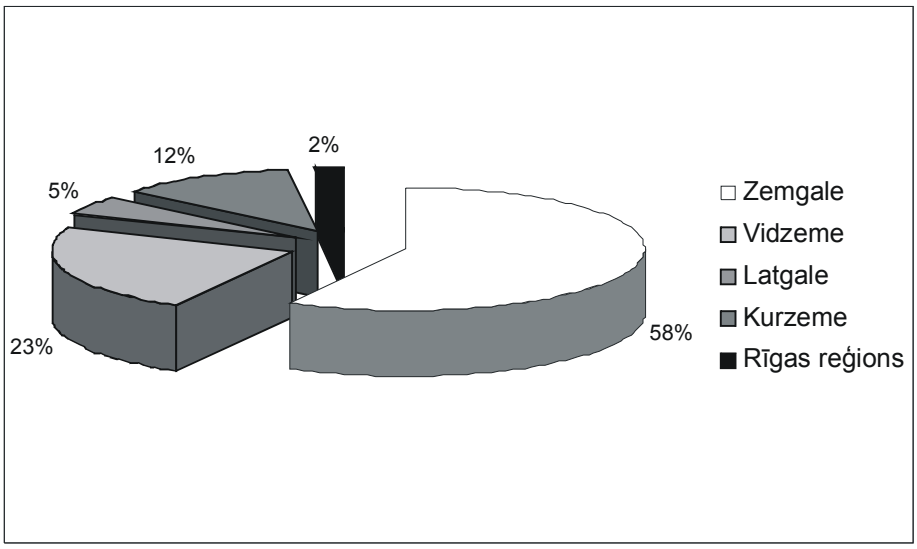
1. ZM slēdz līgumu ar Hipotēku banku par kredītu izsniegšanu programmas ietvaros. Hipotēku banka no lauksaimniecības ilgtermiņa investīciju kreditēšanai paredzētajiem Ls 3 milj. resursiem veic lauksaimniecībā izmantojamās zemes iegādes kreditēšanas programmas realizāciju. Hipotēku banka veic projektu izvērtēšanu, kredītu izsniegšanu, kredītu administrēšanu un uzņemas kredītrisku.
2. Lai nodrošinātu samazinātu gala aizdevumu procentu likmi, ZM izmaksā bankai kredītprocentu subsīdijas no lauksaimniecības subsīdiju līdzekļiem (Precizētā lauksaimniecībā izmantojamās zemes iegādes kreditēšanas programma).

Zemes programmas aktivitāte, salīdzinot ar 2003. gadu, ir samazinājusies. 2004. gadā tika piešķirti 134 aizdevumi par Ls 1 724 043. Visvairāk finansējumu saņēmuši Zemgales reģiona lauksaimnieki (2.1. attēls).

2.3. Nacionālās subsīdijas
2.3. National subsidies

Izvērtējot 2004. gadu kopumā, jāsecina, ka, piešķirot naudas līdzekļus noteiktiem pasākumiem, kas veicina lauksaimniecības nozares attīstību, ir īstenots subsīdiju programmas mērķis un nodrošināta valsts atbalsta nepārtrauktība un pakāpeniska pāreja uz Eiropas Savienības maksājumu sistēmu.

Kā liecina 2.1. tabulas dati, kopējais subsīdiju finansējums 2005. gadā lauksaimniecības attīstībai ir Ls 29 830 806 jeb par 8 % vairāk nekā 2004. gadā. Vislielāko īpatsvaru gan 2004. gadā, gan 2005. gadā



Avots/*Source*: *Latvijas lauksaimniecība un lauki, 2005.*

2.1. att. **Zemes programmas piešķirto aizdevumu struktūra pa reģioniem**
Fig. 2.1 ***The structure of loans granted under the Land Programme according to the Regions***

aizņem līdzfinansējums SAPARDA programmai: 2004. gadā vienu trešdaļu, bet 2005. gadā vairāk nekā vienu piektdaļu no subsīdiju kopējās summas.

Augstu īpatsvaru 2004. un 2005. gadā aizņem arī finansējums lopkopības attīstībai – attiecīgi 18% un 21%. 2005. gadā augstu īpatsvaru (12%) no kopējās subsīdiju summas aizņem ieguldījumi lauksaimniecības nozarē, t.i., graudu, eļļas augu un šķiedraugu pirmapstrādes un uzglabāšanas iekārtu iegādei, būvju rekonstrukcijai vai renovācijai; arī lopkopības produktu (medus, piens) ražošanas būvju rekonstrukcijai, renovācijai, nepieciešamo būvmateriālu iegādei; piena savākšanas autotransportā nepieciešamā piena mērīšanas aprīkojuma iegādei, tehniskās testēšanas programmnodrošinājuma iegādei. Finansējums izglītībai, zinātnei un informācijas izplatībai 2005. gadā pārsniedz iepriekšējo gadu par 225% un veido 8.7 % no kopējā finansējuma. Eiropas Savienības nosacījumu ieviešanai 2005. gadā paredzēti 5.8 % no kopējā finansējuma, tas ir, par 54 % mazāk nekā iepriekšējā gadā. 2004. un 2005. gadā lielu īpatsvaru veido izdevumi investīciju veicināšanai lauksaimniecībā: attiecīgi 5.1 % un 7.1 %. 2005. gadā tie ir par 52 % lielāki nekā 2004. gadā. 2005. gadā 5 % no kopējā finansējuma aizņem:

1) izdevumi lauksaimniecības zemes ielabošanai;
2) izdevumi augkopības attīstībai;
3) ieguldījumi lauksaimniecībā (Valsts subsīdijas lauksaimniecības attīstībai ..., 2004; Subsīdijas lauksaimniecības attīstībai ..., 2005).

2.4. Kredītu garantijas lauku uzņēmumiem
2.4. Loan guarantees for rural enterprises

Ir izveidota valsts a/s „Lauku attīstības fonds", kas piešķir garantijas uzņēmējiem – kredītņēmējiem – kredītnodrošinājuma nepietiekamības gadījumā.

Lauku attīstības fonda garantijas.

Valsts akciju sabiedrība „Lauku attīstības fonds" (turpmāk – Fonds) ar savu vairāk nekā Ls 4 milj. kapitālu garantē lauku uzņēmēju, *tajā skaitā „Lauksaimniecības ilgtermiņa investīciju kreditēšanas programmas" ietvaros,* ņemtos kredītus Latvijas bankās, ja kredīta ņēmējam pietrūkst kredīta nodrošinājuma.

Bez Fonda Latvijā kredītus garantē Latvijas Garantiju aģentūra, kas negarantē lauksaimniecības attīstībai ņemtos kredītus, un tās sniegto garantiju apjoms ir neliels.

Garantiju piešķiršanas kārtība.

1. Fonds garantē lauku un lauksaimniecības attīstībai izsniegtos kredītus, ja kredīta ņēmējam pietrūkst kredīta nodrošinājuma.
2. Fonds garantē kredītus bankām, ar kurām Fondam ir noslēgts līgums.

2.1. tabula/ *Table 2.1*

Nacionālās subsīdijas 2005. gadā
National subsidies paid in 2005

Nr.p.k.	Pasākums *Measure*	Ls	%
1.	Lauksaimniecības zemes ielabošana *For reclamation of agricultural land*	1480000	5.0
2.	Lopkopības attīstībai *For developing livestock industry*	6182000	20.7
3.	Augkopības attīstībai *For developing crop industry*	1595000	5.4
4.	Izglītībai, zinātnei un informācijas izplatīšanai *For education, science and disseminating information*	2594760	8.7
5.	Latvijas un ārvalstu kopprojektu līdzfinansējumam *For co-financing Latvian and foreign co-projects*	290000	1.0
6.	Investīciju veicināšanai lauksaimniecībā *For attracting investments in agriculture*	2126000	7.1
7.	Lauku un lauksaimniecības biedru un nodibinājumu, sabiedrisko organizāciju un lauksaimniecības pakalpojumu kooperatīvo sabiedrību attīstībai *For developing and supporting rural and agricultural public organisations and their members, agricultural services cooperatives*	526000	1.8
8.	Bioloģiskās lauksaimniecības attīstībai *For developing biological farming*	235000	0.8
9.	Tirgus veicināšanai *For fostering markets*	687750	2.3
10.	Lauksaimniecības nozaru riska samazināšanai *For reducing risks in agricultural industries*	506250	1.7
11.	Eiropas Savienības nosacījumu ieviešanai *For meeting European Union requirements*	1745611	5.8
12.	Ieguldījumiem lauksaimniecībā *For investing in agriculture*	1502759	5.0
13.	SAPARD programmas līdzfinansējumam *For co-financing the SAPARD programme*	6501855	21.8
14.	2004. gadā noslēgto līgumu izpildes finansējumam *For financing implementation of contracts made in 2004*	278395	0.9
15.	Ieguldījumiem lauksaimniecības nozarē *For investing in agriculture industry*	3579426	12.0
	K o p ā/*Total*:	**29830806**	**100**

Avots/*Source:* *Subsīdijas lauksaimniecības attīstībai ..., 2005.*

3. Lēmumu par Fonda garantiju izmantošanu pieņem banka, ja tā atzīst, ka kredīta pieprasījums ir ekonomiski pamatots, bet kredīta ņēmējam nav pietiekams īpašums, ar kuru šo kredītu nodrošināt.

4. Banka iesniedz Fondam visu informāciju, kas nepieciešama lēmuma pieņemšanai par garantijas piešķiršanu.

5. Fonda lēmums par garantijām, kuras nepārsniedz Ls 20 tūkst., tiek pieņemts 7 darba dienu laikā, bet par lielākām garantijām – 20 darba dienu laikā.

6. Par garantijas saņemšanu kredīta ņēmējam ir noteikta vienreizēja komisijas maksa 0.5 % apmērā no sākotnēji garantētās aizdevuma daļas. Šo komisiju maksu kredīta ņēmējs iemaksā Fonda norādītajā kontā pēc rakstiska paziņojuma saņemšanas par Fonda garantijas piešķiršanu.

7. Fonda garantija (galvojums) stājas spēkā pēc trīspusēja līguma parakstīšanas starp Banku, Fondu un kredīta ņēmēju. Kredīta ņēmējs līgumu paraksta Bankā pēc komisijas naudas ieskaitīšanas Fonda kontā (Lauku attīstības fonda garantijas).

Fonds 2004. gadā piešķīris 423 kredītu garantijas (tajā skaitā LHZB – 218, LUB – 125, a/s „Hansabanka" – 37, „Latvijas Krājbanka" – 27. „Parekss banka" – 4, „Baltijas Tranzīta banka" – 11, „Rietumu banka" – 1) kopsummā par Ls 12.09 milj. (Latvijas lauksaimniecība un lauki, 2005).

Salīdzinot ar 2003. gadu, piešķirto garantiju skaits ir samazinājies apmēram par 30%, kas saistīts ar „Nelauksaimnieciskās uzņēmējdarbības atbalsta programmas" un SAPARD programmas realizācijas pārtraukšanu.

Pamatojoties uz Fonda garantijām, lauku uzņēmēji 2004. gadā varēja saņemt kredītus kopsummā par Ls 34.02 milj., tajā skaitā ES struktūrfondu apguvei – par Ls 15.66 milj., SAPARD projektu realizācijai – Ls 9.24 milj.

No 2004. gadā piešķirtajām 423 kredītu garantijām 203 piešķirtas tehnikas iegādei, 58 – apgrozāmo līdzekļu palielināšanai, 85 – celtniecībai un iekārtu iegādei, 38 – zemes un nekustamā īpašuma iegādei un 39 – dažādiem citiem pasākumiem (Latvijas lauksaimniecība un lauki, 2005).

Kopš 1997. gada, kad Fonds sāka nodarboties ar kredītu garantēšanu, piešķirtas 1836 kredītu garantijas kopsummā par 38.18 milj. Sakarā ar kredītu atmaksu spēku zaudējušas 576 kredītu garantijas par Ls 6.49 milj. (tajā skaitā 2004. gadā 262 garantijas par Ls 3.4 milj.).

2005. gada 1. janvārī spēkā bija 1179 kredītu garantijas par Ls 23.69 milj.

Lai nodrošinātu pieprasījumu pēc Fonda garantijām, 2004. gada 26. janvārī Fonds parakstīja papildu vienošanos ar Finanšu un kapitāla tirgus komisiju. Tika noteikts, ka Fonda izsniegto un spēkā esošo garantiju apjoms Fonda pašu kapitālu nepārsniegs vairāk par piecām reizēm (Latvijas lauksaimniecība un lauki, 2005).

Dati par Fonda izsniegtajām garantijām apkopoti 2.2. tabulā. Fonds 2004. gadā ir nodrošinājis garantiju piešķiršanu visām banku pieprasītajām kredīta garantijām lauku uzņēmējiem, kuri atbilda Fonda aizdevumu garantēšanas noteikumiem. Fonda kredītu garantijas deva iespēju lauku uzņēmējiem apgūt SAPARD programmas līdzekļus, kā arī sekmēja ES strukturālo fondu līdzekļu apgūšanu.

2.5. Nodokļi
2.5. Taxes

Kā norādīts ekonomikas teorijā, salīdzinājumā ar investīcijām nodokļi netieši un vājāk ietekmē saražoto bruto pievienoto vērtību, par ko liecina nodokļu multiplikators (Bikse V., 2003):

$$m_T = \frac{MPC}{MPS},$$

kur

2.2. tabula/ *Table 2.2*

VAS „Lauku attīstības fonds" izsniegtās garantijas 2002.-2004. gadā
Guaranties given by the State Joint-stock company „Rural Development Fund" in 2002-2004

	2002	2003	2004	1997-2004
Izsniegto garantiju skaits Number of given guaranties	307	618	423	1836
Garantētā summa (tūkst. Ls) Amount guaranteed (thousand LVL)	6046	15215	12086	38177
Kredītu apjoms, kas saņemts ar VAS „LAF" garantijām (tūkst. Ls) Amount of loans received with the guaranties of the State Joint-stock company „RDF" (thousand LVL)	15002	33288	34024	98459

Avots/*Source*: *Latvijas lauksaimniecība un lauki, 2005*

m_T – nodokļu multiplikators,

MPC – robežtieksme patērēt,

MPS – robežtieksme uzkrāt.

Uz lauksaimnieciskās produkcijas ražotājiem attiecas šādi nodokļi:

1) iedzīvotāju ienākuma nodoklis;
2) uzņēmuma ienākuma nodoklis;
3) PVN – ja maksātāja gada apgrozījums pārsniedz Ls 10 000;
4) nekustāmā īpašuma nodoklis;
5) sociālās apdrošināšanas iemaksas;
6) dabas resursu nodoklis;
7) transportlīdzekļu ikgadējā nodeva; lauksaimniecības tehniku – traktorus, kombainus – ar transportlīdzekļu nodevu neapliek.

Atbrīvojumi no nodokļu maksāšanas.

Visa veida lauksaimnieciskie ražotāji ir atbrīvoti no dabas resursa nodokļa, ja šie resursi tiek iegūti viņu pašu īpašumā un netiek izmantoti komerciālā nolūkā.

Bez tam zemnieku saimniecības, piemājas zemes un palīgsaimniecības tiek atbrīvotas no:

- uzņēmuma ienākuma nodokļa, ja kopējais apgrozījums nepārsniedz Ls 45 000 gadā;
- iedzīvotāju ienākuma nodokļa, ja kopējais taksējamais ienākums nepārsniedz Ls 3000 gadā.

Nodokļu atvieglojumi.

Visa veida lauksaimnieciskiem ražotājiem:

1) uzņēmuma ienākuma nodoklis tiek samazināts par Ls 10 uz katru lauksaimnieciskās zemes ha;
2) uzņēmuma ienākuma nodoklis maziem uzņēmumiem tiek samazināts par 20%, ja uzņēmums taksācijas gadā nav pārsniedzis vismaz divus no šādiem nosacījumiem:

- pamatlīdzekļu bilances vērtību – Ls 70000;
- neto apgrozījumu – Ls 200 000;
- vidējo strādājošo skaitu – 25 cilvēki.

2.3. tabula/*Table 2.3*

Valsts budžeta ieņēmumi no zemnieku saimniecībām 2002.-2004. gadā
State budget receipts from farms in 2002-2004

	2002		2003		2004	
	tūkst. Ls thous. LVL	%	tūkst. Ls thous. LVL	%	tūkst. Ls thous. LVL	%
Iedzīvotāju ienākuma nodoklis *Individual income tax*	969.0	36.2	1287.1	35.0	1528.1	37.3
Uzņēmumu ienākuma nodoklis *Corporate revenue tax*	433.1	16.2	459.8	12.5	389.8	9.5
Sociālās apdrošināšanas iemaksas *Social insurance payments*	2459.3	91.9	2963.2	80.7	3136.6	76.6
Pievienotās vērtības nodoklis *Value added tax*	-1266.0	-47.3	-1098.8	-29.9	-1018.9	-24.9
Dabas resursu nodoklis *Natural resources tax*	31.5	1.2	48.3	1.3	47.2	1.2
Akcīzes nodoklis *Excise tax*	8.8	0.3	-	-	-	-
Muitas nodoklis *Customs tax*	40.8	1.5	13.5	0.4	13.4	0.3
Ieņēmumi kopā *Total receipts*	2676.5	100	3673.1	100	4095.9	100

Avots: *Valsts ieņēmumu dienests (VID)*
Source: *State Revenue Service (SRS)*

Attiecībā uz lauksaimniecisko darbību, svarīga ir iespēja saņemt akcīzes nodokļa kompensāciju par iegādāto dīzeļdegvielu (gāzeļļu). Akcīzes nodoklis tiek kompensēts juridiskajām un fiziskajām personām, kurām īpašumā vai pastāvīgā lietošanā ir piešķirta zeme (vismaz 1 ha) un kuras to izmanto lauksaimniecības produkcijas ražošanai. Nomas līguma gadījumā akcīzes nodokli atmaksā tikai nomniekam. 2005. gadā atmaksa par dīzeļdegvielu bija 0.164 Ls/litru.

2005. gadā pastāvošā likme par 1 ha apstrādi ir 100 l dīzeļdegvielas (Valsts ieņēmumu dienesta dati).

2004. gadā kopējie ieņēmumi valsts budžetā pa nodokļu veidiem no zemnieku saimniecībām bija Ls 4095.9 tūkst., kas salīdzinājumā ar 2003. gadu kopumā palielinājušies par 11.5% (skat. 2.3. tabulu).

Pēc 2.3. tabulā apkopotās informācijas, 2004. gadā valsts budžeta kopējie ieņēmumi no zemnieku saimniecībām bija Ls 4.1 milj. No tiem valsts sociālās apdrošināšanas maksājumos samaksāti Ls 3.1 milj. jeb 76.6% no visu samaksāto nodokļu īpatsvara. Jāuzsver, ka sociālās apdrošināšanas iemaksājamo summu ziņā tas ir lielākais nodoklis. Tā likme – 33.09 %.

Savukārt ieņēmumi no iedzīvotāju ienākuma nodokļa (IIN) 2004. gadā bija Ls 1.53 milj. jeb 37.3%.

No 2005. gada 1. janvāra IIN neapliekamais minimums mēnesī ir noteikts Ls 26, atvieglojums par apgādībā esošu personu – Ls 18. Likumā par IIN 2004. gada 20. decembrī pieņemtie grozījumi paredz, ka katru gadu līdz 30. jūnijam noteiks ar IIN neapliekamā minimuma apmēru, to pakāpeniski palielinot, kā arī noteiks nodokļa atvieglojumu par apgādībā esošām personām.

Lai uzlabotu uzņēmējdarbības vidi, kopš 2002. gada Latvijā tika samazināta uzņēmumu ienākumu nodokļa likme (UIN) no 25% līdz 15%. 2004. gadā tā tika samazināta no 19% līdz 15%. Lauksaimniecības nozarē UIN ieņēmumi, salīdzinot ar 2003. gadu, ir samazinājušies par 15% (Latvijas lauksaimniecība un lauki, 2005).

Bez standarta PVN 18% likmes Latvijā ir noteikta arī samazināta PVN 5% likme. Ir arī PVN nulles % likme.

Pēc iestāšanās ES, no 2004. gada 1. maija mainījās arī PVN likmes, kas skar lauksaimniecības nozari. PVN 9% likmes vietā tika ieviesta PVN 5% likme, kas tiek piemērota veterināro medikamentu piegādēm saskaņā ar MK apstiprināto sarakstu. Tāpat arī no 2004. gada 1. maija PVN 18% likme tiek piemērota veterinārmedicīnas preču piegādēm un veterinārmedicīnas pakalpojumiem, kas līdz tam ar šo nodokli netika aplikti (Latvijas lauksaimniecība un lauki, 2005).

2.6. Kooperatīvu un nevalstisko organizāciju atbalsts

2.6. Support for cooperatives and nongovernmental organisations

Lauksaimniecības pakalpojumu kooperatīvās sabiedrības (LPKS) tika dibinātas ar mērķi noteikt stratēģiju un veicināt lauksaimniecības produktu ražošanu un realizāciju par biedriem izdevīgām cenām gan vietējā, gan arī ES tirgū. Sabiedrības saviem biedriem sniedz iespējami lētākus pakalpojumus.

2004. gadā Lauksaimniecības pakalpojumu kooperatīviem bija iespēja pretendēt uz valsts atbalstu subsīdijām „Kredītprocentu dzēšana lauksaimniecības pakalpojumu kooperatīviem", „Investīciju atbalsts lauksaimniecībā". Kā vienreizējos maksājumus Ls 5000 apmērā no subsīdiju programmas „Kooperācijas attīstības atbalsts jaunajiem kooperatīviem" tika piešķirti Ls 69 843,49 tūkst. jaunajām lauksaimniecības pakalpojumu kooperatīvajām sabiedrībām.

Atbalsta politika radījusi labvēlīgu kooperācijas attīstību Latvijas teritorijā kā jaunu lauksaimniecības pakalpojumu kooperatīvo sabiedrību (LPKS) dibināšanā, tā apgrozījuma palielinājumā. Laikā no 2003. gada 1. aprīļa līdz 2004. gada 1. aprīlim tika nodibinātas 27 jaunas kooperatīvās sabiedrības. Tas liecina par kooperatīvu kā organizāciju nepieciešamību laukos un to pozitīvo ieguldījumu lauksaimniecībā.

2004. gadā reģistrētas 72 lauksaimniecības pakalpojumu kooperatīvās sabiedrības, kas savu darbību veic Latvijas teritorijā. To darbības novirzieni: graudu pirmapstrādes un uzglabāšanas kooperatīvās sabiedrības – 25, piena kooperatīvi – 27 (no tiem 3 kooperatīvi nodarbojas arī ar piena pārstrādi un ražo kvalitatīvu produkciju), augļu un dārzeņu kooperatīvi – 10, medus kooperatīvi – 2, gaļas kooperatīvi – 3 un lauksaimniecības tehnikas pakalpojumu kooperatīvi – 5.

2004. gadā vērojama piena un graudu kooperatīvu strauja attīstība (Latvijas lauksaimniecība un lauki, 2005).

Secinājumi
Conclusions

1. 2003. gadā vienai saimniecībai vidēji bija 21.7 ha zemes, tajā skaitā 11.4 ha izmantotās LIZ, 2.6 ha neizmantotās LIZ.

2. Laikā no 2001. līdz 2004. gadam izmantotā LIZ ir palielinājusies par 60.3 tūkstošiem ha, jo ar 2004. gadu Latvija ir iestājusies ES un lauksaimnieki saņem platību maksājumus. Aramzeme palielinājusies par 50.4 tūkst. ha un veido »61% no LIZ; ilggadīgie stādījumi sastāda » 0.8% no LIZ. Pļavu un ganību platība absolūtos skaitļos ir palielinājusies par 9.6 tūkst ha, bet salīdzinājumā ar 2001. gadu relatīvi samazinās par 0.8%.

3. Vismazāko saimniecību grupā līdz 4 ekonomisko lielumu vienībām (ELV) jaunradītā vērtība nesedz nealgotā darbaspēka un ieguldītā kapitāla apmaksu. Grupā no 4 līdz 8 ELV netiek atalgots kapitāls un daļēji arī nealgotais darbaspēks. Grupā, sākot ar 16 ELV, veidojas peļņa un tā palielinās līdz ar ekonomisko lielumu.

4. Bruto pievienotā vērtība lauksaimniecībā, medniecībā un mežsaimniecībā 2000. gada salīdzināmās cenās uz 1 strādājošo nozarēs ir ļoti zema un laikā no 2002. līdz 2004. gadam palielinās no 1349 Ls/ cilvēku līdz 1566 Ls/cilvēku. Tautsaimniecībā vidēji šis rādītājs ir 3.6-3.7 reizes augstāks.

5. Lauksaimniecības, medniecības un mežsaimniecības nozaru produktivitātes koeficients palielinājies 2002. gadā no 0.27 līdz 0.28 2003. un 2004. gadā.

6. Valsts ietekmē lauksaimniecisko ražošanu ar ekonomiskām metodēm. Ievērojot reģionu un nozaru īpatnības, racionālai lauksaimniecības attīstības veicināšanai valsts izmanto kredītpolitiku, subsīdijas, nodokļus u.c. veida maksājumus.

7. 2004. gadā kreditēšanas programmas ietvaros tika piešķirti 84 aizdevumi par Ls 3 554 120. Vislielākais finansējums piešķirts ar piensaimniecības attīstību saistīto projektu īstenošanā. Reģionu griezumā visvairāk piešķirto aizdevumu ir Vidzemes un Zemgales lauksaimniekiem.

8. Subsīdiju finansējums 2005. gadā bija Ls 29 830 806 jeb par 8% vairāk nekā 2004. gadā. Visaugstāko īpatsvaru gan 2004. gadā, gan 2005. gadā aizņem līdzfinansējums SAPARDA programmai.

9. Valsts akciju sabiedrība „Lauku attīstības fonds" ar savu vairāk nekā Ls 4 milj. kapitālu garantē lauku uzņēmēju, tajā skaitā lauksaimniecības ilgtermiņa investīciju kreditēšanas programmas ietvaros, ņemtos kredītus Latvijas bankās, ja kredīta ņēmējam pietrūkst kredīta nodrošinājuma.

10. Lauku attīstības fonds 2004. gadā ir piešķīris 423 kredītu garantijas kopsummā par Ls 12.09 milj. 2005. gada 1. janvārī spēkā bija 1179 kredītu garantijas par Ls 23.69 milj.

11. 2004. gadā kopējie ieņēmumi valsts budžetā pa nodokļu veidiem no zemnieku saimniecībām veidoja Ls 4095.9 tūkst., kas salīdzinājumā ar 2003. gadu kopsummā palielinājušies par 11.5%.

12. 2004. gadā lauksaimniecības pakalpojumu kooperatīviem bija iespēja pretendēt uz valsts atbalstu subsīdijām „Kredītprocentu dzēšana lauksaimniecības pakalpojumu kooperatīviem", „Investīciju atbalsts lauksaimniecībā".

Priekšlikumi
Proposals

1. Valstij vajadzētu izveidot stabilu, nemainīgu lauksaimniecības atbalsta politiku vairākiem gadiem uz priekšu, lai lauku saimniecību vadītājiem rastos drošības sajūta un savu darbību varētu plānot arī vairākus gadus uz priekšu. Piemēram, subsīdiju programma tiek veidota katram gadam, bet to varētu izveidot vismaz 3 gadiem, lai lauksaimnieks varētu ieplānot, ko un cik būtu izdevīgi ražot.

2. Atbildīgajām ministrijām savlaicīgi jāizstrādā visu projektu nosacījumi un jāsniedz vispusīga informācija, lai lauksaimnieks savlaicīgi varētu sākt gatavot nepieciešamos dokumentus un paspētu pieteikties atbalsta saņemšanai.

3. Zemkopības ministrijai vajadzētu izveidot sistēmu, kā informēt lauksaimniekus par jaunumiem un izmaiņām, jo lauksaimnieki joprojām ir parāk maz informēti, kā dēļ tiek nokavēti termiņi dažādiem atbalsta veidiem. Informāciju varētu atspoguļot katra rajona laikrakstā vai arī veidot informācijas stendus pagastu centros. Pagastos varētu norīkot cilvēku, kurš būtu atbildīgs par jaunākās informācijas izplatīšanu.

4. Valsts varētu arī subsidēt interneta izveidi saimniecībās, jo internetā iespējams iegūt jaunāko informāciju, kā arī veikt maksājumus vai pieteikšanos pasākumiem, uzdot jautājumus (piem., LAD) par kādu problēmu un saņemt atbildi ar e-pasta palīdzību no attāluma, ja lauksaimniekam, piemēram, nav laika ierasties kādā iestādē, lai veiktu šīs darbības.

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Reformētās Kopējās lauksaimniecības politikas finansiālā atbalsta stratēģiskās problēmas nākošajam plānošanas periodam Latvijā
The strategic problems of the reformed Common Agricultural Policy financial support for the next programming period in Latvia

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Abstract

The article represents results of study concerning the changes in the strategy of European Union financial support for agricultural sector in the next programming period n Latvia. It is established that the financing of the reformed Common Agricultural Policy (CAP) in the next seven years (2007-2013) will be executed from two new financial instruments of the CAP – European Agricultural Guarantee Fund (EAGF) and European Agricultural Fund for Rural Development (EAFRD). In parallel with these two funds until the end of 2008 disbursement of expenditure will be also made out from the current European Agricultural Guidance and Guarantee Fund (EAGGF) to execute the multi-annual commitments entered into by the end of 2006.

Most significant and fundamental changes relates to measures financed from the EAFRD as they will include measures aimed at improvement of competitiveness of agricultural and forestry sector as well as activities related to the improvement of quality of life in rural areas which up to now were supported through the EAGGF Guidance section or so-called structural funds. In addition, support through the new fund will be also targeted to measures of environmental and rural landscape improvement which during this programming period were financed from the EAGGF Guarantee section or Rural Development Plan measures.

Due to these changes certain strategic problems are anticipated in planning the allocation of available financial resources to different measures related to the development of agriculture and rural development. Firstly, the merging of measures aimed at improvement of agricultural competitiveness and development of rural areas, as well as measures of environmental and rural landscape improvement into one financial 'basket' which according to the total amount of support (approx. 900 mill. EUR of European Union contribution in the whole seven years period) will not exceed or even will be lower than the annual level of support in the current programming period implies that there will be a need for settling on a potential re-distribution of financial resources from currently financially significant rural landscape preservation measures to investment or competitiveness measures. Secondly, since in this programming period a number of measures with multi-annual commitments are implemented (e.g. agro-environmental measures and support to semi subsistence farms undergoing restructuring) which will be carried over to the next programming period then the balance of unsettled financial commitments from the current funds (the end of disbursement period of current period is 31 December 2008) will be transferred to the new EAFRD fund. Consequently, an excessive drawing of financial resources to multi-annual commitments during this period indirectly reduces the amount of support available for the new measures in the new programming period.

Key words: European Union, agriculture, rural development, financial support.

Ievads
Introduction

Kopējā lauksaimniecības politika Eiropas Savienībā nemitīgi tiek diskutēta un periodiski reformējas. Pēdējās lielākās reformas notika 2003.gada jūnijā, kas ieviesa būtiskas izmaiņas lauksaimniecības, privātās mežsaimniecības un lauku teritoriju attīstības stratēģiskajos mērķos, pārliekot vai stipri

palielinot akcentus uz lauku attīstību un lauku ainavas uzlabošanu. Saprotams, ka tas rada pamatu satraukumam komerciālajos lauksaimniecības uzņēmumos un uzņēmējsabiedrībās.

Šādā situācijā, loģiski, zinātniekiem rodas gan interese, gan izdevība detalizēti, strukturēti izpētīt Eiropas Savienības tiesību aktus un no tiem izrietošo turpmākā finansiālā atbalsta stratēģiju un taktiku nākošajam programmēšanas periodam.

Tas arī noteica šī **darba mērķi** – izpētīt Eiropas Savienības reformētās KLP finansēšanas stratēģiju un taktiku nākošajam plānošanas un programmēšanas periodam, un novērtēt tās ietekmi uz Latvijas lauksaimniecības un mežsaimniecības attīstības iespējām.

Darba mērķa sasniegšanai **risināti** sekojoši **uzdevumi**:

- izpētīt nākošā plānošanas perioda KLP finansēšanas stratēģijas un taktikas tiesisko pamatu;
- izanalizēt ELFLA mērķus, asis, pasākumus un pamatnosacījumus;
- novērtēt jaunās stratēģijas un taktikas paredzamo ietekmi uz Latvijas lauksaimniecības uzņēmumu un uzņēmējsabiedrību, kā arī naturālo un daļēji naturālo saimniecību attīstību.

Materiāli un metodes
Materials and methods

Pētījumu uzdevumu risināšanai izmantotas Eiropas Padomes regulas un Eiropas Komisijas izstrādātie regulu projekti, statistikas dati, Lauku atbalsta dienesta informācijas bāze, publikācijas un speciālā literatūra.

Pielietotas vispārējās analīzes un sintēzes, kā arī zinātniskās indukcijas un dedukcijas metodes, bet ietekmes prognozēšanai izmantota ekspertvērtējumu metode.

Rezultāti un diskusija
Results and discussion

1. Nākamā plānošanas perioda KLP finansēšanas stratēģijas tiesiskais pamats
1. Legal basis of the CAP financing strategy for the next programming period

Tiesisko un normatīvo bāzi, jeb dokumentāro pamatu finansiālā atbalsta stratēģijai nākamajam plānošanas periodam veido šādi galvenie dokumenti:

- Eiropas Padomes lēmums par Kopienas lauku attīstības stratēģiskajām pamatnostādnēm (2007.–2013. gada plānošanas laikposms);
- 2005.gada 21.jūnija Eiropas Padomes Regula (EK) Nr.1290/2005 par Kopējās lauksaimniecības politikas finansēšanu;
- 2005.gada 20.septembra Eiropas Padomes Regula (EK) Nr.1698/2005 par atbalstu lauku attīstībai no Eiropas lauksaimniecības fonda lauku attīstībai (ELFLA);
- 1999.gada 17.maija Eiropas Padomes Regula Nr.1257/1999 par Eiropas Lauksaimniecības virzības un garantiju fonda (ELVGF) atbalstu lauku attīstībai;
- Eiropas Komisijas regulas projekts, kas nosaka detalizētus nosacījumus Eiropas Padomes Regulas (EK) Nr.1698/2005 piemērošanai;
- Eiropas Komisijas regulas projekts par pāreju no 2000-06 uz 2007-13.gadu lauku attīstības atbalsta pasākumiem;

Šīm Eiropas Padomes un Eiropas Komisijas regulām pakārtoti nacionālie normatīvie dokumenti (Lauksaimniecības un lauku attīstības likums, ikgadējie valsts budžeta likumi u.c.), kā arī stratēģijas un plānošanas dokumenti, kas vēl ir izstrādes stadijas sākumposmā.

2. ELFLA finansiālā atbalsta veidi, mērķi un pasākumi
2. Types, objectives and measures of the EAFRD support

Saskaņā ar Eiropas Komisijas apstiprinātajiem dokumentiem ir paredzēts, ka Eiropas Lauksaimniecības garantiju fonda (ELGF) finansētās atbalsta programmas būs ar ražošanu nesaistītie tiešie maksājumi lauksaimniekiem, kā arī lauksaimniecības produktu tirgu stabilizējošie pasākumi, tādi kā lauksaimniecības preču eksporta uz trešajām valstīm kompensācijas un intervences pasākumu finansēšana, kas līdz šim tika atbalstīti ELVGF Garantiju izmaksu daļas ietvaros.

Ņemot vērā, ka ELGF finansētie atbalsta pasākumi pēc būtības turpinās līdz šim ELVGF Garantiju izmaksu daļas ietvaros atbalstītos pasākumus, šo pasākumu finansējuma pārnešana uz jaunu fondu principiāli neietekmēs ne šiem mērķiem pieejamā finansējuma apjomu, ne būtiskākos saņemšanas nosacījumus.

Līdz ar to, detalizētāka analīze ir veikta par gaidāmajām izmaiņām saistībā ar jaunā Eiropas

Lauksaimniecības fonda lauku attīstībai (ELFLA) darbību, sākot ar 2007.gada 1.janvāri.

ELFLA izmantošanas stratēģija nākamajam plānošanas periodam 2007.- 2013.gadiem noteikta ar Eiropas Padomes 2005.gada 20.septembra regulu Nr.1698/2005 par atbalstu lauku attīstībai no Eiropas lauksaimniecības fonda lauku attīstībai.

Pēc būtības, regula par ELFLA izveidošanu pabeidz *Agenda 2000* iesākto Eiropas Savienības Kopējās lauksaimniecības politikas un lauku attīstības reformu, kas paredz arvien lielāku uzsvaru atbalsta politikā pārlikt no tiešā lauksaimniecības produktu ražotāju un tirgus atbalsta uz ilgtspējīgas lauku attīstības un lauku vides sakārtošanas pasākumiem, jeb no tā sauktās KLP *pirmā pīlāra* atbalsta politikas uz *otrā pīlāra* pasākumiem.

Šī virsmērķa ietvaros pieņemtā lauku attīstības reforma nosaka plašākus stratēģiskos pamatmērķus:

- lauksaimniecības un mežsaimniecības konkurētspējas paaugstināšana;
- zemes apsaimniekošana;
- vides kvalitāte;
- dzīves kvalitāte;
- aktivitāšu dažādošana lauku apvidos;
- līdzsvara nodrošināšana starp lauku attīstības programmu asīm.

Šie pamatmērķi sasniedzami veicinot inovācijas, pārstrukturēšanos un attīstību lauksaimniecības un mežsaimniecības nozarē, atbalstot ilgtspējīgu zemes apsaimniekošanu vides un lauku ainavas uzlabošanas nolūkā, kā arī veicinot ekonomisko aktivitāšu dažādošanu vai daudzveidību lauku apvidos un tādējādi uzlabojot to dzīves kvalitāti.

Saskaņā ar šiem mērķiem, ELFLA ietvaros tiek paredzēti vairāki atbalsta pasākumi, kas sagrupēti trīs grupās jeb asīs, katrā asī iekļaujot pasākumus, kuru ietekme uz sasniedzamo mērķi ir līdzīga vai papildinoša. Papildus šīm trīs galvenajām asīm ir visus pasākumus vienojoša horizontāla ass, kurā iekļautas LEADER veida pasākumu aktivitātes, t.i. vietējo stratēģiju un rīcības grupu aktivitāšu veicināšanai.

Īsumā, ELFLA ietvaros atbilstoši četrām atbalsta asīm ir paredzēti šādi pasākumi.

1.Ass Lauksaimniecības un mežsaimniecības nozaru konkurētspējas uzlabošana:

a) sekmēt zināšanas un cilvēkpotenciāla uzlabošanos:

- ar arodapmācību un informēšanas pasākumiem,
- ar konsultāciju pakalpojumu pilnveidošanu,
- atbalstot jaunus izglītotus lauksaimniekus,
- atbalstot priekšlaicīgu pensionēšanos

b) attīstīt fizisko kapitālu, veicot tā restrukturizāciju un inovācijas:

- modernizējot lauku saimniecības,
- paaugstinot meža ekonomisko vērtību,
- radot lielāku pievienoto vērtību lauku un mežu produktiem,
- izstrādājot un ieviešot jaunas tehnoloģijas, jaunus procesus un jaunus produktus,
- uzlabojot infrastruktūru lauksaimniecības un mežsaimniecības attīstībai,
- atjaunojot lauksaimniecības ražošanas potenciālu dabas katastrofu rezultātā.

c) lauksaimniecības ražošanas un produktu kvalitātes paaugstināšana:

- atbalstot lauksaimnieku darbību atbilstoši ES standartiem,
- īpaši veicinot lauksaimnieku dalību pārtikas kvalitātes vadīšanas shēmās,
- atbalstot ražotāju grupu informācijas un reklāmas aktivitātes.

d) pārejas posma pasākumi attiecībā uz jaunajām dalībvalstīm:

- daļēji naturālo saimniecību pārstrukturēšanai,
- ražotāju grupu izveidei.

2.Ass Vides un lauku ainavas uzlabošana:

a) sekmēt ilgtspējīgu lauksaimniecības zemes izmantošanu:

- atbalstot lauksaimniekus par nelabvēlīgiem dabas apstākļiem kalnu apvidos un citās teritorijās,
- paredzot Natura 2000 maksājumus,
- turpinot agrovides maksājumus, lai segtu radušos zaudējumus no neiegūtās ražas,
- paredzot maksājumus par dzīvnieku labturības prasībām,
- atbalstot neienesīgās investīcijas (piemēram, vides prasību sasniegšanai).

b) sekmēt ilgtspējīgu mežsaimniecības zemes izmantošanu, atbalstot:

- lauksaimniecības zemes pirmreizējo apmežošanu,
- agromežsaimniecības sistēmu pirmreizēju izveidošanu uz lauksaimniecības zemēm,

■ lauksaimniecībā neizmantojamās zemes pirmreizēju apmežošanu,
■ Natura 2000 un citus vides maksājumus,
■ mežsaimniecības ražošanas potenciāla atjaunošanu un preventīvu pasākumu ieviešanu
■ neienesīgās investīcijas.

3.Ass Dzīves kvalitāte lauku apvidos un lauku ekonomikas dažādošana:

a) Lauku ekonomikas dažādošana:
■ nelauksaimniecisku aktivitāšu dažādošana,
■ mikrouzņēmumu radīšana un attīstīšana, veicinot nelauksaimniecisko uzņēmējdarbību,
■ tūrisma aktivitāšu veicināšana.

b) Dzīves kvalitātes uzlabošana lauku apvidos, atbalstot:
■ pakalpojumus ražošanai un lauku iedzīvotājiem,
■ ciematu atjaunošanu un attīstību,
■ lauku mantojuma saglabāšanu un atjaunošanu.

c) Apmācības un informācijas pasākumi lauku iedzīvotājiem un uzņēmējiem.

d) Prasmju iegūšanas pasākumi vietējo stratēģiju gatavošanai un īstenošanai.

4.Ass Leader:

a) vietējo partnerības tīklu veidošana (vietējās rīcības grupas),

b) sadarbības projektu īstenošana,

c) novatorisku pieeju īstenošana,

d) daudznozaru koncepciju īstenošana,

3. ELFLA paredzamā ietekme uz Latvijas lauksaimniecības uzņēmumu un uzņēmējsabiedrību, kā arī naturālo un daļēji naturālo saimniecību attīstību.

3. Anticipated impact of the EAFRD on the development of Latvian agricultural holdings and enterprises, as well as subsistence and semi-subsistence farms

Lai pilnvērtīgi izanalizētu ELFLA finansēto pasākumu paredzamo ietekmi uz Latvijas lauksaimniecības uzņēmumu un saimniecību attīstību, vispirms jāapskata fonda ietvaros pieejamā *finansējuma apjoma sadalījuma ierobežojumi* starp dažādiem iepriekš apskatītajiem atbalsta pasākumiem.

Lai gan ES nosacījumi paredz, ka finansējuma apjoma noteikšana katram individuālam atbalsta pasākumam ir katras dalībvalsts kompetence, tomēr, lai nodrošinātu saskaņotību un ELFLA noteikto pamatmērķu sasniegšanu visās ES dalībvalstīs, regula nosaka minimālo absolūto finansējuma apjomu, kas jānovirza katrai no četrām asīm un attiecīgi to mērķiem:

■ vismaz 10% no kopējā ELFLA ieguldījuma jāparedz katrā no 1. un 3. asī iekļautajiem pasākumiem;
■ vismaz 25% no kopējā ELFLA ieguldījuma jāparedz 2.ass pasākumiem;
■ vismaz 5% no kopējā ELFLA finanšu apjoma jānovirza 4.asij, tomēr attiecībā uz jaunajām dalībvalstīm šis ieguldījums var tikt samazināts līdz 2.5 %.

Tā kā ELFLA finansētie pasākumi ietver gan lauksaimniecības un mežsaimniecības konkurētspējas paaugstināšanas pasākumus un daļēji arī ar dzīves kvalitātes uzlabošanu lauku apvidos saistītus pasākumus, kas pašreizējā periodā tiek atbalstīti caur ELVGF Virzības izmaksu daļu jeb tā sauktajiem *struktūrfondiem*, kā arī vides un lauku ainavas uzlabošanas pasākumus, kas šobrīd tiek finansēti no ELVGF Garantiju izmaksu daļas jeb *lauku attīstības plāna* ietvaros, tad, lai izvērtētu šo ierobežojumu potenciālo ietekmi uz nākošo programmēšanas periodu kontekstā ar pašreiz Latvijā īstenotajiem atbalsta pasākumiem, esam salīdzinājuši 2004.-2006.gados Latvijā faktiski pieejamo finanšu apjomu ELVGF Garantijas izmaksu daļas finansētajos lauku attīstības plāna pasākumos un ELVGF Virzības daļas finansētajos strukturālajos pasākumos un šo pasākumu iekļaušanos ELFLA attiecīgajā asī (*pašreizējā perioda pasākumu piederība kādai no ELFLA asīm ir izvērtēta pasākumu nevis apakšpasākumu līmenī, līdz ar to salīdzinājums atsevišķos gadījumos, t.i. pasākumiem, kas ietver vairākus pēc būtības atšķirīgus apakšpasākumus, piemēram, „Mežsaimniecības attīstība", ir aptuvens*). Analīzes rezultāti ir apkopoti 1.tabulā.

Saskaņā ar šobrīd pieejamo nākošā programmēšanas perioda finanšu perspektīvas projektu, periodā no 2007.-2013.gadam Latvijai lauksaimniecības un lauku attīstības pasākumiem būs pieejams aptuveni 900 milj. EUR Eiropas Savienības finansējuma, pie kura vēl jāpieskaita aptuveni 210 milj. EUR Latvijas līdzfinansējuma (pieņemot, ka Latvijas vidējā līdzfinansējuma likme ir ~23%). Kopā tas veido ~ 1 110 milj. EUR septiņu gadu periodā, jeb 158,6 milj EUR gadā.

1.tabula / *Table 1*

2004.-2006.gados Latvijā pieejamais un izmaksātais atbalsta apjoms lauku attīstības plāna pasākumos un strukturālajos pasākumos

Available and paid out financial support under Rural Development Plan measures and structural measures in the period 2004- 2006 in Latvia

Pasākuma iekļaušanās attiecīgajā ELFLA asī *Measure alignment with respective EAFRD axis*	Pasākumi *Measures*	Sabiedriskā finansējuma apjoms (tūkst. EUR) *Amount of public expenditure (thsd. EUR)*		
		Programm-dokumentā apstiprinātais *Approved in programming document*	Līdz 01.03.2006. izmaksātais *Paid out as on 01.03.2006*	Prognozētais saistību apjoms, kas pāries uz jauno periodu *Forecasted amount of overcommitments transferred to new period*
Lauku attīstības plāna pasākumi ***Rural Development Plan measures***				
1.ass *Axis 1*	Priekšlaicīgā pensionēšanās *Early retirement*	8 272	3	14 500
1.ass *Axis 1*	Atbalsts ražotāju grupām *Support to producer groups*	2 871	1 122	370
1.ass *Axis 1*	Atbalsts daļēji naturālām saimniecībām *Support to semi-subsistence farms*	30 987	15 465	15 400
1.ass *Axis 1*	Standartu sasniegšana *Meeting standards*	67 058	15 195	0
2.ass *Axis 2*	Agrovide *Agri-environment*	25 256	19 404	20 000
2.ass *Axis 2*	Mazāk labvēlīgie apvidi un AIVAN *Less favoured areas*	223 195	90 126	0
	KOPĀ	**357 639**	**141 315**	**50 270**
ELVGF Virzības daļas strukturālie pasākumi ***EAGGF –Guidance financed structural measures***				
1.ass *Axis 1*	Investīcijas lauksaimniecības uzņēmumos *Investments in agricultural holdings*	47 455	41 382	0
1.ass *Axis 1*	Atbalsts jaunajiem zemniekiem *Setting up of young farmers*	6 804	6 596	0
1.ass *Axis 1*	Lauksaimniecības produktu pārstrādes un mārketinga uzlabošana *Improvement of processing and marketing of agricultural products*	27 400	11 874	0
2.ass *Axis 2*	Mežsaimniecības attīstība *Forestry development*	9 351	1 609	0
3.ass *Axis 3*	Lauku teritorijas pārveidošana un attīstības veicināšana *Promotion of adaptation and development of rural areas*	41 467	13 242	0
3.ass *Axis 3*	Apmācības *Training*	2 436	13	0
4.ass *Axis 4*	Vietējo rīcību attīstība *Development of local action*	3 044	0	0
	KOPĀ / *TOTAL*	**137 957**	**74 716**	**0**

Avots: *autoru aprēķini pēc LAD datiem*
Source: *authors' calculations from RSS data*

Apskatot 1.tabulā apkopotos datus, redzams, ka 2004.-2006.gada programmēšanas periodā Latvijai lauksaimniecības un lauku attīstības pasākumiem kopumā ir pieejams aptuveni 165,2 milj. EUR gadā (*būtiski ir ievērot, ka šajā analīzē netiek ņemti vērā ELVGF garantijas izmaksu daļas finansētie tiešie maksājumi un citi tirgus atbalsta pasākumi, kuru finansējumam jaunajā programmēšanas periodā paredzēts atsevišķs finansējums jaunā – ELGF fonda ietvaros*).

Lai uzskatamāk varētu salīdzināt jaunajā ELFLA fondā katrai asij saskaņā ar ES likumdošanu noteikto minimālo finansējuma apjomu un pašreizējā periodā faktiski pieejamo finansējumu attiecīgās ass pasākumiem ELVGF ietvaros, šie dati ir apkopoti 2.tabulā.

No 2.tabulā apkopotajiem datiem var secināt, ka, lai 2007.-2013.gadā nodrošinātu pašreizējam programmēšanas periodam ekvivalentu sabiedriskā atbalsta intensitāti, vislielākais nepieciešamā finansējuma ieguldījuma pieaugums attiecībā pret ES likumdošanā noteikto būtu nepieciešams ELFLA pasākumu **1.asī** (t.i. no minimāli noteiktajiem 10% uz 40% no kopējā fonda ieguldījuma), jeb *lauksaimniecības un mežsaimniecības nozaru konkurētspējas uzlabošanas pasākumiem*, kuriem šajā periodā ir pieejams vairāk kā 4 reizes lielāks līdzekļu daudzums, nekā jaunajam ELFLA fondam 1.ass pasākumos minimāli noteiktais apjoms.

Ievērojamu, tomēr mazāk būtisku finansējuma apjoma palielinājumu būtu jānovirza arī 2.asij (no minimālajiem 25% uz 54%), jeb *vides un lauku ainavas uzlabošanas pasākumiem*, kuriem saskaņā ar šībrīža regulējumu ir iedalīts aptuveni 2 reizes vairāk finansējuma, nekā 2.ass pasākumos minimāli paredzētais apjoms.

Attiecībā uz 3..ass pasākumiem var secināt, ka līdzšinējā Latvijas atbalsta stratēģija faktiski atbilst reformētās lauku attīstības politikas minimālajām prasībām, jo pašreizējais kopējā atbalsta apjoms *dzīves kvalitāte lauku apvidos un lauku ekonomikas dažādošanas* pasākumiem pēc būtības sakrīt ar Eiropas Komisijas noteikto minimālo atbalsta intensitāti, t.i. vismaz 10% no kopējiem fonda ieguldījumiem.

Vismazākais finansējuma apjoms šajā periodā ir novirzīts LEADER veida pasākumiem un arī šo pasākumu praktiskā ieviešana ir aizkavējusies, kas varētu apgrūtināt minimālā finansējuma apgūšanu šiem pasākumiem nākošajā plānošanas periodā, kas būs vairāk kā 4 reizes lielāks, nekā šobrīd.

2.tabula / *Table 2*

Minimālais finansējuma piešķīrums ELFLA asīm 2007.-2013.gadiem un faktiskais pieejamais finansējuma apjoms ELVGF un LAP pasākumiem 2004.-2006.gados
Minimum financial allocation for EAFRD axis in 2007-2013 period and actual financial support available under EAGGF and RDP measures in 2004-2006 period

Asis un minimālais finansējuma piešķīrums(%) *Axis and minimum financial allocation (%)*	2007.-2013.gads (tūkst. EUR) *2007-2013 period (thsd. EUR)*		2004.-2006.gads (tūkst. EUR) *2004-2006 period (thsd. EUR)*		Nepieciešamais ELFLA ieguldījums, lai sasniegtu 2004.-2006.g. līmeni (%) *Required EAFRD allocation to meet the level of 2004-2006 (%)*
	Minimālais finansējuma piešķīrums asīm periodā kopā *Minimum financial allocation for axis in the total period*	Minimālais finansējuma piešķīrums asij gadā *Minimum financial allocation for axis in one year*	Faktiski pieejamais finansējuma apjoms periodā kopā *Actually available support in the total period*	Faktiski pieejamais finansējuma apjoms gadā *Actually available support in one year*	
1.ass (10%) *Axis 1*	111 000	15 850	190 847	63 615	40,1 %
2.ass (25%) *Axis 2*	277 500	39 640	257 802	85 934	54,2 %
3.ass (10%) *Axis 3*	111 000	15 850	43 903	14 634	9,2 %
4.ass (2,5%) *Axis 4*	27 750	3 960	3 044	1 015	0,6 %

Avots: *autoru aprēķini pēc LAD datiem*
Source: *authors' calculations from RSS data*

Slēdziens
Conclusions

Kopumā var secināt, ka, ņemot vērā kopējo pieejamā finansējuma apjomu nākošajam programmēšanas periodam, turpmāk ilgtermiņā nebūs iespējams nodrošināt visos četros ELFLA atbalsta mērķa virzienos jeb asīs tādu pašu sabiedriskā finansējuma ieguldījumu, kāds tas ir bijis pieejams 2004.-2006.gados, it īpaši ņemot vērā, ka ne 3.ass, ne arī 4.ass pasākumu ietvaros nebūs iespēju atrast rezerves līdzekļus citām vajadzībām. Papildus tam, jāņem vērā, ka pēc aptuvenām aplēsēm vairāk kā 50 milj. EUR nākošajā programmēšanas periodā būs jātērē finansiālo saistību segšanai par ilgtermiņa pasākumiem, kas tiek īstenoti šajā periodā – piemēram, agrovides pasākumi, atbalsts daļēji naturālām saimniecībām u.c., kas kopējo pieejamo finansējuma apjomu jaunā perioda pasākumiem vēl vairāk samazina.

Līdz ar to, rodas jautājums pēc būtības, kura no abām – 1. vai 2. ass būs Latvijai prioritārākā un kurai no tām tiks novirzīts nepieciešamais finansējums papildus Eiropas Komisijas noteiktajam minimālajam atbalsta apjomam.

Šai problēmai ir vairākas iespējamas pieejas. Pirmā – pārskatīt gan 1.ass, gan 2.ass ietvaros šobrīd esošos atbalsta pasākumus, izvērtēt to lietderību un nepieciešamības gadījumā, kādu no šiem pasākumiem nākošajā plānošanas periodā neiekļaut. Viens no šādiem pasākumiem varētu būt Lauku attīstības plāna „Standartu sasniegšana", kam šajā periodā ir paredzēts būtisks finansējuma apjoms – kopumā 67 milj. EUR. Papildus būtisks arguments šī pasākuma neiekļaušanai jaunajā periodā ir fakts, ka saskaņā ar Eiropas Komisijas regulu projektiem, šajā pasākumā vairs netiks pieļauts investīciju atbalsts, kas bija būtiskākā šī pasākuma sastāvdaļa šajā periodā un līdz ar to, būtiski samazināsies šāda atbalsta pozitīvā ietekme uz saimniecību ražošanas struktūru modernizāciju un ilgtermiņa ietekmi.

Līdzīgi varētu pārvērtēt 2.ass pasākuma „Mazāk labvēlīgie apvidi" ilgtspēju un papildinātību ar pārējiem 1. un 2.ass pasākumiem, jo šim pasākumam šajā plānošanas periodā salīdzinot ar jebkuru citu atbalsta veidu ir paredzēts vislielākais finansējuma apjoms – 223 milj. EUR, kā arī, protams, vislielākais atbalsta saņēmēju skaits. Tomēr, jāņem vērā, ka 2. ass pasākumus (piemēram, agrovide un mazāk labvēlīgie apvidi) ir iespējams izmantot kā kompensējošu mehānismu, lai izlīdzinātu iespējamu tiešo maksājumu samazinājumu. Papildus jāņem vērā, ka ilgtermiņā agrovides pasākumiem Eiropas Savienības KLP atbalsta kontekstā tiks pievērsts arvien lielāks uzsvars un līdz ar to, arī prasība nodrošināt lielākus pieejamos finanšu līdzekļus.

Otrā pieeja būtu ilgtermiņa Latvijas lauksaimniecības un lauku attīstības iespēju stratēģiska izvērtēšana visas Latvijas tautsaimniecības un pārējo ES struktūrfondu (īpaši, Eiropas Reģionālās attīstības fonds) atbalsta jomu kontekstā ar attiecīga sabiedriskā atbalsta apjoma novirzīšana tiem mērķiem, kas vistiešākajā veidā risinātu šos ilgtermiņa uzdevumus. Šādā gadījumā, galvenais uzdevums struktūrfondu plānošanas procesā būtu nevis finansējuma pārdalīšana un sabalansēšana ar pašreizējiem vai vēsturiski ierastiem atbalsta veidiem lauksaimniecības fonda ietvaros, bet gan šī atbalsta novirzīšana lauksaimniecības un mežsaimniecības sektoram nepieciešamo pamatuzdevumu risināšanai, saistītajām tautsaimniecības nozarēm paredzot atbalstu no attiecīgajiem ES struktūrfondiem un Latvijas atbalsta mehānismiem. Protams, šāda uzdevuma izvirzīšana pārsniedz lauksaimniecības un mežsaimniecības kā sektora robežas un ir risināma kompleksi saistībā ar pārējām tautsaimniecības nozarēm.

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Совершенствование механизма ценообразования на сельскохозяйственную продукцию
Perfection of the mechanism of agricultural produce pricing

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Abstract

During the period 2001-2004 despite of the growth of total production the main parameters of financial stability and solvency of belarusian agricultural enterprises were below normative ones. It was caused by the increased disparity between the prices for agricultural produce and material resources of industrial production used in agriculture. The main causes of unfavorable price ratios are price liberalization for material resources and services without coordination with possible dynamics of the prices for agricultural produce; large-scale monopolization among the processing, procuring and trade enterprises; drop of effective demand of consumers; negative influence of low prices for the imported products. The equation of price ratios can be reached in several directions, but the priority should be given to the economic methods of regulation such as guaranteed, target (equivalent, parity) and pledge prices, mechanism of commodity and purchase interventions.

Ключевые слова: непаритет цен, эквивалентность товарообмена, внутриотраслевые диспропорции, залоговые операции.

Key words: *price disparity, equivalence of commodity exchange, intrabranch disproportions, pledge operations.*

Introduction

В Республике Беларусь существующая несбалансированность ценовых пропорций на продукцию сельскохозяйственного производства и материальные ресурсы промышленного производства, поступающие в сельское хозяйство, оказывает негативное влияние на эффективность сельскохозяйственного производства и приводит к недополучению доходов товаропроизводителями.

В связи с этим основной целью данной статьи стало исследование проблемы ценовых пропорций на продукцию сельскохозяйственного производства и материальные ресурсы промышленного производства, поступающие в сельское хозяйство. Для успешного достижения поставленной цели нам потребовалось определить масштабы межотраслевого и внутриотраслевого непаритета цен на сельскохозяйственную продукцию, определить причины неблагоприятных ценовых соотношений для агропромышленного комплекса и предложить пути их совершенствования.

При написании статьи были использованы труды отечественных и зарубежных ученых по проблематике межотраслевых отношений. В работе были применены общелогические приемы познания (анализ и синтез, обобщение, индукция и дедукция, аналогия), методы эмпирического и конкретно-экономического анализа (наблюдение, описание, измерение) и др.

Results and discussion

На протяжении всего периода реформ, начиная с 1991 г., ценовые пропорции были неудовлетворительными для ведения сельского хозяйства, особенно в 1992 и 1993 гг., когда цены на средства производства росли быстрее в 2-2.5 раза, чем цены на сельскохозяйственную продукцию. В итоге в 1993 г. для покупки сопоставимого объема промышленных товаров требовалось продать почти в 5.4 раза больше продукции, чем в 1990 г. В последующие годы, вплоть до 1999 г.,

ценовые пропорции улучшались (в 1996 г. индексы роста цен на сельскохозяйственную продукцию и товары и услуги для сельского хозяйства были примерно равны). Однако накопившийся на начальном этапе преобразований ценовой непаритет не был устранен. В 1999 г. соотношение стоимости «Ресурсной корзины» и «Корзины сельскохозяйственной продукции» было выше, чем в 1990 г., почти в 2.7 раза.

Опережающие темпы роста цен промышленности отмечены также в 2000 и 2001 гг. В 2002 г. ценовой пресс на сельское хозяйство несколько уменьшился: цены на промышленную продукцию возросли по сравнению с предыдущим годом на 31 %, тогда как сельскохозяйственная продукция подорожала на 49 %. Однако и в 2003 – 2004 гг. ценовая ситуация сложилась не в пользу сельского хозяйства. По данным Министерства статистики и анализа Республики Беларусь в 2003 г. индекс цен на реализованную сельскохозяйственную продукцию – 116 %, а на промышленную продукцию и услуги для сельского хозяйства – 131 %. В 2004 г. индекс цен на реализованную сельскохозяйственную продукцию – 127 %, а на промышленную продукцию и услуги для сельского хозяйства – 128 %. В результате индекс ценового непаритета в 2004 г. по отношению к 1990 г. достиг 328.6 %. То есть в 2004 г. для покупки равновеликого количества ресурсов требовалось продать сельскохозяйственной продукции в 3.3 раза больше, чем в 1990 г.

Потери сельского хозяйства в результате непаритета цен составили с 1991 г. более 29 млрд. долл. США, в том числе только за 2004 г. более 2.9 млрд. долл.

Если в 1991 г. стоимость трактора МТЗ-82 была адекватна стоимости 26 т зерна, то в апреле 2005 г. – уже 119.1 т (в 4 раза выше); 1 т дизельного топлива - соответственно 120 и 5729 кг (в 47 раз выше). По сравнению с 1991 г. в апреле 2005 г. для приобретения 1 т бензина требовалось продать в 14.5 раз больше молока, в 22 раза — мяса крупного рогатого скота, для покупки 1 т дизельного топлива — более 2.9 т молока или 561 кг мяса крупного рогатого скота против 83 и 10 кг в 1991 г. соответственно. Аналогичное положение складывается при реализации других видов продукции.

В 2004 г. по сравнению с 1991 г. цены на зерновые выросли в 2.9 млн. раз, на крупный рогатый скот – 2.6 млн. раз, на молоко – 4.8 млн. раз, на свиней – 3.6 млн. раз, тогда как на дизельное топливо - в 61.4 млн. раз, на электроэнергию — в 71.5 млн. раз, на технику — в 24.4 млн. раз.

Среди основных причин неблагоприятных ценовых соотношений для агропромышленного комплекса можно выделить:

- либерализацию цен на материально-технические ресурсы и услуги без увязки с возможной динамикой цен на сельхозпродукцию;
- ограничения в формировании цен на сельскохозяйственную продукцию из-за монополизации перерабатывающих предприятий, заготовительных и торговых структур;
- снижение платежеспособного спроса населения;
- воздействие на рынок относительно низких цен импортируемого продовольствия.

Вследствие непропорционального роста цен на промышленную продукцию финансовое положение большинства субъектов хозяйствования остается крайне сложным, несмотря на предпринимаемые меры по стабилизации экономического положения сельскохозяйственного производства, включая и высокий уровень государственной бюджетной поддержки. Низкая окупаемость затрат на производство и реализацию сельхозпродукции не позволяет сельхозорганизациям обеспечить свои финансовые обязательства. Рентабельность растениеводческой продукции хотя и сокращается в последние годы, но является положительной. Так в 2004 г. рентабельность растениеводческой продукции составила – 19.4 %, а животноводства – 0.6 %. Однако доходность животноводческих отраслей существенно отличается. Окупаемость затрат на производство КРС за последние четыре года снизилась с «82.1 %» до «74.9 %», а вот рентабельность производства молока

увеличилась с «-16.5 %» до 16.4 %. Положительные тенденции наблюдаются и по остальным важнейшим видам продукции.

Наряду с межотраслевым непаритетом цен отмечается внутриотраслевая несбалансированность. Так, в 1993 г. по

Таблица 1 / *Table 1*

Изменение средних цен реализации продукции сельскохозяйственными предприятиями по сравнению с 1990 г., раз
Changes of average prices of realization of produce by agricultural enterprises in comparison with 1990, times

Продукция *Produce*	1991	1993	1995	1999	2000	2001	2002	2003	2004
Зерно / *Grain*	1.61	351.3	28.3	893.4	3261.6	3906.8	4444.4	4677.4	6093.2
Картофель / *Potato*	3.62	186.7	68.7	2069.0	2533.3	3955.6	7733.3	8133.3	5866.7
Овощи /*Vegetables*	4.69	1011.9	169.0	5062.0	11190.5	20357.1	14895.8	34226.2	42559.5
Сахарная свекла / *Sugar-beet*	2.56	845.1	61.5	2371.8	4647.9	5774.6	6901.4	9154.9	10281.7
Мясо (живой вес) / *Meat (live weight):*									
крупного рогатого скота / *of cattle*	1.5	90.6	15.3	364.8	987.2	1759.6	2814.8	3043.2	4098.5
свиней / *of pigs*	1,8	220.5	34.1	792.8	2224.4	4038.2	5227.9	5716.1	7694.8
птицы / *of poultry*	1.4	267.8	38.8	1055.8	2678.1	4158.9	5729.2	6497.2	7873.9
Молоко / *Milk*	1.3	109.6	21.9	409.9	1423.1	2192.3	3730.8	4788.5	6076.9
Яйца, за 1000 шт. / *Eggs, for 1000 piece*	2.2	395.8	62.5	1489.8	3854.2	6354.2	8333.3	9375	11770.8

Источник: *данные Министерства статистики и анализа, собственные расчеты автора.*
Source: *data of the Ministry of Ministry of Statistics and Analysis of the Republic of Belarus, own calculations of the author.*

Таблица 2 / *Table2*

Соотношение средних цен реализации продукции сельскохозяйственными предприятиями с ценами реализации зерна, раз
Ratio of average prices of realization of produce by agricultural enterprises to the prices of grain realization, times

Продукция *Produce*	1990	1991	1993	1995	1998	1999	2000	2001	2002	2003	2004
Картофель /Potato	0.8	1.8	0.4	1.96	1.5	1.9	0.6	0.8	1.4	1.4	0.8
Овощи / *Vegetables*	0.6	1.8	1.7	3.6	3.2	3.4	2.1	3.1	2.0	4.4	4.2
Сахарная свекла / *Sugar-beet*	0.3	0.4	0.6	0.6	0.6	0.7	0.4	0.4	0.4	0.5	0.4
Мясо (живой вес) / *Meat (live weight):*											
крупного рогатого скота / *of cattle*	13.2	12.7	3.4	7.1	6.1	5.4	4.0	5.9	8.4	8.5	8.9
Свиней / *of pigs*	11.1	12.4	7.0	13.4	11.2	9.8	7.6	11.5	13.0	13.5	14
птицы / *of poultry*	9.6	8.5	7.3	13.2	10.6	11.4	7.9	10.2	12.4	13.3	12.4
Молоко / *Milk*	1.9	1.5	0.6	1.4	0.9	0.9	0.8	1.1	1.6	1.9	1.9
Яйца, за 1000 шт. / *Eggs, for 1000 piece*	0.3	0.5	0.4	0.8	0.5	0.6	0.4	0.6	0.7	0.7	0.7

Источник: *данные Министерства статистики и анализа, собственные расчеты автора.*
Source: *data of the Ministry of Ministry of Statistics and Analysis of the Republic of Belarus, own calculations of the author.*

отношению к 1990 г. цены на зерно возросли в 351.3 раза, картофель – в 186.7; овощи – 1011.9; сахарную свеклу – 845.1 раза; тогда как на мясо КРС – в 90.6; свиней –220.5 раза; молоко – 109.6 раза. И только рост цен на яйца в 395.8 раза был сопоставим с повышением цен на растениеводческую продукцию (табл. 1).

В 1990 году цены на животноводческую продукцию – мясо КРС, свиней, птицы и молоко – превышали среднюю цену реализации зерна, соответственно, в 13.2; 11.1; 9.6 и 1.9 раза, тогда как в 1993 году эти соотношения были уже 3.4; 7.0; 7.3; и 0.6 раза. Выручка от реализации килограмма молока была почти в 2 раза меньше, чем от продажи такого же количества зерна, тогда как во всем мире молоко стоит дороже зерна в 1.5-2 раза. Использовать зерно на корм скоту для получения мяса и молока было не целесообразно, так как можно было гораздо более эффективно реализовать его государству или на рынке. В результате, сельскохозяйственные организации стали больше внимания уделять развитию доходных растениеводческих отраслей (табл. 2).

В дальнейшем внутриотраслевые ценовые соотношения начали улучшаться и в 1995 г. они стали почти удовлетворительными. Однако затем вновь нарушились: в 2000 г. соотношение цен на КРС и молоко и средней цены реализации зерна было лишь 4.0 и 0.8. Только в 2003 и 2004 гг. ценовые пропорции на растениеводческую и животноводческую продукцию удалось в основном нормализовать, но, главным образом, за счет снижения доходности растениеводства. Необходимо отметить, что соотношение цены реализации молока и средней цены реализации зерна в 2004 году приближается к уровню 1990 г. – 1.9.

Неэквивалентность обмена между промышленными и сельскохозяйственными организациями приводит к уменьшению возможностей сельхозтоваропроизводителей к реализации воспроизводственных процессов – капитального строительства, приобретения новой техники, удобрений, средств защиты растений, необходимых для производства сельскохозяйственной продукции. Важнейший инструмент экономического механизма регулирования агропромышленного производства – восстановление эквивалентных отношений между сельским хозяйствам и промышленностью.

Полученный в сельскохозяйственной отрасли доход перераспределяется в другие сферы экономики. Наибольшую часть выручки от реализации продовольственных товаров получает торговля. Доля сельского хозяйства в средних ценах продовольственных товаров возрастает, но остается незначительной. В 1995 г. по мясу крупного рогатого скота она составила 23.27 %, свиней 37.26 %, птице – 42.10 %, молоку – 37.14 %. Хотя в последующие годы она стала увеличиваться. Так в 2004 г. эти показатели составили 27.25; 40.18; 43.68; 42.82 % соответственно.

За 1991 – 2005 гг. (на начало года) произошло значительное сокращение технических средств в сельскохозяйственных организациях: тракторов – на 51 %, зерноуборочных комбайнов – на 58.42 %, картофелеуборочных комбайнов – на 79.31 %, машин для внесения в почву твердых органических удобрений – на 63.72 %. Это может свидетельствовать либо о сокращении реальной потребности в сельскохозяйственной технике либо об отсутствии средств для ее приобретения. В пользу последнего говорит тот факт, что износ основных производственных фондов сельскохозяйственных организаций на начало 2005 г. составил 52.8 %, в том числе машин и оборудования – 71.4 %, транспортных средств – 79.5 %. Все это свидетельствует о губительности отсутствия сбалансированной политики государства в области паритета цен на продукцию агропромышленного комплекса.

Необходимо отметить, что нарушение паритета цен между продукцией сельского хозяйства и ресурсами промышленного производства – это постоянное явление рыночной экономики, оно присуще практически всем странам и связано, главным образом, с истощением мировых запасов и ростом альтернативной стоимости ресурсов, задействованных в процессе сельскохозяйственного производства. Другой фактор - рост индустриализации сельскохозяйственного производства и

производительности аграрного труда в сравнении с секторами экономики по оказанию услуг, которые играют одну из ключевых ролей в экономике развитых стран. В-третьих, продукция сельского хозяйства имеет социальное значение, поэтому цены на продовольствие строго контролируются любым государством. Промышленные же средства – техника, удобрения, горюче-смазочные материалы и другие – не имеют прямого социального характера, цены на них в большей мере регулируются законами рыночного спроса и предложения.

В обеспечении паритетного соотношения цен на промышленную и сельскохозяйственную продукцию большое значение имеет оптимизация закупочных цен на сельскохозяйственную продукцию, приведение производственных затрат к научно обоснованным нормативам.

Экономически обоснованные издержки производства складываются не случайно: они отражают, с одной стороны, уровень обеспеченности организации производственными ресурсами, а с другой – уровень производительности труда в обществе. Поэтому нормативные затраты, положенные в основу рыночного обмена, балансируют рынки всех типов, а саму рыночную экономику приближают к состоянию равновесия, где рынок функционирует наиболее эффективно.

Рентабельность в целом по сельскому хозяйству сложилась на уровне 4.8 % при нормативе для простого воспроизводства – около 20%, а для расширенного – 35-40 %. Проведенные исследования свидетельствуют, что только закупочная цена по зерну обеспечивает не только простое воспроизводство, но и расширенное. А вот действующая закупочная цена по мясу КРС, свиней и молоку – 1756, 2832, 316 тыс. руб./т не обеспечивает не только расширенное воспроизводство при расчетных ценах соответственно – 5636, 4156, 551, но и простое воспроизводство – 4706, 36205, 466 тыс. руб./т (табл. 3).

Сбалансированность ценовых соотношений необходимо обеспечивать по нескольким направлениям, отдавая приоритет экономическим методам регулирования. Одним из приоритетных является залог продукции с участием государства.

Таблица 3 / *Table 3*

Рекомендуемые минимальные закупочные цены для обеспечения простого и расширенного воспроизводства, тыс. руб/т

Recommended minimum procurement prices for providing of simple and extended reproduction, thousand rubles/ton

Продукция *Produce*	2004 г.				2005 г.		
	Себестоимость *Cost price*	Действующая цена *Current price*	Рекомендуемая цена *Recommended price*		Действующая цена *Current price*	Рекомендуемая цена *Recommended price*	
			для простого воспроизводства *for simple reproduction*	для расширенного воспроизводства [for extended reproduction]		для простого воспроизводства *for simple reproduction*	для расширенного воспроизводства *for extended reproduction*
Зерно / *Grain*	133	170	153.35	168.78	199	176.35	194.09
Мясо (живой вес) / *Meat (live weight)*:							
крупного рогатого скота / *of cattle*	3016	1507	4092.71	4901	1756	4706.62	5636.15
свиней / *of pigs*	2540	2380	3152.14	3614.42	2832	3624.96	4156.58
Молоко / *Milk*	306	316	404.84	479.50	316	465.56	551.43

Источник: *данные Министерства статистики и анализа, собственные расчеты автора.*

Source: *data of the Ministry of Ministry of Statistics and Analysis of the Republic of Belarus, own calculations of the author.*

Как показывает анализ, летом и осенью цены на зерно, молокопродукты, яйцо падают. Так, сезонная динамика цен и объемов экспорта в Российскую Федерацию молокопродуктов: животного масла, сыра и творога отличается диаметрально противоположными тенденциями помесячного изменения цен и объемов. В период сезонного пика производства цены на 15-40 % ниже, чем в зимние месяцы. Однако именно летом предприятия отгружают на экспорт наибольшее количество молокопродуктов из-за дефицита оборотных средств для закупки ресурсов. В результате чего отсрочка реализации продукции на более поздний срок может трактоваться как неспособность руководства справляться с поставленными задачами и выполнить условия контракта.

Реализуя продукцию при неблагоприятной конъюнктуре рынка, предприятия несут ощутимые потери. По нашим расчетам, если бы животное масло было положено на хранение в мае – августе, а затем реализовано по ценам, складывающимся в ноябре – феврале, то выручка, полученная за реализованную продукцию в период сезонного пика в 2002 г. возросла бы на 15 млн. долл. США – на 57 %, за продукцию, реализованную в 2003 г., можно было получить больше на 4 млн. долл. США – на 15 %.

По нашим исследованиям могут использоваться две формы реализации залоговых операций – кредитная и бюджетная.

При кредитной форме финансирования залоговых операций обязательным условием является предоставление банкам государственных гарантий по возврату заемных средств.

Дополнительными условиями, призванными повысить эффективность залоговых операций, может стать: открытие специальной кредитной линии для предоставления заемных средств под продукцию, переданную на хранение; льготирование процентной ставки за пользование кредитом; отсрочка оплаты процентов до момента расчета по основному долгу.

При кредитной форме залога на заложенную продукцию может выдаваться складская долговая записка (ваучер), которая используется как залог для получения кредита в банке или даже для свободного обращения. Требования по возврату заложенной продукции переуступаются - право на получение товара по складской записке приобретает ее предъявитель, который становится залогодателем.

При бюджетной форме залога сельскохозяйственные или перерабатывающие предприятия получают в распоряжение денежные средства по залоговой ставке из бюджета.

В механизме залога на конкурсных началах задействуются организации, у которых имеются складские помещения (элеваторы, холодильники), прошедшие специальную проверку (сертификацию) на соответствие установленным техническим и санитарным нормам. Сельскохозяйственная продукция передается на хранение только им. Это, с одной стороны, позволяет обеспечить сохранность товаров без сверхнормативных потерь технологических и потребительских качеств, с другой – подтвердить их точное количество. Лишь в порядке исключения хранение зерна, являющегося залогом, может разрешаться на складах сельскохозяйственной организации.

Залог может применяться в отношении стандартизированной продукции, пригодной к длительному хранению, – зерно, льноволокно, сахар, туши и полутуши КРС, свиней, сухое молоко, твердые сыры, животное масло и т.д. Это позволит устанавливать и регулировать залоговую цену. Ее целесообразно дифференцировать по сезонам. В качестве базы для расчета залоговых ставок может быть принята среднеотраслевая себестоимость производства или, что более целесообразно, прогнозируемые рыночные цены. В любом случае она не должна быть, во-первых, выше рыночной цены в период ее максимума (как вариант - с учетом затрат по хранению и оплате процентов за пользование заемными средствами, особенно если они покрываются централизованно - финансирование залоговых операций осуществляется через организации, принимающие продукцию на хранение, что позволило бы снизить экономические риски всех участников залоговых операций), и, во-

вторых, ниже, чем рыночная цена в момент ее сезонного минимума. При этом сельскохозяйственные и перерабатывающие предприятия будут стремиться к участию в проведении залоговых операций и их рыночная активность не снизится, т.к. не будут девальвированы стимулы к выполнению обязательств перед кредиторами.

Исходя из своих финансовых возможностей производители, участвуя в операциях с залогом продукции, должны оптимизировать соотношение расходов и доходов, варьируя сроки передачи продукции в залог и продолжительность залога.

До времени, указанного в договоре залога, сельскохозяйственной продукцией может распоряжаться залогодатель, если рассчитается по соответствующим обязательствам с бюджетом или банком и по хранению продукции. После этого срока она переходит в собственность финансирующего субъекта - государства (передается в государственный резервный фонд) или банка, который также имеет право передать ее государству и получить взамен средства по залоговой ставке, действующей на тот момент. Залогодателю также должно быть предоставлено право передать заложенную продукцию в собственность государства досрочно в качестве погашения залоговой ссуды.

Банк или уполномоченный орган государственного управления может дать залогодателю разрешение на реализацию заложенной продукции, если им обязательства еще не исполнены - при условии, что выручка в требуемом объеме будет направлена на их исполнение.

Залог позволил бы во многом сократить убытки от экспорта животного масла и других видов продукции, стабилизировать рынок зерна.

Для реализации в республике сформулированных в статье положений требуется подготовить соответствующие нормативные правовые акты, разработать финансово-экономические нормативы реализации механизма залога (уровень залоговых ставок, тарифы на хранение сельскохозяйственной продукции и т.д.), предусмотреть финансовое обеспечение за счет кредитов и централизованных ресурсов.

Внедрение залога сельскохозяйственной продукции при минимальных расходах способно обеспечить существенную финансовую прибавку для предприятий отечественного АПК.

Conclusions, proposals, recommendations

Система ценообразования должна основываться на сочетании свободного ценообразования и государственного регулирования цен и обеспечивать ведение эффективного производства, балансировать интересы товаропроизводителей и потребителей. Для обеспечения паритетного соотношения цен на промышленную и сельскохозяйственную продукцию необходимо приведение производственных затрат к научно обоснованным нормативам.

Сбалансированность ценовых соотношений следует обеспечивать по нескольким направлениям, отдавая приоритет экономическим методам регулирования, используя гарантированные, целевые (эквивалентные, паритетные) и залоговые цены, механизм товарных и закупочных интервенций.

Совершенствование межотраслевых ценовых отношений в системе АПК возможно в условиях функционирования интегрированных формирований, когда выручка от реализации конечной продукции распределяется в соответствии со среднеотраслевыми нормативными затратами каждого участника единой технологической цепи.

Особое внимание в обеспечении паритетного соотношения цен мы отдаем использованию системы залога сельскохозяйственной продукции, которая позволит восполнить потребности производителя в оборотных средствах и повысить эффективность его финансово-экономической деятельности за счет отсрочки реализации продукции до улучшения рыночной конъюнктуры.

Для применения залога на практике нами предлагается:

- разработать и принять на уровне Правительства Положение «О залоге сельскохозяйственной продукции с участием государства», в котором установить форму и

порядок проведения залоговых операций, государственные гарантии их участникам или предусмотреть соответствующий механизм регулирования в Законе «О государственном регулировании агропромышленного производства», разработка которого предусмотрена в Государственной программе возрождения и развития села на 2005-2010 гг.;

- организовать финансовое обеспечение за счет кредитов и централизованных ресурсов;
- провести инвентаризацию складских помещений и их сертификацию на соответствие требованиям хранения сельскохозяйственной продукции;
- определить виды продукции для проведения залоговых операций;
- разработать финансово-экономические нормативы реализации механизма залога: уровень залоговых цен (ставок), тарифы на хранение сельскохозяйственной продукции и т.д.;
- своевременно корректировать предоставляемые предприятиям и регионам показатели по темпам прироста экспорта с учетом переноса сроков реализации продукции.

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Резюме

Несмотря на рост производства, основные показатели финансовой устойчивости и платёжеспособности сельскохозяйственных предприятий Беларуси в период с 2001 по 2004 гг. оставались ниже нормативных вследствие увеличившегося непаритета цен на продукцию сельскохозяйственного производства и материальные ресурсы промышленного производства, поступающие

в сельское хозяйство. Ситуация осложняется тем, что практически исчерпан ресурсный запас прочности сельскохозяйственных организаций: износ основных средств на начало текущего года составил 52.8 %, в том числе активной части - машин, оборудования, транспортных средств – 79.5%. В этой связи сельскому хозяйству необходимы средства не только для возмещения текущих затрат, но и вложений в технико-технологическое переоснащение производства для восстановления и развития производственного потенциала. Основные каналы поступления средств - собственные средства предприятий, полученные от реализации продукции, бюджетные ресурсы, негосударственные инвестиции и кредитные ресурсы.

При корректировке регулируемых цен на сельскохозяйственную продукцию следует исходить из затрат предприятий по ее производству. Однако объективные данные по этому показателю в силу специфики сельскохозяйственного производства можно получить лишь к концу финансового года. Решения же необходимо принимать постоянно. В этой связи важную роль в поддержании эквивалентности товарообмена в условиях быстро меняющей ценовой конъюнктуры может играть установление целесообразных ценовых пропорций на основные виды сельскохозяйственной и промышленной продукции.

Уровень цен на сельскохозяйственную продукцию должен обеспечивать норму прибыли в сельском хозяйстве не менее сложившейся промышленности и процента по депозитным банковским вкладам. Это позволило бы создать условия одинаковой доходности авансированного капитала, повысить привлекательность вложения инвестиций в аграрный сектор, рост интенсивности производства и повышение производительности труда.

Сбалансированность ценовых соотношений необходимо обеспечивать по нескольким направлениям, отдавая приоритет экономическим методам регулирования, используя гарантированные, целевые (эквивалентные, паритетные) и залоговые цены, механизм товарных и закупочных интервенций.

Для нашей республики вследствие высокой сезонности производства первостепенное значение имеет разработка и внедрение в практику рыночного регулирования механизма залога сельскохозяйственной продукции с участием государства.

По нашим исследованиям могут использоваться две формы реализации залоговых операций – кредитная и бюджетная. Залог должен применяться в отношении стандартизированной продукции, пригодной к длительному хранению – зерно, льноволокно, сахар, туши и полутуши КРС, свиней, сухое молоко, твердые сыры, животное масло и т.д. Это позволит устанавливать и регулировать залоговую цену.

Summary

During the period 2001-2004 despite of the growth of total production the main parameters of financial stability and solvency of belarusian agricultural enterprises were below normative ones. It is caused by the increased disparity between the prices for agricultural produce and material resources of industrial production used in agriculture.

In addition, the resource margin of safety of agricultural enterprises is practically reached. By the beginning of the year 2005 the wearing of permanent assets was 52.8 %, for the machines, equipment and vehicles – 79.5 %. That is why agricultural producers need not only the means for indemnification of current costs, but also for investments in technical and technological reequipment of production for restoration and development of productive potential. The main channels of the receipt of these means should be the own means of the producers, budget resources, non-state investments and credit resources.

The mechanism of controlled prices correcting for agricultural produce should take into account the costs of producers. According to the specificity of agricultural production objective data of these parameters can be received only at the end of financial year, but the solutions need to be made constantly. So in the conditions of fast changes of price conjuncture establishment of expedient price proportions on the main kinds of agricultural and industrial outputs can play the important role in the maintenance of equivalence of commodity exchange.

The price level for agricultural produce should provide the rate of return in agriculture not less than in industry and the percent under bank deposits. It would allow creating the conditions for identical yield of the advanced capital, to increase appeal of investments in agrarian sector, growth of intensity of production and increase of labor productivity.

It is necessary to provide equation of price ratios in several directions giving a priority to the economic methods of regulation such as guaranteed, target (equivalent, parity) and pledge prices, mechanism of commodity and purchase interventions.

According to our results of research it is recommended to use two forms of pledge operations - credit and budget ones. The pledge should be applied for the standardized production suitable to prolonged storage (grain, flax fibre, sugar, cattle, pigs, milk powder, solid cheeses, animal oil, etc.). It will allow to establish and control the pledge prices.

Eiropas Savienības finanšu atbalsta asimilācija viesmīlības uzņēmumos
Assimilation of the European Union Financial Support in Hospitality Enterprises

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Abstract

One of priorities of Latvian economics is development of tourism. Hospitality enterprises such as guest houses and catering enterprises play an important role in tourism infrastructure. The aim of the research is to investigate the possible support from EU Structural Funds for hospitality enterprises. The research analyses the dynamics of catering enterprises in the context of regions starting from the year 2001. The financial sources available from the EU for hospitality enterprises are investigated. After identifying and analyzing the financial aims, a conclusion is made that the tourism and catering enterprises could apply for 27% of finances from EU Structural Funds. Financial support results suggest that the major part of finances have been used to develop infrastructure of the hospitality industry. Generally hospitality enterprises have used 21.3% of the EU available finances.

Key words: EU Structural Funds, hospitality enterprises, financial sources.

Ievads
Introduction

Eiropā un visā pasaulē tūrisms ir viena no vadošajām un visstraujāk augošajām nozarēm un tiek uzskatīts par nozīmīgu darbavietu radītāju, kā arī svarīgu reģionālās un sociālās attīstības faktoru.

Tūrisma attīstību valstī galvenokārt kavē tādi faktori, kā nepietiekami izvērsta un tūristu vēlmēm neatbilstošas kvalitātes tūrisma infrastruktūra, tai skaitā viesmīlības uzņēmumu attīstība atsevišķos reģionos, zems vietējo un ārvalstu investīciju apjoms (Ziņojums ..., 2004). Kapitālieguldījumu nepietiekamība un darbaspēka kvalifikācija viesmīlības uzņēmumos, lai nodrošinātu nepieciešamo pakalpojuma kvalitāti, ir viena no aktuālākajām viesmīlības uzņēmumu attīstības problēmām. Jau kopš Latvijas Republikas darbības pirmsākumiem 1991. gadā valdība vienmēr par vienu no galvenajām savas darbības prioritātēm ir deklarējusi atbalstu uzņēmējdarbības veicināšanai, jo īpaši mazo un vidējo uzņēmumu (MVU) attīstībai. Tomēr, ņemot vērā ierobežotos valsts budžeta līdzekļus, MVU mērķprogrammu realizācija līdz šim ir bijusi iespējama ierobežotā apmērā. Arī pašu uzņēmēju iespējas finansēt investīciju projektus ir ierobežotas un nepietiekamas. Tāpēc Eiropas Savienības (ES) piedāvātā finansējuma izmantošana viesmīlības uzņēmumu attīstībā varētu sekmēt straujāku nodarbinātības un pakalpojuma klāsta pieaugumu dažādos Latvijas reģionos.

ES finanšu atbalsta pieejamība un izvērtēšana ir bijis pētījumu priekšmets vairākos zinātniskajos pētījumos. Šīs tēmas un problēmas savās publikācijas ir analizējuši vairāki zinātnieki, kopumā pievēršoties finansējuma atbalstam lauksaimniecības uzņēmumiem (Čiulevičiene V., 2004; Parts V., 2004; Pilvere I., 2004; Saktiņa D., 2004). Tomēr trūkst pētījumu par citu nozaru publiskās finansēšanas iespējām, kas palīdzētu noskaidrot, cik intensīvi ES finansējumu izmanto nozares, kuru ieguldījums reģionu ekonomikas izaugsmē varētu būt nozīmīgs. Viens no tiem ir uzņēmējdarbības sektors viesmīlības jomā, kura darbības apjomi nemitīgi palielinās un to sniegtajiem pakalpojumiem ir reģionāls raksturs.

Pētījuma mērķis – izpētīt ES strukturālo fondu iespējamo finanšu atbalstu viesmīlības uzņēmumiem.

Mērķa izpildei izvirzīti **uzdevumi**:

- izanalizēt un novērtēt viesmīlības uzņēmumu ekonomiskos rādītājus;

■ noskaidrot viesmīlības uzņēmumiem pieejamās finansiālā atbalsta programmas un to finanšu apjomus;

■ izvērtēt viesmīlības uzņēmumiem piešķirtā finansējuma īpatsvaru.

Pētījumu metodika, nosacījumi un materiāli.

Lai noskaidrotu piešķirtā finansējuma apjomu viesmīlības uzņēmumiem, tika veikta katra ES fondu apsaimniekotāja atsevišķa analīze, balstoties uz institūciju mājas lapās un presē publicēto informāciju un intervijām pa tālruni. Institūcijām (LAD, PIAA, LIAA u.c.) tika lūgta informācija par pieteikto projektu skaitu, apstiprināto projektu skaitu, publiskais piešķīrums sadalījumā pa aktivitātēm un teritorijām.

Saskaņā ar MK noteikumiem Finanšu ministrija kā vadošā iestāde ir izveidojusi ES strukturālo fondu vadības informācijas sistēmu, kuras ietvaros uzkrātajiem, apkopotajiem un aprēķinātajiem datiem vajadzētu kalpot par pamatu jebkurai analīzei par struktūrfondiem, taču šobrīd šīs prasības nav izpildītas un prioritāšu ES struktūrfondu apsaimniekotāji veic atšķirīgu un nepilnīgu piešķīruma un izlietojuma uzskaitījumu. Praktiski nav atrodama informācija par struktūrfondu izlietojumu pēc uzņēmējdarbības veida un pa ekonomikas apakšnozarēm. Pētījumā tiek analizētas tikai tās aktivitātes, kuru ietvaros līdz 2005. gada oktobrim projekti jau saņēmuši atbalstu un par to ir pieejama informācija.

Darbā izmantoti statistikas dati, valsts institūciju sniegtie dati, zinātniskās publikācijas u.c.

Darbā izmantotās metodes: loģiskā analīze un sintēze, salīdzinošie un statistiskie pētījumi.

Rezultāti un diskusija
Results and discussion

Viena no Latvijas ekonomikas prioritātēm ir tūrisma nozares attīstība. Tūrisma pakalpojumu eksporta (ienākošā tūrisma) īpatsvars IKP Latvijā 2003. gadā bija 2.2 %, bet Eiropas Savienības valstīs šis rādītājs ir vidēji 4.8 %, pasaulē – 4.2 %. Tūrisma attīstības politikas principi ir balstīti uz tūrisma ilgtspējīgu attīstību, decentralizāciju, viesmīlību, pieejamību, profesionalitāti un drošību. Viens no rīcības virzieniem tūrisma attīstības mērķu sasniegšanai ir atbilstošas infrastruktūras, t.sk. viesmīlības uzņēmumu, veidošana, kas attiecīgi palielinās pakalpojumu sniedzēju radīto pievienoto vērtību un nodarbinātību ar tūrismu saistītās nozarēs (Ziņojums ..., 2004) .

Viesmīlības uzņēmumu raksturojums
Disposition of hospitality enterprises

No uzņēmējdarbības viedokļa viesmīlības uzņēmumi ir uzņēmējdarbības sektors, kurā tiek nodrošināts pakalpojuma pircēju fizioloģiskais un psiholoģiskais komforts par samaksu, tāpēc par tādiem var uzskatīt ēdināšanas uzņēmumus, viesnīcas, viesu mājas, lauku tūrisma uzņēmumus u.c. viesu izmitināšanas mītnes, līdzīgi kā tas ir daudzās pasaules valstīs.

Latvijā viesmīlības nozare nav definēta kā tautsaimniecības nozare un pašreiz pieejamā statistiskā informācija par viesmīlības uzņēmumiem iegūstama dažādu nozaru kontekstā, kas rada datu pretrunīgumu. Nav sistematizētas informācijas par nozaru (apakšnozaru) uzņēmumu sastāvu pēc uzņēmējdarbības formas, to juridiskās piederības, specializācijas, efektivitātes un finanšu stāvokļa ilgākā laika periodā. Fragmentāri šādu informāciju iespējams gūt Uzņēmumu reģistra, CSP, LAA, PVD datu bāzēs; noteiktus, ierobežotus pakalpojumus piedāvā arī komercstruktūras (Lursoft u.c.). Tas neļauj argumentēti pamatot notiekošos procesus un to attīstības virzienus nozaru vai apakšnozaru iekšienē. Centrālās statistikas pārvalde datu apkopošanai izmanto NACE klasifikatoru, kas precizē uzņēmumu darbības veidu, un dati par viesmīlības uzņēmumiem tiek izdalīti atsevišķi (Viesnīcas un restorāni). Šie rādītāji tika ņemti par pamatu viesmīlības uzņēmumu izaugsmes tempu novērtēšanai.

Viesmīlības uzņēmumu ekonomiskās izaugsmes tempi ar katru gadu palielinās, turklāt apgrozījuma rādītājiem ir tendence pārsniegt uzņēmumu skaita dinamiku. 2003. gadā ēdināšanas uzņēmumu apgrozījums 1.2 reizes pārsniedza 2001. gada apgrozījumu, savukārt apkalpoto viesu skaits viesu izmitināšanas mītnēs 2003. gadā sasniedzis gandrīz 760 tūkstošus cilvēku, kas ir 1.3 reizes vairāk nekā 2001. gadā. Uzņēmumu skaita pieaugums tajā pašā laikā ir palielinājies 1.17 reizes. Kopš 2000. gada vērojams vienmērīgs viesnīcu un moteļu skaita un tajos esošo vietu skaita pieaugums. 2003. gadā salīdzinājumā ar 2000. gadu viesnīcu skaits palielinājies par 30 %, bet vietu skaits tajās –par 18%, kas liecina par pārsvarā nelielu viesnīcu atvēršanu. Naktsmītņu skaita pieauguma izmaiņas ir ciešā saistībā ar tūristu

skaita izmaiņām. Pēc Centrālās statistikas biroja (CSB) datiem, nakšņojumu skaits 2003. gadā salīdzinājumā ar 2000. gadu palielinājies par 22 % (Statistikas ..., 2005).

Viesmīlības uzņēmumos strādājošo skaits vidēji palielinās par 1000 cilvēkiem gadā, kas ir saistīts arī ar tūrisma multiplikatīvo efektu nodarbinātībā, tādējādi mazinot bezdarbu un sociālo spriedzi atsevišķos reģionos. Nodarbināto īpatsvars viesmīlības uzņēmumos 2004. gadā sasniedza gandrīz 2.6 % no kopējā tautsaimniecībā nodarbināto kopskaita, kas 2 reizes pārsniedza to īpatsvaru iekšzemes kopproduktā. Tomēr pievienotā vērtība uz 1 viesmīlības uzņēmumos strādājošo 2003. gadā bija 3.1 tūkst. LVL, kas tikai nedaudz atpaliek no līdzīga rādītāja apstrādes rūpniecībā (vidēji 4.3 tūkst. LVL) (Statistikas, 2005).

Viesmīlības uzņēmumu attīstība ir diferencēta pa reģioniem un tie aplūkoti atbilstoši plānošanas reģioniem, kas noteikti saskaņā ar 2003. gada 25. martā pieņemtajiem MK noteikumiem Nr. 133 (skat. 1. tabula).

Viesmīlības uzņēmumu attīstības līmenis dažādos reģionos ir atšķirīgs, un, kā redzams 1. tabulā, šīs atšķirības turpina augt. Viesmīlības uzņēmumu skaits turpina palielināties gandrīz visos Latvijas reģionos. Vislielākais tas ir Rīgas reģionā, kur 2004. gadā viesmīlības uzņēmumu skaits palielinājās par 40%, salīdzinot ar 2001. gadu. Daudz neatpaliek arī Vidzemes reģions uzņēmumu dinamikas ziņā, jo tā pieaugums šajā laikā ir sasniedzis 38%. Kurzemes un Zemgales reģionos pieaugums sasniedzis attiecīgi 27% un 21%. Gandrīz nav vērojams viesmīlības uzņēmumu skaita pieaugums Latgales reģionā, tas drīzāk ir krītošs, un 2004. gada uzņēmumu skaits ir samazinājies par 2.5% salīdzinājumā ar 2003. gadu.

Pēc mūsu domām, uzņēmumu skaita pieaugums liecina, ka uzlabojusies uzņēmējdarbības vide un palielinājies pieprasījums pēc tās sniegtajiem pakalpojumiem, tomēr tas nesniedz pilnīgu priekšstatu par pieprasījuma un piedāvājuma attiecībām.

Kopumā viesmīlības uzņēmumu skaits Rīgas reģionā vidēji 9 reizes pārsniedz uzņēmumu skaitu pārējos Latvijas reģionos. Tomēr uzņēmumu piedāvājuma izvērtēšanā būtu jāņem vērā konkrētā reģiona iekšējais pieprasījums pēc šiem pakalpojumiem, ko nosaka gan vietējie iedzīvotāji, gan ārvalstu tūristi. Pēc CSB datiem, 2003. gadā Latvijā iebraukušo ārvalstu ceļotāju skaits sasniedza 2.52 miljonus, un viņu vidējais uzturēšanās ilgums Latvijā bija 1.9 diennaktis, kas norāda uz viesmīlības uzņēmumu sniegto pakalpojumu izmantošanas nepieciešamību. Tā kā nav pieejami statistikas dati par viesmīlības uzņēmumu noslogojumu (tiek apkopots vienīgi viesnīcu noslogojums, bet ne reģionālā griezumā), tad to izmantošanas pakāpes raksturošanai tiks izmantots iedzīvotāju skaits, kas vismaz aptuveni sniegs priekšstatu par viesmīlības uzņēmumu pietiekamību (skat. 2. tabulu). Pēc Starptautiskās viesnīcu un restorānu asociācijas datiem (IHRA), rādītājs, kas liecina par viesmīlības uzņēmumu pietiekamību, ir 2 uzņēmumi uz 1000 iedzīvotājiem. Šim rādītājam tuvāk ir tikai Rīgas reģions ar 1.35 uzņēmumiem uz 1000 iedzīvotājiem, taču arī tas ir nepietiekams. Tas liecina, ka pieprasījums pēc viesmīlības uzņēmumu pakalpojumiem pārsniedz piedāvājumu un ir nepieciešami jauni viesmīlības uzņēmumi.

1. tabula / *Table 1*

Ekonomiski aktīvo viesmīlības uzņēmumu skaita dinamika pa reģioniem
The number of economically active enterprises in the regions

Reģioni *Regions*	Viesnīcas un restorāni *Hotels and restaurants*			
	2001	2002	2003	2004
Rīgas reģions	1251	1328	1487	1760
Kurzemes reģions	205	218	226	261
Zemgales reģions	145	143	162	176
Vidzemes reģions	119	128	152	164
Latgales reģions	156	158	161	157
Kopā / *Total*	1876	1975	2188	2518

Avots: *CSB dati.*

2. tabula/*Table 2*

Viesmīlības uzņēmumu īpatsvars 2003. gadā
The proportion of hospitality enterprises in 2003

Reģioni *Regions*	Ekonomiski aktīvo uzņēmumu skaits uz 1000 iedzīvotājiem *The number of economically active enterprises per 1000 inhabitants*	Viesmīlības uzņēmumu skaits uz 1000 iedzīvotājiem *The number of hospitality enterprises per 1000 inhabitants*	Viesmīlības uzņēmumu īpatsvars *The percentage of hospitality enterprises* %
Rīgas reģions	28	1.35	4.8
Kurzemes reģions	14	0.72	5.1
Vidzemes reģions	13	0.61	4.7
Zemgales reģions	11	0.56	5.1
Latgales reģions	10	0.44	4.4

Avots: *Ziņojums par Latvijas tautsaimniecības attīstību. Latvijas Republikas Ekonomikas ministrija Rīga, 2004. gada. decembris; autoru aprēķini pēc CSB datiem.*

Kā redzams 2. tabulā, gan ekonomiski aktīvo uzņēmumu, gan viesmīlības uzņēmumu skaits uz 1000 iedzīvotājiem nav vienmērīgs reģionālā sadalījuma ziņā – vislielākais skaits ir Rīgas reģionā, kas pārējos Latvijas reģionus pārsniedz vairāk nekā 2 reizes. Tomēr, analizējot uzņēmējdarbības aktivitāti viesmīlības jomā, jāsecina, ka nav vērojamas ievērojamas reģionālas atšķirības, proti, viesmīlības uzņēmumu skaits attiecībā pret visiem ekonomiski aktīvajiem uzņēmumiem reģionos ir vidēji 4.6 %, kas norāda uz vienmērīgu uzņēmēju aktivitāti un uzņēmējdarbības apstākļiem šajā jomā. Ar īpašu aktivitāti izceļas Kurzemes un Zemgales reģioni, kuros 5.1% no visiem ekonomiski aktīvajiem uzņēmumiem ir viesmīlības uzņēmumi.

Finanšu atbalsta mērķu identifikācija
Identification of the financial support aims

Saskaņā ar Eiropas Komisijas 2003. gada 6. maija Rekomendāciju 2003/362/EK par mikro-, mazo un vidējo uzņēmumu definīciju, viesmīlības uzņēmumi gandrīz visi atbilst mazo un vidējo uzņēmumu kategorijai (Definition ..., 2003). 2003. gadā MVU kopumā nodarbināti 69.9% no privātā sektorā strādājošajiem valstī, kas rada 63.2% no IKP. Latvijā kopš 2003. gada tiek izstrādāta MVU atbalsta sistēma, kuru nosaka arī MK 2004. gada 27. janvārī apstiprinātās "Latvijas Mazo un vidējo uzņēmumu attīstības politikas pamatnostādnes". Pamatnostādņu īstenošanai MK 2004. gada 25. maijā apstiprināja "Latvijas Mazo un vidējo uzņēmumu attīstības programmu 2004.-2006. gadam", lai sekmētu MVU attīstības politikas mērķu sasniegšanu. Programmas realizēšanai paredzēti šādi rīcības virzieni:

- uzņēmējdarbībai labvēlīgas vides radīšana, it īpaši attiecībā uz MVU;
- finanšu pieejamības sekmēšana mazās un vidējās uzņēmējdarbības attīstībai;
- cilvēkresursu un jaunas uzņēmējdarbības iniciatīvas attīstīšana;
- MVU konkurētspējas veicināšana;
- uzņēmējdarbības vides analīze un papildu pasākumu izstrāde teritorijām ar zemu sociāli ekonomisko attīstību, kuru īstenošanu plānots realizēt sasaistē ar ES Struktūrfondu finanšu līdzekļu apguves plāniem (Latvijas ..., 2004).

Lielākajai daļai Programmā paredzēto uzņēmējdarbības atbalsta pasākumu paredzēts piesaistīt ES Struktūrfondu līdzfinansējumu. Programmas darbības laikā plānotais atbalsta finansējums ir 164.3 mlj. LVL, no kuriem ES Struktūrfondu līdzfinansējums – 115.3 mlj. LVL. Viesnīcas, ēdināšanas uzņēmumi un citu pakalpojumu sniegšanas uzņēmumi jau iepriekšējos gados (no 2000. līdz 2003. g.) aktīvi izmantojuši Latvijas Hipotēku un zemes bankas piešķirtos aizdevumus, kas paredzēti MVU attīstības kreditēšanai, kuru īpatsvars bija 11% no 48.5 milj. eiro (Ziņojums ..., 2004).

Projekti un pasākumi tūrisma infrastruktūras attīstībā, t.sk. viesmīlības uzņēmumu attīstībā, tiek finansēti no dažādiem budžetiem un programmām. Tūrisma nozarei ir atvēlēti arī līdzekļi valsts pamatbudžetā (2004. gadā vairāk nekā 1 mlj. LVL),

taču tos izlieto mārketinga, reklāmas un starptautiskās sadarbības nodrošināšanai, tikpat kā neparedzot atbalstu nozares infrastruktūras uzņēmumiem. Paredzēts, ka līdztekus nacionālajam finansējumam tiks piesaistīti arī ES fondu līdzekļi.

ES struktūrfondi

Saskaņā ar ES reģionālo politiku, Latvija iesaistījusies ES sociālās un ekonomiskās izlīdzināšanās politikā. No 2004. gada līdz 2006. gadam Latvijai 4 struktūrfondu ietvaros kopējais pieejamais finansējums ir 585.1 milj. LVL (ES struktūrfondu finansējums – 438 milj. LVL un Latvijas Republikas valsts budžeta finansējums – 147.1 milj. LVL). ES struktūrfondu finansējums veidojas no tādiem fondiem, kā:

- Eiropas Reģionālās attīstības fonds (259 milj. LVL), kas paredzēts nelieliem infrastruktūras projektiem;
- Eiropas Sociālais fonds (97 milj. LVL), kas paredzēts nodarbinātības veicināšanai;
- Eiropas Lauksaimniecības virzības un garantiju fonda Vadības nodaļa (65 milj. LVL);
- zivsaimniecības vadības finansēšanas instruments (17 milj. LVL) (Ziņojums …, 2004).

No tiem viesmīlības uzņēmumu atbalstīšanai galvenokārt izmantojami **Eiropas reģionālās attīstības fonds** (ERAF) un **Eiropas Sociālais fonds** (ESF). ERAF paredzēts, lai atbalstītu attīstības un dzīves līmeņa atšķirību mazināšanu reģionos. Finansējums galvenokārt paredzēts infrastruktūras, ražošanas un MVU attīstībai, lai uzlabotu finansējuma pieejamību uzņēmējdarbībai, kā galveno aktivitāti izvirzot aizdevumu ar atvieglotiem nosacījumiem izsniegšanu uzņēmējdarbības uzsākšanai, paplašināšanai un pārstrukturēšanai atbilstoši ES kvalitātes prasībām. ESF mērķis ir samazināt diskrimināciju un nevienlīdzību darba tirgū, veicināt nodarbinātību.

ES struktūrfondu līdzekļi pieejami atbilstoši Vienotajā programmdokumentā noteiktajām četrām valsts attīstības prioritātēm:

1) ilgtspējīgas attīstības veicināšana (189.1 mlj. LVL);
2) uzņēmējdarbība un inovāciju veicināšana (146.5 mlj. LVL);
3) cilvēkresursu attīstība un nodarbinātība (122.9 mlj. LVL);
4) lauku un zivsaimniecības attīstības veicināšana (126.6 mlj. LVL).

ES struktūrfondu līdzekļi tiek piešķirti projektu konkursu, grantu shēmu un struktūrfondu nacionālo programmu veidā. Tūrisma un viesmīlības uzņēmumi līdzvērtīgi jebkuram citam uzņēmumam var pretendēt uz ES struktūrfondu līdzekļiem, kas paredzēti privātā sektora vajadzībām. Tā kā uz 1. prioritātes finanšu līdzekļiem var pieteikties valsts un pašvaldību uzņēmumi, tad viesmīlības uzņēmumi var pretendēt uz daļu no 2., 3. un 4. prioritātes līdzekļiem.

2. prioritātei plānotas 4 ERAF Nacionālās programmas, 1 atklātais projektu konkurss un 9 grantu shēmas, no kurām tūrisma un viesmīlības uzņēmumi var pretendēt uz 5 grantu shēmām, kas veido 108 mlj. LVL vai 74 % no kopējā 2. prioritātei paredzētā finansējuma.

3. prioritātei plānotas 10 ESF Nacionālās programmas, 12 atklāto projektu konkursi, 8 grantu shēmas, uz kurām tūrisma un viesmīlības uzņēmumi tieši pretendē uz 1 grantu shēmu „Nodarbinātības pārkvalifikācija un kvalifikācijas paaugstināšanas veicināšana", kas ir 15.2 mlj. LVL vai 12% no kopējā 3. prioritātei paredzētā finansējuma. Projektos viesmīlības uzņēmumi var iesaistīties arī netieši kā sadarbības partneri.

4. prioritātei plānotas 4 Nacionālās programmas, bet atklātie konkursi – 32. Lai arī lielākā daļa plānota lauksaimniecības un zivsaimniecības uzņēmumu attīstībai, tomēr arī lauku tūrisma pakalpojumu sniedzēji var pretendēt uz daļu no šā finansējuma – 1 atklāto projektu konkursu „Lauku tūrisma un amatniecības veicināšana", kas ir viens no visvairāk atbalstītajiem šajā prioritātē un veido apmēram 26 % no kopējā prioritātei atvēlētā finansējuma.

Kopumā no visiem pašreiz pieejamiem ES struktūrfondiem tūrisma un viesmīlības uzņēmumi ir varējuši pretendēt uz aptuveni 156.2 mlj. LVL, kas ir 27 %.

SAPARD

Vieni no lielākajiem līdzekļiem tūrisma infrastruktūras un uzņēmumu pilnveidošanā tika saņemti no SAPARD programmas (no 2000. līdz 2006. g.), izmantojot apakšprogrammai 3.1. „Lauku ekonomikas dažādošana, veicinot alternatīvos ienākumu avotus" piešķirto finansējumu. Pavisam tikuši atbalstīti 219 ar tūrismu saistītie projekti, no kuriem 19 paredzēja tūrisma mītņu kvalitātes uzlabošanu un 90 – pakalpojumu dažādošanu, galvenokārt lauku tūrisma mītnēs un viesu mājās dažādos Latvijas reģionos. Pēc finanšu apsaimniekotāja Lauku atbalsta dienesta (LAD) aplēsēm, piešķirtais finansējums ļaus uzlabot vai

no jauna radīt 455 gultasvietas, kā arī uzlabos sniegto pakalpojumu kvalitāti vidēji 183 tūkstošiem tūristu gadā. SAPARD fondu sadale, līdzīgi kā citiem strukturālajiem fondiem, ir vērsta uz ilgtermiņa darbību, piemērojot kopfinansējuma un kompensācijas mehānismus, kas spēj nodrošināt projekta efektivitāti (Tomsone I., 2004).

Citi fondi

Vides projektu realizācija, t.sk. Zaļā sertifikāta kritēriju izstrāde un ieviešana, tikusi veikta ar EU LIFE programmas atbalstu. Finanšu iespējas tūrisma un viesmīlības uzņēmējdarbības veicināšanai snieguši, piemēram, Kultūrkapitāla fonds, Sorosa fonds, „Leonardo da Vinci" programma, Ziemeļvalstu informācijas birojs, kas katru gadu atbalsta noteiktu skaitu projektu, kuri saistīti ar kultūru, jaunu tehnoloģiju ieviešanu, tūrisma izglītības modernizāciju, pieredzes apmaiņas projektiem, prakšu un stažēšanās iespējām, sadarbības veicināšanu un kultūrmantojuma saglabāšanu.

Piešķirtā ES finansējuma izvērtējums
Evaluation of assigned EU finances

Par investīcijām tūrisma infrastruktūrā var spriest pēc investīcijām viesmīlības uzņēmumu attīstībā, kā arī pēc atsevišķu ES programmu ieguldījuma. Šobrīd ES fondu apguves īstenošana ir tikai uzsākta un vēl nav iespējama piešķirtā finansējuma efektivitātes izvērtēšana, tomēr iespējams gūt provizorisku ieskatu viesmīlības uzņēmumu finansēšanā.

Latvija ES finansējuma apguves ziņā ir bijusi viena no sekmīgākajām jaunajām dalībvalstīm. No kopējā finansējuma, kas Latvijai piešķirts laikposmā no 2004. līdz 2006. gadam, pašlaik jau pie konkrētiem projektiem piesaistīti 76% no šīs naudas summas, t.i., projekti ir apstiprināti un sākta to realizācija. Līdz 2005. gada septembrim apgūti 84% no ERAF, 56% no ESF, 83% no ELVGF un 50% no ZVFI, kas liecina, ka infrastruktūras attīstībai Latvijā kopumā līdzekļi ir vairāk izmantoti nekā cilvēkresursu attīstībai (Sloga G., 2005). Nepietiekami ir pieprasīta ESF nauda, kas varētu kavēt cilvēkresursu attīstību un nodarbinātības pasākumus dažādu nozaru uzņēmumos, tai skaitā viesmīlības uzņēmumos.

Viesmīlības uzņēmumiem piešķirtā finansējuma apjomus pa reģioniem raksturo 3. tabulā sakārtotie autoru aprēķinātie dati.

No 3. tabulas datiem var secināt, ka ES piešķirtā finansējuma struktūra viesmīlības uzņēmumiem ir neviendabīga, lielākā finansējuma daļa tika novirzīta 4. prioritātes pasākumu

3. tabula/*Table 3*

Piešķirtais ES finansējums viesmīlības uzņēmumiem
Assigned EU finances for hospitality enterprises

Prioritāte *Priorities*	Piešķirtais finansējums pa reģioniem , tūkst. LVL *Assigned finances in regions, thous. LVL*					Kopā, tūkst. LVL *Total*
	Rīgas reģions	Kurzemes reģions	Zemgales reģions	Vidzemes reģions	Latgales reģions	
2. Uzņēmējdarbība un inovāciju veicināšana	49.964	-	10.000	94.615	-	154.6
3. Cilvēkresursu attīstība un nodarbinātība	-	-	-	4.417	-	4.4
4. Lauku un zivsaimniecības attīstības veicināšana	9044.289	10285.663	2482.746	8689.612	2660.085	33162.4
Kopā / Total	**9094.253**	**10285.663**	**2492.746**	**8788.644**	**2660.085**	**33321.4**
Piešķirtais finansējums uz 1000 iedzīvotājiem *Assigned finances per 1000 inhabitants*	8.2	32.8	8.6	35	7.2	14.4

Avots: *autoru aprēķini.*

finansēšanai, kas ir vairāk nekā 33 mlj. LVL. Viesmīlības uzņēmumiem tika izmantots viss (100%) tiem pieejamais finansējums, ko piedāvāja 4. prioritātes pasākumi. Turklāt viesmīlības uzņēmumu pieprasījums izsludinātajā 4. prioritātes atklātā projekta konkursā ,,Lauku tūrisma un amatniecības veicināšana", kas bija vienīgais, uz ko varēja pretendēt viesmīlības uzņēmumi, vairākkārtīgi pārsniedza pieejamo finansējumu. Tomēr tikpat kā netika izmantota iespēja pieteikties uz 2. un 3. prioritātes izsludinātajiem pasākumiem. Viesmīlības uzņēmumiem piešķirtais finansējums 2. prioritātē (Uzņēmējdarbības un inovācijas veicināšana) ir 154.6 tūkst. LVL, kas nepārsniedz 0.14% (9 projekti) no viesmīlības uzņēmumiem pieejamā finansējuma, bet 3. prioritātē (Cilvēkresursu attīstība un nodarbinātība) – 4.4. tūkst. LVL, kas ir tikai 0.03% (1 projekts). Līdz ar to lielākā ES Struktūrfondu finansējuma daļa tika novirzīta uz viesmīlības uzņēmumu būvniecību un labiekārtošanu, nepievēršot vajadzīgo uzmanību cilvēkresursu attīstībai.

Izvērtējot finansējuma reģionālos ieguldījumus, jāsecina, ka visvairāk ES finansējumu saņēmuši Rīgas (vairāk nekā 9 mlj. LVL), Kurzemes (10.3 mlj. LVL) un Vidzemes reģioni (8.7 mlj. LVL). Tomēr, rēķinot uz iedzīvotāju skaitu, visvairāk finansējuma piesaistījis Vidzemes reģions (35 tūkst. LVL uz 1000 iedzīvotājiem) un Kurzemes reģions (32.8 tūkst. LVL uz 1000 iedzīvotājiem), kas vairākkārtīgi pārsniedz piešķirto finansējumu Rīgas reģionam (8.2 tūkst. LVL uz 1000 iedzīvotājiem). Tas atbilst arī kopējā ES struktūrfonda finansējuma sadalījumam pa reģioniem, kur lielākie ieguvēji ir Vidzemes un Kurzemes reģioni, attiecīgi saņemot 219.4 tūkst. LVL un 212.8 tūkst. LVL, rēķinot uz 1000 iedzīvotājiem (Gluhina A., 2005). Viesmīlības uzņēmumi kopumā ir apguvuši 33.3 mlj. LVL, kas ir 21.3 % no tiem pieejamā ES Struktūrfondu kopējā finansējuma.

Galvenie šķēršļi, kas kavējuši piesaistīt vairāk ES Struktūrfondu līdzekļus cilvēkresursos, pēc Labklājības ministrijas speciālistu domām, kuri iesaistīti projektu administrēšanā, ir birokrātiskie šķēršļi – sarežģītā ES strukturālo fondu administratīvā sistēma un projektu apstiprināšanas process, valsts iepirkuma kārtība. Tomēr pastāv arī objektīvie šķēršļi, kas kavējuši piesaistīt vairāk ES Struktūrfondu līdzekļu. Tie ietverti makroekonomiskajā vidē: pašfinansējuma trūkums, ierobežotas iespējas saņemt banku kredītus finansiālās nestabilitātes dēļ, augsti kredītprocenti, konsultatīvā servisa trūkums. Subjektīvie šķēršļi: ekspertu trūkums, nepietiekama uzņēmēju aktivitāte (Zālīte Z., 2005).

Secinājumi
Conclusions

1. Pēdējo gadu pieaugošais pieprasījums pēc viesmīlības uzņēmumu pakalpojumiem pārsniedzis pašreizējo piedāvājumu, tāpēc uzņēmējiem aktīvāk jāizmanto visas iespējas piesaistīt finansējumu, tai skaitā ES Struktūrfondu finansējumu.
2. Viesmīlības uzņēmumiem pieejams vairāku ES Struktūfondu finansējums, kas sasniedz 156.2 mlj. LVL vai 27% no kopējā apjoma.
3. Galveno ES finansējuma atbalstu viesmīlības uzņēmumi saņēmuši no Eiropas Lauksaimniecības virzības un garantiju fonda Vadības nodaļas – 33.1 mlj. LVL apmērā, ko paredzēts izmantot tūrisma infrastruktūras attīstībai visos reģionos, taču lielākā daļa piešķirta Kurzemes, Vidzemes un Rīgas reģioniem.
4. Viesmīlības uzņēmumiem piešķirti 33.3 mlj. LVL vai 21.3% no tiem pieejamā ES Struktūrfondu kopējā finansējuma, kas perspektīvā nodrošinātu patērētāju vēlmēm atbilstošu uzņēmumu attīstību.

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Reforms and Problems of the Lithuanian Tax System

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Abstract

The aim of the article is to foresee the possibilities of improving Lithuanian tax system. The research of the development of tax system shows the existence of multiple taxation, black economy and an extremely big burden of taxes for population. The paper provides the possibilities to improve population income, profit tax and social insurance payments by reducing tax rates. Reduction of population income tax would stimulate economic efficiency – stimulus to work would result in increased income from work, the taxes paid on the increased incomes would ensure the required revenue.

Key words: tax system, reforms, burden of taxes, rates, income.

Introduction

The establishment of the Lithuanian tax system included solving of the tasks set for taxation, expression of the state social, economic and fiscal policy. Change of taxes, fiscal basis, and rates and privileges enables to regulate macroeconomic processes towards the direction indicated by the state. Each state is interested in the development of good tax system. The three completed reforms of the Lithuanian tax system have not given the expected results. The existing tax system is characterized by multiple taxation, existence of black economy, increasing burden of taxes for population. The period of tax system reform coincided with the time of reforming social insurance system – it is the system of pensions – the change to private accumulation has been performed (the paper analyses social insurance system only in respect to black economy).

The following authors have written on the issues of the Lithuanian tax system and its improvement, burden of taxes and black economy: E.Buskeviciute, A.Misiunas, G.M.Pajuodiene, D.Murauskaite, A.Novosinskiene, A.Slavickiene, V.Sabaliauskaite, D.Meskauskiene, M.Tvarionaviciene, etc. Most of them suggest certain improvements of taxes but fail to cover the whole of taxes. Improvement of the existing taxes is possible only having completed the analysis of tax system and tax burden.

Object of investigations – the Lithuanian tax system.

Aim of investigations – to foresee the possibilities of improving the tax system.

In order to reach the aim of the article the following actions were carried out:

- the research of the development of tax system was evaluated;
- the drawbacks of the main taxes, as well as the reasons for avoiding paying taxes were emphasized;
- the burden of taxes was analyzed;
- the model for improving the tax system is given.

Methods of investigations. The papers of scientists, as well as Lithuanian laws and legal regulations are analyzed in the article; the research of the tax system, taxation and the issues of the burden of taxes was carried out.

The Lithuanian tax system, its structure and the burden of taxes was analyzed using the methods of analysis (monographic, logic, horizontal and vertical, etc.) and other ways of analysis (comparative, graphic). Recommendations for improvement of the tax system are provided.

Statistical data and the data from the Ministry of Finance were used in the article.

Results and discussion

After reestablishment of the Lithuanian independence creation of tax system has been performed alongside with reorganization of the country. A number of laws, decisions and explanatory letters have been passed since 1990. During almost 15 years of Independence creation and several reorganizations the tax system have taken place. The performed three reforms of tax system have shown that creation of good tax system is a complex task for a developing country. The last stage of the reform was related to integration into the European Union (the EU) in order to avoid tax limitations on free movement of commodities, individuals, services and capital. The new taxes imposed by the Government show that tax reform is not completed yet.

It is understandable that aim of taxes is to get income for execution of the state expenditure (Meidunas et.al., 2001; Novosinskiene et. al., 2002). Taxes are continually improved and changed in order to find the most optimal variant of taxation. Authors of this paper have divided the reforms of the Lithuanian tax system into the following stages:

- establishment of the Lithuanian tax system – 1990;
- the first reform of the Lithuanian tax system – 1994;
- the second reform of the Lithuanian tax system – 1997;
- the third reform of the Lithuanian tax system – 2002.

Establishment of the Lithuanian tax system was started on June 26th, 1990 after **the Lithuanian Republic law on State Tax Inspection had been passed**. On July 31st, 1990 **the LR law on Juridical Persons' Profit Tax** was passed, which changed the previous tax for the main funds and the tax of free profit balance. Profit tax rate was determined to be 35% of the assessed profit. On July 1st, 1991 the rate was reduced to 29%, and on July 1st, 1993 the rate for the part of profit that was used for investments was reduced to 10%. Until April 1st, 1997 foreign investors enjoyed privileges. Local investors had no privileges and this legalized different taxation conditions for taxpayers. Until May 1st, 1998 the production enterprises that employed people of limited working capacity and students of higher schools, colleges and vocational schools for the period of practical training did not pay taxes if the number of these employees made more than 50% of all employees (Novosinskiene et. al, 2001; Slavickiene, 2001).

On October 5th, 1990 **the LR temporary law of Physical Persons' Income Tax** was passed instead of the law of Population Income Tax that had been in force before. This law has been in operation since 1991 and it has been renewed twice, while in 1993 it was prolonged until the new law is passed. Personal incomes are assessed all over the world and it makes 10-15% of GDP, in tax income – about 30%. Although it was a temporary law it has undergone several amendments and supplements. Until May 1st, 1994 the income related with work relations were assessed by differentiated rate of 10-33%. The change to the uniform tariff of 33% took place on May 1st, 1994. Taxation of physical persons' income from registered commercial-economic activity greatly differed.

Establishment of independent state social insurance system was started after the LR Supreme Soviet passed **the LR law of the Fundamentals of State Supply System** on October 26th, 1990, and **the LR law of State Social Insurance** on May 21st, 1991. The main source of the LR SSI fund – the payments paid by insurers and the insured. The tariffs of insurers' payments are established by the LR Government, while those of the insured – by the Seym. Payments of insurers made 30 and 22,5% of the calculated salary. The insured paid the payments of 1% of the calculated salary.

In 1991 **general excise and individual excise taxes** paid by the final consumer were introduced (indirect tax was taken through the price system), while according to the LR Excise law the tax is paid by producers and importers of certain goods. General excise rate was 15% and since July 1st, 1992 – 18% (for the goods realized in foreign states for converted currency – 10%). The turnover tax substituted the taxes of general excise and individual excise.

Later the laws of other taxes were passed. **The law of Duties** is applied to the goods that cross the border of the Lithuanian Republic. It is an indirect tax and it is unfair one for the people who have low income. When buying the indispensable goods they leave to the state the bigger part of income than the rich do.

The tax of inherited or gifted property was passed on June 13th, 1995 and its application

started on January 1st, 1998. **The tax of real property of enterprises and organizations** was imposed on January 1st, 1995. This tax is criticized, as it also has to be paid in the case when income source is absent. The possession of some property does not mean that this property "earns" income. In the case the income is earned, the income tax is paid.

The Lithuanian tax system includes marketplace tax, stamp duty and consulage, taxes for state natural resources and pollution of environment, land and land rent taxes, realization income deductions according to the LR law of Road Fund. The paper presents development of the main taxes only.

1994 is considered to be the year **of the first reform of tax system** – the fiscal basis was extended, tax rates were reduced, other laws were passed. The number of taxes and charges existing in Lithuania reached 18.

During the first reform of tax system **the LR Value Added Tax** was imposed on 1st May 1994 that substituted the Turnover Tax. Having introduced the Value Added Tax other taxes were not abrogated, therefore, the prices of goods for final consumers increased. The change of tax system aimed to stimulate saving and investments, to impose taxes on consumption, to increase indirect but not direct taxes because of expensive administration of the latter. Introduction of this tax in Lithuania legalized multiple taxation. The Value Added Tax provides many privileges that make correct application of this tax difficult. Lithuania introduced this tax in the course of seeking the EU membership. In many countries VAT has become an important component of tax system – it is easy to collect, has wide fiscal basis, enables easy taxation of services, does not influence behavior of the payer, does not interfere with the interest to work, to save. This tax is constantly increasing in the Lithuanian National Budget revenue (Novosinskiene et al., 2002).

Until 1997 tax rate of 9% was imposed on agricultural and food products in Lithuania. Since may 1995 the compensatory tariff has been applied to the farmers, who possess less that 7 ha of land and whose yearly (12 months) income for the sold goods and provided services does not exceed 50 thousand Lt (since July 1st, 1998 – 100 thousand Lt).

The tax system is unstable, as it was changed a few times, supplemented and corrected. Despite the experience of the European Union, LR Law on Juridical Persons' Profit Tax and the Law of Physical Persons' Income Tax received the status of temporary laws.

In 1997 the second phase **of tax reform started** – tax rates were reduced, tax administration and customs control were made stricter, regulations of single taxes were changed and added.

Since 1997 taxes have been imposed on new trends of activity (on income received by enterprises of foreign states, revenue of the enterprises involved in organization of lotteries). The LR law of Juridical Persons' Profit Tax has been many times supplemented and changed, and in July 2nd, 1998 the possibility to postpone the losses for five years instead of three was legitimated. A "zero" tariff was imposed on the profit used for investments, taxation of dividends was established to avoid double taxation. Since January 1st, 2000 profit tax rate has been decreased to 24%.

Individual enterprises, differently from juridical ones, registered revenue following only one principle of income. Since January 1st, 1998 the enterprises that do not have the status of juridical person can register general income following the principle of data accumulation (the moment when the money was earned) or the principle of money (when the money was actually received). Once one of these methods has been chosen it cannot be changed until liquidation of the enterprise.

Since January 1st, 1999 the LR provisional law of Physical Persons' Income Tax has imposed taxes on the received dividends and income from increasing value of shares, bonds and other securities.

The most important shortcomings of tax system are as follows:

- too high tariffs and too big tax burden stimulate development of black economy but do not encourage earning of revenue;
- failure to avoid double taxation;
- taxes are aimed to regulate economy;
- complicated calculation of taxes, taxes are overloaded with tariffs, deductions and various terms;
- some taxes have no economic reasoning.

2002 was **the year of the third reform of tax system. This is related with harmonization of taxes** – most of tax deductions and exceptions were abandoned, the order of quickened calculation of depreciation (amortization) was introduced, the order of excise duty collection was changed and a number of laws were passed.

VAT law was harmonized with the EU regulations and came into force on July 1st, 2002. The main tariff was 18%. The preferential tariff of 5% was imposed on transportation of passengers. This tariff was imposed on medicine and medical goods, books and press that had not been taxed, therefore, the VAT of 18% paid for the used raw materials could not be recovered. Since 2003 the preferential tariff of 5% has imposed on hotels.

The preferential VAT tariff of 9% is imposed on social construction, i.e. construction of houses financed from budgets or favorable loans. Temporal application of 9% tariff is planned for heating of housing and for biofuel.

Zero tariff is imposed on export and related transactions to stimulate international business relations.

Until 2004 VAT was not imposed on the spheres that were socially sensitive or fortered – agricultural services provided by agricultural cooperatives, VP portfolio management, consulting, market research, burial services. Until 2004 VAT privilege was also applied to the enterprises that employed people of limited working capacity.

Simplified procedures of tax declaration and payment, 10-day extension of the term for submission of declaration, providing the regulation to pay VAT not monthly but once in six months, which is favorable for small-scale business. VAT on leasing interest rate has been abandoned, the provided recovery of VAT to non residents (foreign tourists and enterprises) would stimulate turnover of trade enterprises (LR pridetines…, 2002).

Since January 1st, 2002 the LR law **of Profit Tax** has come into force. Profit tax rate has been reduced from 24 to 15% and the tax exceptions that deform business conditions have been abandoned. The exception of reinvested profit taxation that had been applied since 1997 was abrogated by refusing stimulation of passive investment and interference of the State. By this competition possibilities between big and small enterprises were unified.

In order to have real stimulation of small-scale business development the tax rate of 13% was imposed on the small scale enterprises (number of employees up to 10 people, income – up to 500 thousand Lt . Besides, small taxpayers, whose income during the last three-month periods did not exceed 100 thousand Lt each period, would recognize their income following the principle of money accounting. 10% tax was imposed on the "at the source" income (the income that originated in Lithuania but was received not through the residence existing in Lithuania) of foreign subjects.

Since 2003 the tax rate of 15% has been imposed on dividends and other income distributed from the profit. Efforts have been made to avoid repeated taxation of the same dividends. When the enterprise that receives dividends controls more that 10% of shares of the enterprise that pays dividends, no taxes are imposed on the dividends (LR pelno…, 2001).

The suggestion of the Lithuanian Institute of Free Market to abrogate profit tax arouse lots of discussions. This suggestion was based on the argument that profit tax was the most harmful tax in Lithuania as it was complicated to calculate, expensive to administrate, easy to avoid, etc. The program of the LR Government for the period of 2000-2004 also provided the possibility to abrogate juridical persons' profit tax by imposing taxes on dividends.

Authors of this paper hold that not abrogation of profit tax had the following arguments:

- taxation of dividends puts individual enterprises and joint stock companies to unequal position as individual enterprises do not calculate dividends;
- analysis of literature shows that having abrogated profit tax and imposed taxes on dividends the state revenue would decrease as only one third of shareholders receive dividends;
- direct taxes dominate in most countries, therefore, abrogation of profit tax and transition to the main indirect value added tax are unjust due to shifting the tax burden to population. In the tax revenue of the Lithuanian National Budget direct taxes made 38,6%, while profit tax – 8,1% (2003);
- the importance of profit tax in developed state has been proved (Novosinskiene, 2001).

The change of the profit tax and its share in the tax revenue, as well as in the revenue of the Lithuanian National Budget and GDP is shown in Table 1.

Table 1

Profit tax share in tax revenue, the National Budget tax revenue and GDP in Lithuania, 1999-2004

Year	Profit tax	Profit tax share in tax revenue %	Profit tax share in the National Budget tax revenue %	Profit tax share in GDP %
1999	360,8	2,4	4,3	0,8
2000	311,7	2,2	3,9	0,7
2001	259,2	1,8	3,2	0,5
2002	307,7	2,1	3,4	0,6
2003	784,9	4,8	8,1	1,4
2004	837,4*	4,6	7,6	1,3

Source: *Lithuanian chronicle of statistics, 2000, 2003, 2004.*
*Data of Lithuanian Ministry of Finance.

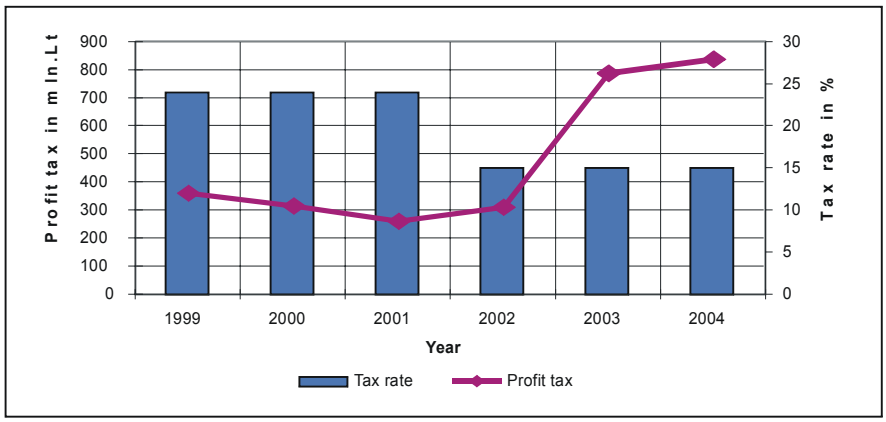

Fig. 1 **The change of Profit Tax and Profit Tax rates in 1999-2004**

In 2004 the received profit tax was 837,4 million Lt, which made 4,6 % of tax revenue, 7,6% of the revenue of the National Budget and 1,3 % of GDP. During the period analyzed GDP increased 44 % and the profit tax increased more than twice.

During the first three years of the period analyzed the profit tax was decreasing and since the beginning of the fourth year it has been increasing. Since 2002 the tariff of the Profit tax was reduced by 9 percentage points and in comparison with 2002, the received profit tax in 2004 increased 2.7 times. The change of the profit tax and tariffs is provided in Table 1.

The reduction of Profit tax rate and the abrogation of privilege for the reinvested profit greatly influenced the income from this tax. This is the assumption for the decrease of black economy.

The law of Profit Tax that came into force in 2002 seeked to abandon deductions and exceptions, to ensure application of clarity and transparency principles. The amendments that provided the tax rate of 0% for the share of assessed profit, which corresponded the sum of 25 thousand Lt, of individual enterprises and farm communities that employed up to 10 people and during the tax period received the revenue not exceeding 1mln Lt were passed in 2004 in order to create more favorable conditions for small-scale business (LR pelno …,2001; LR smulkaus …, 2002).

Since January 1st, 2003 the law of **Population Income Tax** has come into force that legitimates a number of innovations in the field of taxation: increased the basic amount of tax-exempt income (since January 1st, 2003 – 290 Lt, former size – 250); increased the amount of tax-exempt income applied to corresponding groups of population (disabled people, individuals, who bring up three and more children, individuals, who bring up children alone,

employees of agricultural entities, and parents, who bring up one or two children can make use of the amount that is tax-exempt). Possibility to reduce the assessed revenue of population to 25% has also been provided: life insurance payments, payments to pension funds, interest rate paid to the bank or other credit institution for the credit for housing, the sums paid for studies in higher school, computer and software purchase expenses under 4 thousand Lt can be deducted from the revenue (LR gyventoju…, 2002).

The tariffs of 15 % and 33% are applied for the taxation of population income. The 33% tariff is used to calculate employees' income rate from their salary.

One cannot assess taxation from the tariff rate. The taxation of population is determined by the taxation system of population, i.e. the taxation basis, non-taxable income rate, which is applied, as well as tax tariff rates and privileges (Gyventojų pajamų, 2005)

The Law of Population Income Tax is important because it is the second tax according to the share of collected income in the tax revenue of the Lithuanian National Budget.

Since 2003 the rate of non taxable income is applied not only to the income related with working relations, but also for the calculation of taxable income of all permanent Lithuanian residents.

Since 2003 the rate of non-taxable income was increased from 250 Lt to 290 Lt and thus a possibility was given to reduce population's taxable income through the population's expenses. By increasing the rate of taxable income, the Government aims to protect socially vulnerable residents. The increase of non-taxable income rate increases real income for those who earn least, in this way the tax burden decreases, as well as the demand for social payments. By the increase of tax-exempt income rate for the population, the tax burden decreases only temporarily and the problem of tax burden for population as well as the problem of social insurance for entities remain unsolved.

During the period analyzed the collection of the Population Income Tax, tax revenue of the state and tax revenue of the National Budget were influenced by the economic crisis in Russia, which took place in 1999, as well as too big burden of income taxation for the population and entities (Table 2).

The Population Income Tax was changing during the period which is analyzed: in 2000 2504,3 million Lt were received, i.e. 2,8 % less than in 1999. Since 2001 the tax was increasing slightly and only in 2003 reached and exceeded the income level of 1999. The most revenue was received in 2004 – 3054,2 million Lt, and in comparison to 2003, it increased by 14,6%. Tax revenue of the state increased during this period from 7,6 % in 2002 to 13,1 % in comparison to the previous year. Tax revenue of the National Budget was increasing since 2001: from 0,9% to 14%.

Table 2

The change of the Population Income Tax, tax revenue of the state and tax revenue of the National Budget during the period of 1999-2004

Income and change	1999	2000	2001	2002	2003	2004
Population Income Tax, million Lt	2576,6	2504,3	2511,6	2547,3	2666,2	3054,2*
The change in comparison to previous year, %	6,4	-2,8	0,3	1,4	4,6	14,6
Tax revenue of the state, million Lt	14476,0	14328,2	13905,2	14957,6	16086,1	18191,1
The change in comparison to previous year, %	4,8	-1	-3	7,6	7,5	13,1
Tax revenue of the National Budget, million Lt	8376,1	8033,1	8104,7	8990,8	9723,1	11086,4
The change in comparison to previous year, %	-3,4	-4,1	0,9	10,9	8,1	14,0

Source: *Lithuanian chronicle of statistics, 2000, 2003, 2004.*
*Data of Lithuanian Ministry of Finance.

Table 3

Share of population income tax in tax revenue, in the National Budget tax revenue and in GDP, 1999-2004

Year	Population income tax	Share of population income tax in tax revenue	Share of population income tax in the National Budget tax revenue	Share of population income tax in GDP
1999	2576,4	18	30,8	5,9
2000	2504,3	17,5	31,2	5,5
2001	2511,6	18,1	31	5,2
2002	2547,3	17	28,3	4,9
2003	2666,2	16,6	27,4	4,7
2004	3054,2*	16,8	27,5	4,9

Source: *Lithuanian chronicle of statistics, 2000, 2003, 2004.*
*Data of Lithuanian Ministry of Finance.

The share of the Population Income Tax in tax revenue and in GDP in the period of 1999-2004 is provided in Table 3.

During the period of analysis the share of the Population Income Tax in tax revenue of the state and in tax revenue of the National Budget were decreasing and made 18,1- 16,6 % of tax revenue and 31,0- 27,4% of tax revenue of the National Budget. Although in 2003 the amount of received population income tax was bigger than in previous years, however, due to a fast growth of GDP, the share of this tax decreased and made 5,9-4,7 %. During the period of 1999-2004 GDP increased by 44 %, while the population income tax increased only by 18%.

The impression of decreasing tax burden in made. But this is not true. This shows the existence of black economy when income is hidden and the tax is not paid. We think that for the people who honestly paid population income tax the tax burden decreased due to the increased size of tax-exempt income. The increase of tax-exempt income reduced the tax burden only for the people who received low income and it did not influence tax burden for the people receiving high income.

The following has been provided in the LR Government program for the period of 2004-2008:

- to achieve better balance of labor force and capital taxation;
- gradual decrease of income tax burden for the people receiving low income, increase of tax-exempt income (LR Vyriausybes…, 2004).

Reduction of population income tax to 27% was planned from 2006-06-01 and to 24% - from 2008-01-01. Authors of the paper hold that aim of the Government to unify taxation of labor force and capital has not been realized yet.

Population income makes basis of both direct and indirect taxes. On the received income population pays population income tax and contributions to the fund of obligatory health insurance. On the same income enterprises pay contributions to social insurance. The individual citizen on already assessed income pays excise duties, custom duties and value added tax: on excises and duties the value added tax is also calculated. In this way multiple taxation has been legitimated.

Authors of this article indicate the following reasons to hide income and avoid paying taxes:

- too high taxes imposed on labor income;
- state social insurance contributions paid by the employer.

Work expenditure experienced by employers is too high, therefore it is an essential condition to reduce the burden for social insurance in order to establish more jobs and to reduce illegal payment.

The authors of the paper suggest gradual decrease of population income tax rate to 15%. It is not always the case that lower tariff means lower income – it is the precondition for black economy to quit the underground. Authors of the paper think that reduction of the tariff will not reduce the budget revenue, contrary, the taxes will be paid on all income that is not hidden any more – this has been shown by practical reduction of profit tax rate. Reduction of population income tax would stimulate economical efficiency of business, i.e. would stimulate to work, labor income would increase, higher taxes would be paid on higher income

and this would ensure budget revenue. Collection of tax revenue should not stay behind from the increasing Gross Domestic Product. This would make richer both population and the State.

Evaluation of taxation cannot be based on the rate size only as tax basis and tax deductions, which strongly influence size of tax, are of great importance

Calculation of tax burden index is based on comparison of tax systems in different countries. Burden of tax is the ratio between tax revenue and gross domestic product. No systematized exact data about tax revenue of consolidated budget exists for calculation of tax burden (Meskauskiene et al., 2003). Calculation of tax burden records all tax revenue not only to the National Budget but also to other funds: state social insurance budget, obligatory health insurance budget, road and guarantee funds. Calculation of tax burden is not exact in Lithuania due to the existing black economy. Black economy is created but not counted up values and services that are not included into calculation of GDP. It is the received income on which taxes have not been paid. According to calculations of some authors in the period of 1999-2004 tax burden in Lithuania was decreasing and now it makes approximately 29% (Table 4).

In the period of 1999-2004 decrease of tax revenue was observed only in 2000-2001. The decrease of tax revenue was influenced by economical crisis in Russia and by the granted tax deductions. The consequences of the Russian crisis are considered to influence Lithuania only until 2002. During the period of 1999-2004 gross domestic product was increasing but increase of the index was slower due to the impact of the Russian crisis. When tax revenue is decreasing and gross domestic product is increasing – the burden of taxes decreases. Tax revenue has been increasing since 2002. Authors of this paper think that reduction of profit tax rate to 15% increased tax revenue, revival of economics significantly increased GDP, which reduced the tax burden.

During the analyzed period increase of GDP was more rapid than that of tax revenue and it made 44 and 26 %. National budget tax revenue and state social insurance tax revenue make the biggest part of tax revenue. During the analyzed period they increased by 32 and 31% respectfully. Formation of Guarantee fund started in 2001 and in the period of 2001-2004 it increased by 82%. However, it makes an insignificant share of tax revenue.

The greatest share of tax revenue is made by national budget tax revenue. They are formed by taxes of the following two main tax groups:

- domestic goods and services (value added tax and excises);
- income and profit (population income tax).

In the period of 1999-2004 taxes of these groups made 92,2-96,4% of the Lithuanian national budget tax revenue. Other taxes were of not significant importance.

Table 4

Tax burden in Lithuania in the period of 1999-2004, %

Indices	1999	2000	2001	2002	2003	2004
1. Tax revenue million Lt	14476,0	14328,2	13905,2	14957,6	16086,1	18191.1
1.1. National budget	8376,1	8033,1	8104,7	8990,8	9723,1	11086,4
1.2. Social insurance budget	4134,3	4362,3	4416,6	4553,9	4876,1	5430,0
1.3. Health insurance budget	1341,6	1379,2	1371,8	1394,8	1467,2	1652,6
1.4. Road fund budget	624,0	553,6	-	-	-	-
1.5. Guarantee fund	-	-	12,1	18,1	19,7	22,1
2. In GDP prices, million Lt	43359	45526	48379	51643	56179*	62440*
3.Gross Domestic Product per capita	12303	13009	13897	14887	16264*	18174*
4. The ratio of tax revenue to GDP, %	33,4	31,5	28,7	29	28,6	29, 1

* preliminary data.

Table 5

Tax burden in Lithuania, Latvia and Estonia, %

Country	Total burden of tax, %	Total burden of tax, %	Physical persons' income tax	Maximum enterprise taxes
ES 25	40,5	40,4	41,7	27,4
ES 15	40,6	40,5	46,2	31,4
Estonia	-	35,2	26,0	26,0
Latvia	37,2	31,3	25,0	15,0
Lithuania	28,6	28,8	33,0	15,0

Source: *EUROSTAT.*

It is expedient to compare the Lithuanian tax burden, physical persons' and enterprise tax rates with the existing tariffs in Latvia and Estonia (Table 5).

The comparison shows that Lithuania has the lowest tax burden of all three states. Nevertheless, in Lithuania population income tax rate is higher by 7-8%.

Conclusions

Analysis of the Lithuanian tax system, its development and tax burden brings to the following statements:

1. The Lithuanian tax system was created anew and during 15 years of independence three reforms of tax system have taken place. The first reform of taxes extended fiscal basis, reduced tax rates and passed other laws on taxes. The second reform of tax system started in 1997 – it reduced tax rates, tax administration and customs control became stricter, regulations of single taxes were changed and supplemented. The third reform of tax system – harmonization of taxes - took place in 2002. Most tax deductions and exceptions were abandoned, quickened depreciation calculation order was applied, a number of laws were passed.
2. In the period of 1999-2004 GDP increased by 44%, while the population income tax increased only by 18%. This shows the existence of black economy.
3. The population income is the basis of direct and indirect taxes. From the received income people make payments to Social Insurance, excise and Value added tax. Entities also make payments from income to Social insurance. The existence of black economy shows that the burden of tax for population and entities was too big.
4. It is essential to reduce the Population income tax to 15%. The reduction of the tariff would increase income from wages; this tax would be paid from all income, which would not have to be hidden. In this way the taxation of labor force and capital will be unified.
5. Work expenditure experienced by employers is too high, therefore it is an essential condition to reduce the burden for social insurance in order to establish more jobs and to reduce illegal payment.
6. Calculation of tax burden is not accurate in Lithuania. Due to the existing black economy the tax burden was decreasing during 1999-2004 and made approximately 29 %.

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Система бюджетного финансирования сельскохозяйственного производства в Беларуси
The System of Budget Financing of Agricultural Production in Belarus

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Abstract

Budget financing plays the key role in the support of income for agricultural producers in the Republic of Belarus. The financing is put into practice in a quantity of directions from three sources: national fund of agricultural producers support, food and agricultural science, public budget and local funds for the stabilization of agricultural producers economy. The extent of such support has noticeably increased within the last years. Therefore it is very important to know the directions and evaluate the efficiency for the use of budget resources. The paper deals with the analysis of the sources and directions of budget financing in detail and determines shortcomings of the state support in the given area.

Key words: state support of agricultural sector, budget financing, subsidies, income of agricultural producers.

Ключевые слова: *государственная поддержка аграрного сектора, бюджетное финансирование, субсидии, доходы сельскохозяйственных товаропроизводителей.*

Introduction

Финансовая поддержка сельского хозяйства является неотъемлемой частью экономической политики любого государства и в зависимости от поставленных правительством рассматриваемой страны приоритетов направлена на достижение определенного объема и эффективности производства сельскохозяйственной продукции, обеспечение определенного уровня и стабильности доходов товаропроизводителей и т.д.

Своя специфика государственной поддержки аграрного сектора характерна и для Республики Беларусь, что обусловлено рядом факторов политического, экономического, социального и исторического характера.

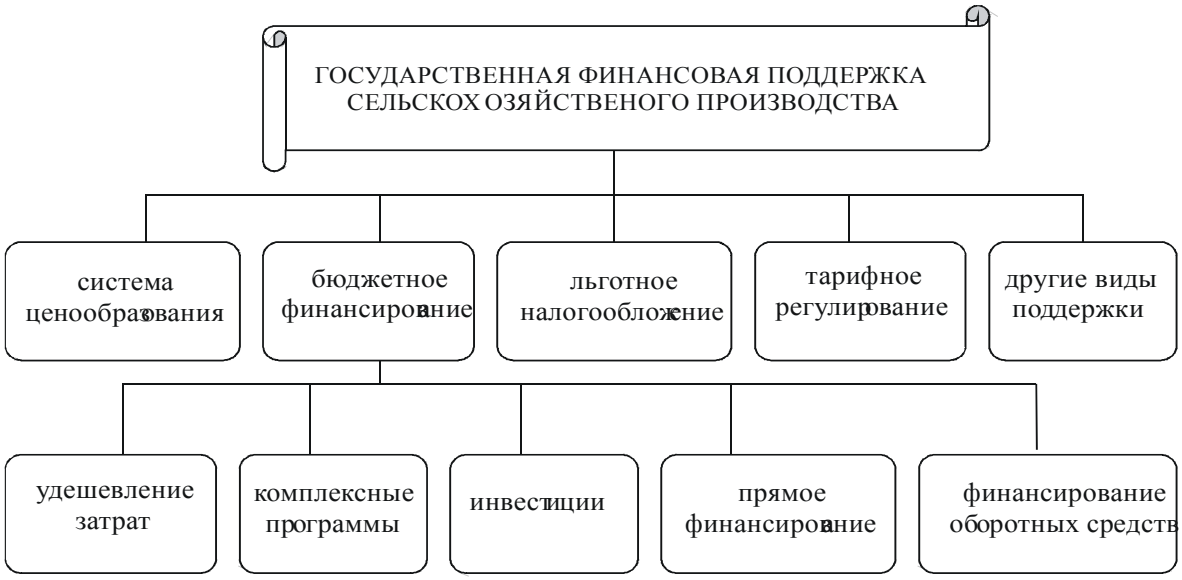
В связи с этим основной целью данной работы стало рассмотрение современной системы бюджетного финансирования сельскохозяйственного производства в Республике Беларусь. Поставленная цель потребовала решения следующих основных задач:

- определить место бюджетного финансирования в общей системе государственной поддержки сельскохозяйственного производства;
- выделить основные источники финансирования и провести анализ динамики изменения их размеров;
- рассмотреть основные направления использования средств каждым из источников финансирования;
- классифицировать используемые инструменты государственной поддержки в соответствии с характером их воздействием на доходы сельскохозяйственных товаропроизводителей;
- выделить недостатки действующей системы бюджетного финансирования.

При написании статьи были использованы общелогические приемы познания (анализ и синтез, обобщение, индукция и дедукция, аналогия), методы эмпирического и конкретно-экономического анализа (наблюдение, описание, измерение) и др.

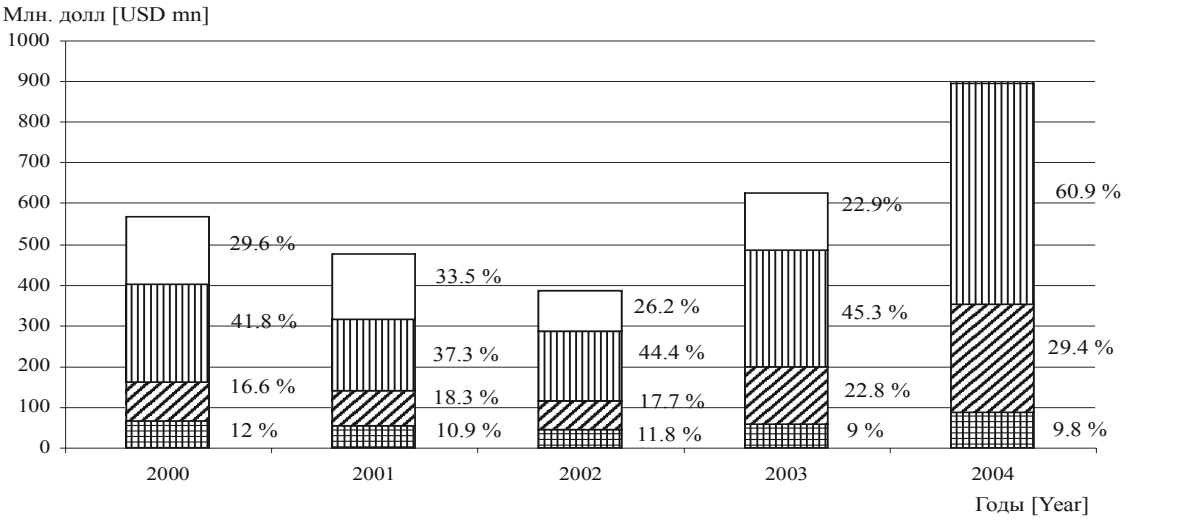
Results and discussion

В Республике Беларусь централизованная финансовая поддержка сельскохозяйственного производства осуществляется посредством использования комплексной системы рычагов и механизмов государственного регулирования (см. рис. 1).



Источник: *данные Министерства сельского хозяйства и продовольствия Республики Беларусь.*
Source: *Data of the Ministry of Agriculture and Food of the Republic of Belarus.*

Рис. 1. **Система государственной поддержки сельскохозяйственных товаропроизводителей в Республике Беларусь**
Fig. 1 ***The system of state support of agricultural producers in the Republic of Belarus***



□ Местные бюджетные фонды стабилизации экономики производителей сельскохозяйственной продукции и продовольствия [Local budget funds of agricultural producers' economy stabilization]

▨ Республиканский фонд поддержки производителей сельскохозяйственной продукции, продовольствия и аграрной науки [Republican fund of support of agricultural producers, food and agricultural science]

▨ Местные (областные) бюджеты [Local (regional) funds]

▦ Республиканский бюджет [Republican budget]

Источник: *данные Министерства сельского хозяйства и продовольствия Республики Беларусь.*
Source: *Data of the Ministry of Agriculture and Food of the Republic of Belarus.*

Рис. 2. **Бюджетное финансирование аграрного сектора**
Fig. 2 ***Budget financing of agricultural sector***

Одно из ключевых мест в поддержке доходов сельскохозяйственных товаропроизводителей занимает бюджетное финансирование, которое осуществляется из трех основных источников (Ильчик В., 2000):

- республиканский бюджет;
- республиканский фонд поддержки производителей сельскохозяйственной продукции, продовольствия и аграрной науки (далее фонд поддержки);
- местные (областные) бюджеты.

Проведенный нами анализ динамики и структуры бюджетного финансирования агропромышленного комплекса Беларуси в 2000-04 гг. (см. рис. 2) позволяет сделать следующие выводы:

- Уровень общего финансирования, несмотря на некоторое снижение за период 2000-2002 гг., имеет общую тенденцию к увеличению. В 2004 г. он превысил уровень 2002 года в более чем 2.3 раза, а уровень 2000 года в более чем 1.5 раза. Следует отметить,

Таблица 1

Республиканский фонд поддержки производителей сельскохозяйственной продукции, продовольствия и аграрной науки
National fund of support of agricultural producers and agrarian science

Наименование финансируемых мероприятий *Measures to be financed*	2002 г.			2003 г.			2004 г.		
	млрд. руб. *BYR bln*	млн. долл. *USD mn*	%	млрд. руб. *BYR bln*	млн. долл. *USD mn*	%	млрд. руб. *BYR bln*	млн. долл. *USD mn*	%
Уставной фонд "Белагропромбанк" *Authorized capital of "Belarussian agroindustrial bank"*	4	2.2	1.3	-	-	-	-	-	-
Платежи Правительства по гарантиям *Government payments under warranties*	38.1	21.3	12.4	-	-	-	-	-	-
Субсидии / Subsidies	128.3	71.9	41.9	261.9	127.7	44	689.3	319.3	58.5
Капитальные расходы *Government capital expenditures*	144.3	80.8	47	142.3	69.4	23.9	245.9	113.9	20.9
Предоставление и возврат кредитов *Granting and return of credits*	-7.9	-4.5	-2.6	38.2	18.6	6.4	107.8	49.9	9.2
Текущие трансферты *Current transfers*	-	-	-	55	26.8	9.2	40	18.5	3.4
Выплата процентов по займам *Payments of interest rates*	-	-	-	18.9	9.2	3.2	17.1	7.9	1.5
Капитальные трансферты *Capital transfers*	-	-	-	78.4	38.2	13.2	77.1	35.7	6.6
Итого / *Total*	306.7	171.9	100	594.8	289.9	100	1177.3	545.3	100

Источник: *данные Министерства сельского хозяйства и продовольствия Республики Беларусь, собственные расчеты автора.*
Source: *Data of the Ministry of Agriculture and Food of the Republic of Belarus, calculations done by the author.*

Примечание: Среднегодовой официальный обменный курс Национального банка Республики Беларусь, руб./ долл.: 2002 г. – 1784.5; 2003 г. – 2051.4; 2004 г. – 2159.
Notes: *the average annual official exchange rate of the National bank of the Republic of Belarus, BYR/ USD: 2002 – 1784.5; 2003 – 2051.4; 2004 – 2159.*

что доля размера валовой государственной поддержки в ВВП в 2004 г. составила 3.9%. что превосходит аналогичный показатель ряда экономически развитых стран.

■ Основными источниками финансирования в 2000-2003 гг. выступали республиканский фонд поддержки производителей сельскохозяйственной продукции, продовольствия и аграрной науки и местные целевые бюджетные фонды стабилизации экономики производителей сельскохозяйственной продукции и продовольствия. На их долю приходилось около 70 % от общего финансирования. После включения в 2004 г. фондов стабилизации в фонд поддержки, последний стал основным источником финансовой поддержки агропромышленного комплекса. В 2004 г. средства данного фонда составили 545.3 млн. долл.

■ Происходит усиление роли местных (областных) бюджетов, выражающееся как в количественном, так и долевом увеличении поступлений от них в общем финансировании АПК. Так в 2004 г. на их долю приходилось 29.4% всех средств прямого финансирования.

На данный момент формирование республиканского фонда поддержки производителей сельскохозяйственной продукции, продовольствия и аграрной науки осуществляется за счет сбора с организаций по ставке 2 процента от выручки, полученной от реализации товаров (работ, услуг), банками и небанковскими кредитно-финансовыми организациями, за исключением Национального банка Республики Беларусь, – от дохода за вычетом расходов по уплате процентов, комиссионных и прочих банковских расходов; организациями независимо от организационно-правовой формы, осуществляющими торговую, заготовительную деятельность и деятельность по предоставлению услуг общественного питания, – от валового дохода; страховыми организациями – от балансовой прибыли (Закон Республики Беларусь «О бюджете Республики Беларусь на 2005 год», 2004).

Начиная с 2005 г. уплата сбора в фонд поддержки производится единым платежом вместе со сборами на формирование местных целевых бюджетных жилищно-инвестиционных фондов, налогом с пользователей автомобильных дорог в дорожные фонды и сбором на финансирование расходов, связанных с содержанием и ремонтом жилищного фонда в размере 3.9 процента. 51 % полученных средств идет на формирование фонда поддержки.

Анализ структуры финансирования из фонда поддержки в 2002-04 гг. (см. табл. 1) позволяет сделать следующие выводы:

■ Начиная с 2003 г. были определены 7 направлений, в рамках которых происходило расходование средств фонда: выплата процентов по займам, субсидии, текущие трансферты, капитальные расходы, капитальные трансферты и предоставление кредитов.

■ Размер фонда в 2004 г. по сравнению с 2002 г. увеличился более чем в 3 раза. В связи с тем, что формирование фонда осуществляется за счет сбора с организаций от выручки по постоянной ставке, это говорит об укреплении экономики государства и росте благосостояния общества.

■ Субсидии являются основной статьей финансирования и их доля имеет тенденцию к увеличению. За рассматриваемый период размер финансирования по этому направлению увеличился более чем в 4 раза.

■ Увеличились в 1.4 раза капитальные расходы, несмотря на это, доля этой статьи в общем финансировании снизилась более чем в 2 раза за счет более высоких темпов роста размера расходов по субсидированию АПК.

■ За рассматриваемый период имела место тенденция к снижению размеров финансирования по статьям: «текущие трансферты», «выплата процентов по займам» и «капитальные трансферты».

Более детальное рассмотрение главных направлений расходования средств фонда поддержки в 2004 г. позволило выявить, что в качестве основных статей субсидирования были выбраны «выполнение обязательств облисполкомов» и «надбавки к закупочным ценам на сельскохозяйственную продукцию», на которые было израсходовано 20.5 и 18.7% средств фонда соответственно. Основными направлениями финансирования

капитальных расходов были закупка сельскохозяйственной техники и техническое перевооружение реформируемых организаций агропромышленного комплекса.

Основным статьями расходования средств местных (областных) бюджетов являются приобретение и ремонт сельскохозяйственной техники; приобретение горюче-смазочных материалов, минеральных удобрений; погашение кредитов, процентов, займов, компенсация потерь банков. На их долю приходилось более 60 % средств бюджетов в 2004 г. В порядке возрастания размера сформированных местных бюджетов в 2004 г. субъекты хозяйствования расположились следующим образом: Могилевская обл., Витебская обл., г. Минск, Гродненская обл., Брестская обл., Гомельская обл., Минская обл.

Анализ освоения средств республиканского бюджета по Министерству сельского хозяйства и продовольствия в 2002-2004 гг. позволяет выделить 8 направлений финансирования из рассматриваемого источника (рис. 3). В 2004 году основными статьями расходования средств выступали государственные программы и известкование, на долю которых приходилось 26.9% и 21.2% средств бюджета соответственно. Среди государственных программ ключевое место занимает программа «Мелиорация», на которую за рассматриваемый год было выделено более 41 млрд. руб. или более 19 млн. долл.

Рассмотренные выше направления государственной поддержки аграрного сектора в Республике Беларусь можно классифицировать в соответствии с характером воздействием используемых

Источник: *данные Министерства сельского хозяйства и продовольствия Республики Беларусь.*

Source: *Data of the Ministry of Agriculture and Food of the Republic of Belarus.*

Рис. 3. **Освоение средств республиканского бюджета по Министерству сельского хозяйства и продовольствия в 2004 году**

Fig. 3 ***Use of the national budget resources by the Ministry of Agriculture and Foodstuffs in 2004***

инструментов политики на доходы сельскохозяйственных товаропроизводителей (Воробьев В., Филипцов А., Чеплянский Ю., 2003):

1. Инструменты, непосредственно обеспечивающие рост прибыльности (рентабельности) производства:

1.1. Инструменты, обеспечивающие рост валовых доходов:

- Меры по увеличению спроса (Государственные закупки сельскохозяйственной продукции);
- Субсидирование цен на сельскохозяйственную продукцию (Надбавки к закупочным ценам на сельскохозяйственную продукцию).

1.2. Инструменты, способствующие снижению издержек производства:

- Субсидии на капитальные блага (например, субсидии на закупку сельскохозяйственной техники и оборудования; субсидии на капитальный ремонт техники; субсидии на модернизацию и техническое переоснащение сельскохозяйственных организаций; субсидии на удешевление стоимости племенных животных, инкубационного яйца и молодняка птицы, зерноуборочных комбайнов; погашение задолженности за средства защиты растений и т.п.);
- Государственное льготирование по налогам и выплатам процентов по кредитам (например, льготы сельскохозяйственным организациям по уплате некоторых налоговых платежей; компенсация потерь банков в связи с выдачей льготных кредитов организациям агропромышленного комплекса, льготированием процентов по кредитам. полученным этими организациями; компенсация расходов по уплате процентов и погашение основного долга по бюджетным ссудам (займам), выданным организациям и т.п.).

2. Инструменты, непосредственно не связанные с ростом прибыльности (рентабельности) производства (например, целевые государственные субсидии на развитие сельских районов).

С учетом увеличения размеров финансирования за последние годы, важным, на наш взгляд, является своевременное определение недостатков действующей системы распределения средств с целью их ликвидации и повышения эффективности поддержки доходов сельскохозяйственных товаропроизводителей.

На наш взгляд, в действующей системе бюджетного финансирования можно выделить следующие недостатки:

- Система финансирования из трех источников и множественность направлений финансирования усложняют механизм государственной поддержки доходов сельскохозяйственных товаропроизводителей и снижает ее эффективность. Так, детальное рассмотрение статей расходования средств позволило выявить факт дублирования по некоторым направлениям. Более того, множественность направлений финансирования усложняет систему поддержки и снижает эффективность контроля над использованием выделяемых средств;
- Механизмы государственной поддержки сельскохозяйственных товаропроизводителей слабо отражают принцип содействия развитию наиболее эффективных видов и форм аграрного производства (Бельский В., 2004; Казакевич И., 2003; Гусаков В., 2003);
- В силу специфики механизма формирования фонда поддержки, его размер зависит от выручки, полученной организациями от реализации товаров (работ, услуг), и, таким образом, постоянно меняется вне зависимости от изменения объективных потребностей сельскохозяйственных товаропроизводителей в необходимых размерах финансирования;
- Среди направлений бюджетного финансирования не получили должного внимания механизмы, устраняющие причины низких доходов в сельском хозяйстве. Практически отсутствует защита сельскохозяйственных товаропроизводителей от конъюнктурных изменений рынка, форс-мажорных природно-климатических условий и т.п. Наиболее эффективными мерами защиты от оказываемого негативного воздействия, на наш взгляд, являются страхование и развитие рынка фьючерсов (Чеплянский А., 2004).

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Summary

В Республике Беларусь централизованная финансовая поддержка сельскохозяйственного производства осуществляется посредством использования комплексной системы рычагов и механизмов государственного регулирования. Одно из ключевых мест в поддержке доходов сельскохозяйственных товаропроизводителей занимает бюджетное финансирование, которое осуществляется по множеству направлений из трех основных источников: республиканский бюджет; республиканский фонд поддержки производителей сельскохозяйственной продукции, продовольствия и аграрной науки (далее фонд поддержки); местные (областные) бюджеты.

Уровень общего финансирования, несмотря на некоторое снижение за период 2000-2002 гг., имеет общую тенденцию к увеличению. Доля размера валовой государственной поддержки в ВВП в 2004 г. составила 3.9%. что превосходит аналогичный показатель ряда экономически развитых стран.

Основным источником финансирования в 2004 г. выступал фонд поддержки производителей. На его долю приходилось более 60 % от общего финансирования. Главными направлениями финансирования были выплата процентов по займам, субсидии, текущие трансферты, капитальные расходы, капитальные трансферты и предоставление кредитов. Основным статьями расходования средств местных (областных) бюджетов являются приобретение и ремонт сельскохозяйственной техники; приобретение горюче-смазочных материалов, минеральных удобрений; погашение кредитов, процентов, займов, компенсация потерь банков.

Наибольшая часть средств бюджета по Министерству сельского хозяйства и продовольствия в 2004 году была направлена на государственные программы и известкование, на долю которых приходилось 26.9% и 21.2% средств бюджета соответственно. Среди государственных программ ключевое место занимает программа «Мелиорация», на которую за рассматриваемый год было выделено более 41 млрд. руб. или более 19 млн. долл.

На наш взгляд, в действующей системе бюджетного финансирования существуют следующие недостатки: 1) система финансирования из трех источников и множественность направлений финансирования усложняют механизм государственной поддержки доходов сельскохозяйственных товаропроизводителей и снижает ее эффективность; 2) механизмы государственной поддержки сельскохозяйственных товаропроизводителей слабо отражают принцип содействия развитию наиболее эффективных видов и

форм аграрного производства; 3) в силу специфики механизма формирования фонда поддержки, его размер зависит от выручки, полученной организациями от реализации товаров (работ, услуг), и, таким образом, постоянно меняется вне зависимости от изменения объективных потребностей сельскохозяйственных товаропроизводителей в необходимых размерах финансирования; 4) среди направлений бюджетного финансирования не получили должного внимания механизмы, устраняющие причины низких доходов в сельском хозяйстве.

Summary

The centralized financial support of agricultural production in the Republic of Belarus is based on the use of a complex system of mechanisms of public regulation. Budget financing plays one of the most important roles in the support of income for agricultural producers and is applied in practice in a quantity of directions from three main sources: public budget; national fund of support for agricultural producers and agrarian science (hereinafter - fund of support); local (regional) budgets.

Despite the decline occurred between 2000 and 2002 the level of total financing has a general tendency to increase. In 2004 the proportion of state support in GDP amounted to 3.9%, thus surpassing the similar parameters of some economically developed countries.

The main source of financing in 2004 was the fund of support of producers (more than 60% of general financial resources). The payments for loan charges, subsidies, current transfers, capital expenditures, and capital transfers were the key directions of financing.

The main expense items of regional budgets are the following: purchase and repair of agricultural machinery; purchase of fuel, fertilizers; repayment of credits, interest rates, loans, and compensation for bank losses.

The majority of the public budget resources in 2004 was directed for the public programs and liming, respectively comprising 26.9% and 21.2% of the total budget resources. The subsidy program "Amelioration" with more than 19 million dollars being disbursed from the budget is ranked in the key place among the state financed programs.

In our opinion the current system of budget financing has some shortcomings: 1) the system of financing from three sources complicates the mechanism of state support of income for agricultural producers and thus reduces its efficiency; 2) mechanisms of state support for agricultural producers poorly reflect the principle of assistance to the development of the most efficient kinds and forms of agricultural production; 3) according to the specifics of the mechanism of fund of support formation its amount depends on the Belarussian producers receipts from sales of goods (activities, services) and thus constantly varies without dependence upon the changes of objective requirements of agricultural producers; 4) among the directions of budget financing the mechanisms of eliminating the causes of low income in agriculture have not received due attention.

Cost Calculation Model of Weak Labour Environment Quality in Latvia

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Abstract

The article focuses on the studies of labour environment in the enterprises of Latvia. Weak labour environment costs are split into two sections: costs only related to an employer and costs covered by the public budget resources. In 2002 the costs related to weak quality labour environment have amounted to 3.7%, in 2003 to 4.3%, in 2004 to 5.2% and in 2005 to 6.0%. Although the number of accidents has a tendency to decrease with each year, the annual amount of compensations disbursed from the social budget increases.

A model for calculation of an employer's costs, comprising all the possible company costs arisen due to a weak labour environment of the company, has been elaborated. The notion "weak labour environment" is attributed to cases when occupational accidents occur, and the number of employees suffering from occupational diseases increases.

Key words: labour environment, quality costs, occupational accident.

Introduction

The studies on labour environment fall under several directions or aspects: technical, technological, social, economic etc.. Besides the notion "environment quality" may have different interpretations.

Scientific information flows prove that the attention of scientists and specialists from different sectors is multi-directed, though it is based on different levels.

In Latvia studies on labour environment and costs related to the development of safe labour environment have been done by V. Kaļķis, I. Kristiņš, Ž. Roja, who have more concentrated on the assessment of risks connected with labour environment (V. Kaļķis, Ž. Roja, 2002, 2003.). I. Ervinga, V. Urbāne, J. Ieviņš, and L. Bite study economic consequences of labour traumatism and occupational diseases (J. Ieviņš, L. Bite, 2004, 2005, I. Ervinga, V. Urbāne, 2004).

However the present studies have been focused on the government social budget expenses, as well as on the losses attributed to non-produced output. Though there are relatively few studies on certain costs to be covered by the employer in case an accident occurs in an enterprise or employees catch occupational diseases due to weak labour environment.

There are no publications on research results related to the formation of costs associated with labour environment quality, yet such costs have to be studied to draw employers' attention on the costs of weak quality labour environment. In the form of hypothesis it may be assumed that the reduction of labour turnover is promoted, the state of health of employees is improved, and the length of a labour lifetime is prolonged due to the employer's ability to establish high quality labour environment in the company.

Therefore the professional level and qualification of a company staff increases, and consequently the amount of related costs disbursed either from the public or company budget decreases. Besides it may be forecasted that the establishment of a safe labour environment:

- reduces inexpedient financial expenditure (occupational accidents, damages of equipment, sick leaves, benefits, etc.);
- reduces labour turnover of the company;
- increases labour productivity and staff loyalty;
- increases a company prestige.

Therefore the following **aim for the research** was set: to study the costs of occupational accidents occurred and occupational diseases caught due to weak labour environment and elaborate a model for calculation of these costs in the company.

The objectives of the research:

- to study the correlation among the number of enterprises, employed persons, occupational accidents occurred and occupational diseases caught;
- to compare the dynamics of occupational accidents and occupational diseases in the Baltic States;
- to clarify labour environment quality cost components covered by the employers;
- to analyse the amount of compensations paid from the public budget to the employees suffered in occupational accidents;
- to elaborate a model for calculation of labour environment costs.

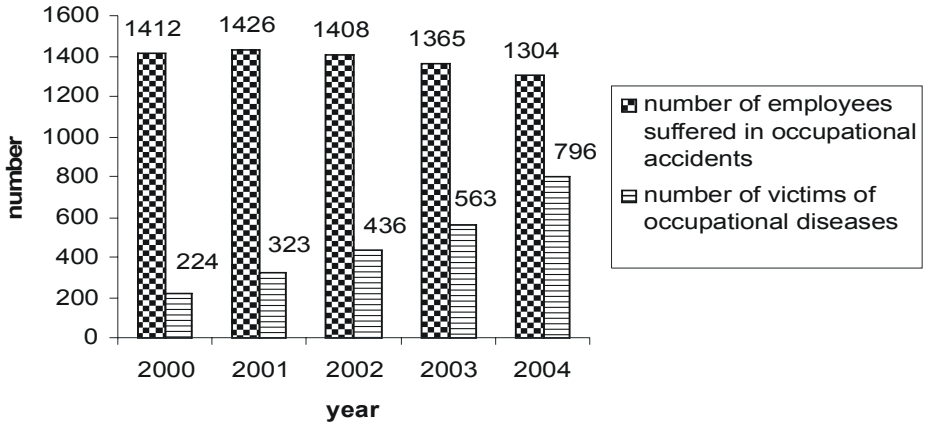
Research methods:

- statistical methods, i.e., data summarisation and grouping methods have been applied for the study of the first objective;
- cost components of labour environment quality are studied by means of abstractedly logical and monographic methods;
- public spending on employees suffered in occupational accidents is calculated by means of a calculus constructive method;
- a method of modelling is used to elaborate a cost calculation model of labour environment.

Results and discussion

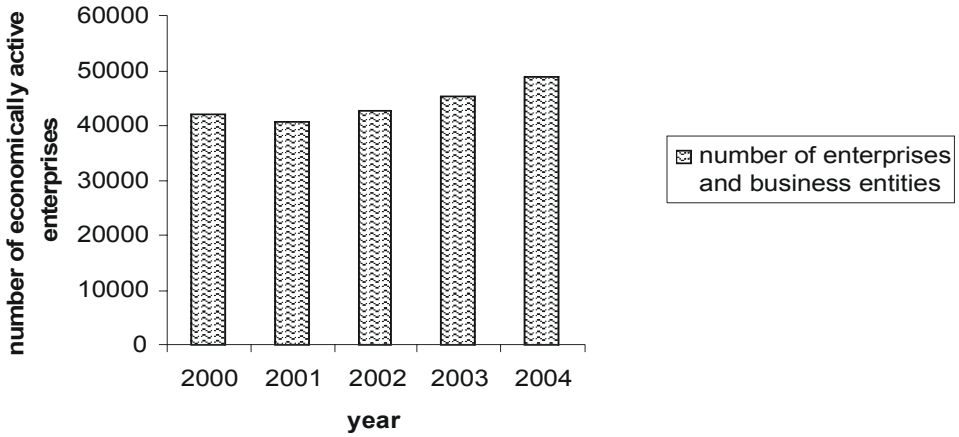
1. Correlation among the number of enterprises of Latvia, employed persons, occupational accidents occurred and occupational diseases caught

The development of the first objective is based on statistical data subjected to the interpretation of the State Labour Inspection, thus admitting a possibility of their imperfectness, as some employers may conceal the information on small or light accidents. Statistical data are arranged in Figure 1.



Source: *Figure made by the author according to the data of the State Labour Inspection.*

Fig. 1 **Number of employees suffered in accidents**



Source: *Figure made by the author according to the data of the Central Statistical Bureau.*

Fig. 2 **Number of active enterprises in Latvia**

According to the data on accidents registered in the State Labour Inspection of Latvia, the number of accidents has decreased with each year. However the assessment of the correlation between the number of active enterprises and number of employees and the number of victims suffered in accidents leads to the conclusion that these accidents are insignificant (see Figure 2).

The data reflected in Figure 2 show that the decrease in the number of active enterprises was observed only in 2001, when the number of enterprises has declined by 1324 units in comparison with 2000. However already in 2002 the number of active enterprises has grown by 557 units in comparison with 2000, in 2003 the number of these enterprises has increased by 3308 units in comparison with 2000. But in 2004 the number of active enterprises has grown by 6993 units in comparison with 2000. Therefore it may be concluded that the increase in the number of active enterprises is observed with each year, consequently the employment situation in the country has been improved, as additional jobs are created and total unemployment in the country is reduced.

The data necessary for the analysis of the number of employees and the number of occupational accidents occurred are grouped in Table 1.

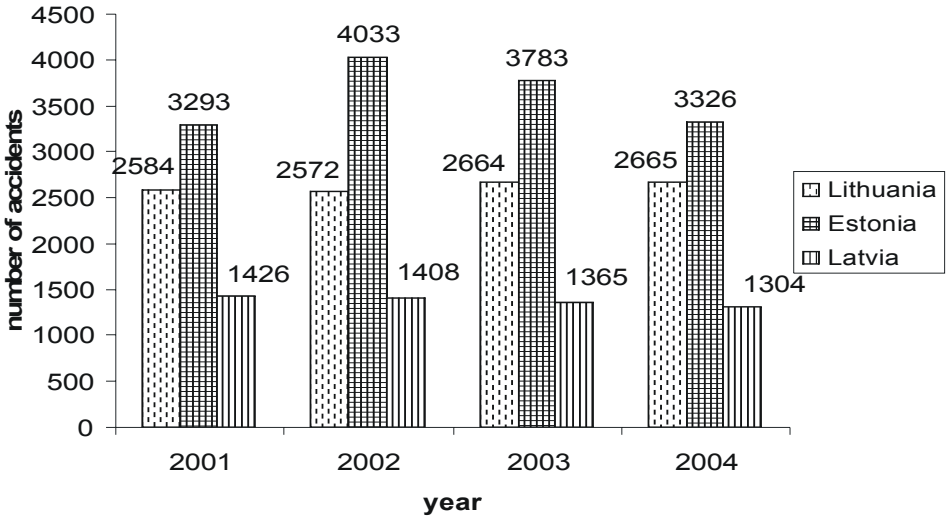
The analysis of the data shows that only 0.15% of all the employees have suffered in accidents in 2000, 2001 and 2002. While only 0.14% and 0.13% of the employees have suffered in accidents in 2003 and 2004. These figures explain the situation why employers pay so little attention to the improvement of labour environment.

Table 1

Comparison of the number of employees and victims suffered in accidents

No	Year	Number of employed persons, thou.	Number of employees suffered in accidents	Proportion of the number of victims suffered in occupational accidents of the total number of employees
1	2000	917.6	1412	0.15
2	2001	937.5	1426	0.15
3	2002	962.5	1408	0.15
4	2003	981.5	1365	0.14
5	2004	988.2	1304	0.13

Source: *Summary done by the author according to the data of the Central Statistical Bureau and the State Labour Inspection.*



Source: *Figure made by the author according to the data of the State Labour Inspections of Latvia, Lithuania and Estonia.*

Fig. 3 **Number of employees suffered in occupational accidents in the Baltic States**

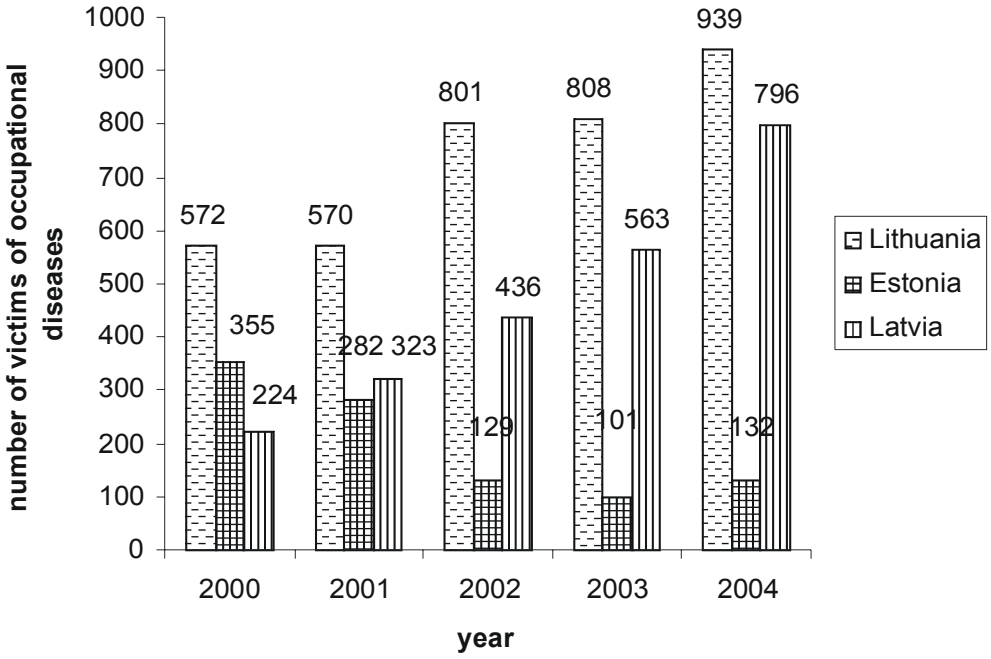
2. Comparison of occupational accidents and victims of occupational diseases in the Baltic States

The study on occupational accidents occurred in Lithuania and Estonia leads to the conclusion that in Latvia occupational accidents occur less (see Figure 3).

According to Figure 3, occupational accidents occur more frequently in Estonian enterprises than in Lithuania and Latvia. Comparing the number of employees suffered in accidents it is evident that in 2002 the number of employees suffered in accidents in Lithuania is by 1461 employees less than in Estonia, while in Latvia the corresponding figure is by 2625 employees less than it is in Estonia. In 2003 the situation has slightly improved in Estonia, since the number of suffered employees has decreased by 250 persons in comparison with the figure of 2002. Still in Lithuania the number of suffered employees has increased by 92 cases, while in Latvia it has decreased by 43 cases. Already in 2004 the number of employees suffered in accidents has declined by 707 cases in Estonia, in Lithuania the figure has increased by 93 suffered employees, while in Latvia it has decreased by 104 employees suffered in accidents in comparison with 2002.

The comparison of the number of victims of occupational diseases in the Baltic States leads to the conclusion that the largest number of the victims is observed in Lithuania, while the smallest one is observed in Estonia (see Figure 4).

According to Figure 4, the number of registered victims of occupational diseases greatly differs in the Baltic States. In Latvia and Lithuania the number of victims of occupational diseases has a tendency to increase with each year, while in Estonia the corresponding figure decreases. The only exception is 2004, when the number of victims has increased by 31 cases in comparison with 2003. In Lithuania 801 cases were registered in 2002. In Latvia and Estonia the number of victims was by 365 and 672 cases less than in Lithuania. In 2003 in comparison with 2002 the number of victims of occupational diseases has increased in Lithuania and Latvia by 7 and 127 cases respectively, while in Estonia this number has decreased by 28 cases. In 2004 in comparison with 2002 the number of victims of occupational diseases has increased in Lithuania, Latvia and Estonia by 138, 233 and 3 cases respectively.



Source: *Figure made by the author according to the data of the State Labour Inspections of Latvia, Lithuania and Estonia.*

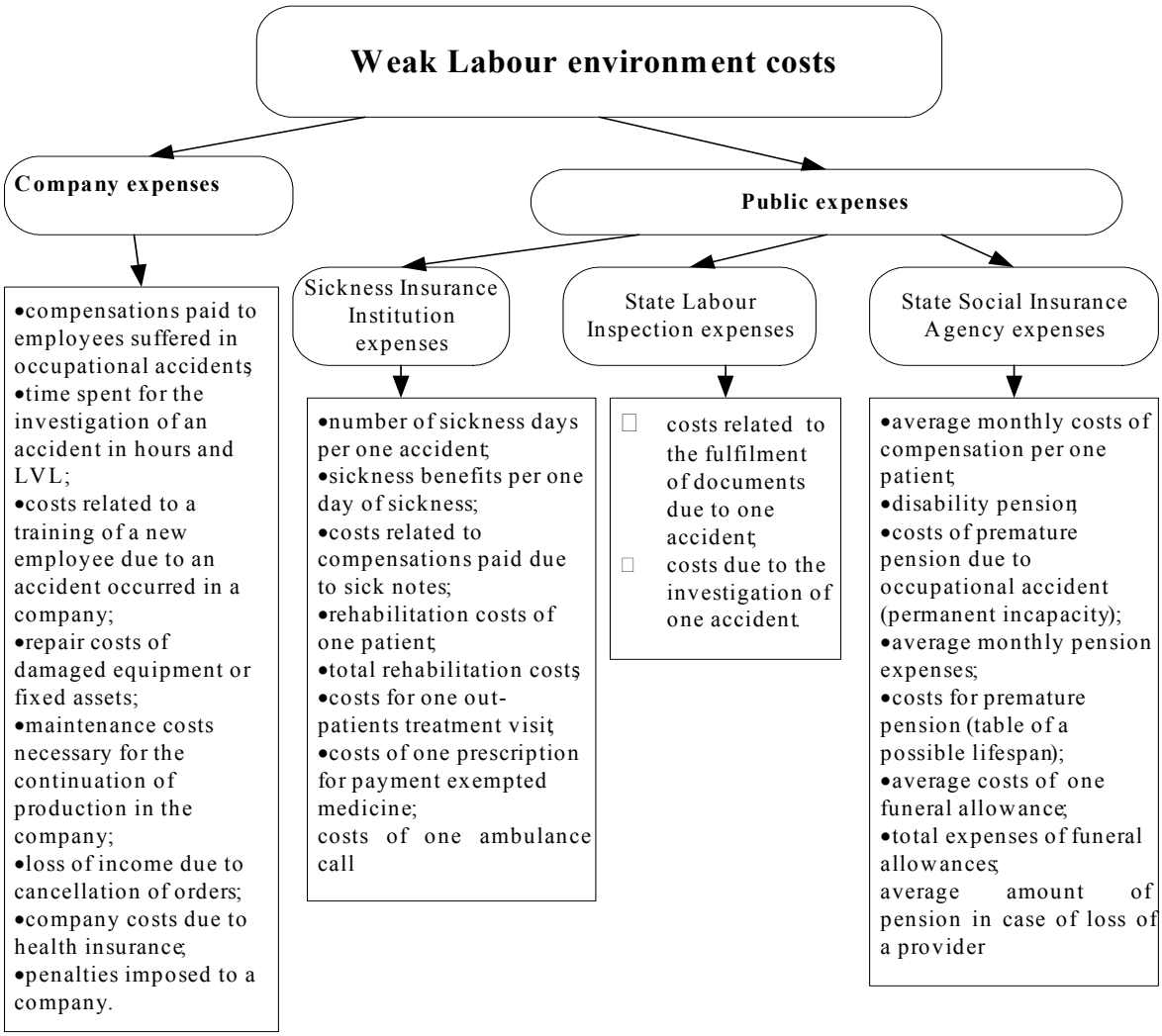
Fig. 4 **Dynamics of the number of victims of occupational diseases in the Baltic States**

3. Cost components of weak labour environment quality

The types of costs to be included into the cost calculation model were selected prior to the development of the model itself. The author's concept on labour environment formation and maintenance cost components is schematically reflected in Figure 5.

According to the figure, labour environment costs are split into two sections: costs related only to the employer and costs covered from the public budget. In case an employee suffers in an occupational accident or catches an occupational disease, an employer covers the following costs:

- compensation to an employee for the first 10 days of sickness;
- covers treatment and rehabilitation expenses of a suffered employee;
- time spent due to the investigation of an occupational accident (costs of 1 working hour);
- time spent due to the tidying of a place of accident (costs of 1 working hour and total expenses per 1 accident);
- time spent for training of a new employee (spent working hours);
- working hours not used by the employees present in the epicentre of an accident (totally spent working hours);
- repair costs of equipment or other fixed assets of the company due to an accident occurred in the company;
- maintenance costs necessary due to the continuation of production in the company;
- loss of income due to cancellation of orders;
- penalties.



Source: *Figure made by the author according to the data of the State Labour Inspection, the Central Statistical Bureau and the State Social Insurance Agency.*

Fig. 4 **Cost components of weak labour environment**

4. Government social budget expenses due to weak labour environment in the enterprises

It is certain that the government pays disability pension to the employees suffered in occupational accidents, pension in case of loss of a provider, covers funeral expenses to the relatives of a victim of an accident, as well as pays premature pension to employees suffered in accidents.

Besides the government covers expenses of the State Labour Inspection, sickness benefits starting from the 11th day of work incapability, treatment expenses, rehabilitation expenses, pharmaceutical costs, and costs of a public hospital bed.

Public expenses arisen due to occupational accidents within the period of 4 years are summarised in Table 2.

According to the information included into Table 2, the government social budget expenses arisen due to weak labour environment in the enterprises increase with each year, i.e., the amount of insurance indemnity paid is respect of disablement, loss of a provider due to an occupational accident etc. increases. More detailed analysis shows that the expenses paid due to weak labour environment in enterprises in 2002 have amounted to 3.7%, in 2003 - 4.3%, in 2004 - 5.5%, and in 2005 – 6.0% of the government social insurance budget. Regardless of the fact that the number of occupational accidents has a tendency to decrease with each year, the amount of payments from the government social insurance budget increases with each year.

Table 2

Government social budget expenses due to weak labour environment in the enterprises

No	Indicators	Amount 2002	Amount 2003	Amount 2004	Share in government social budget %	Amount 2005	Share in governme nt social budget %
	Social security budget, thou.	536626	578934	657962		736506	
1.	Insurance compensation in respect of fatal accidents (industrial accident or occupational disease) LVL	365220.20	334352.04	303421.32	0.046	260506.40	0.035
2.	Funeral expenses allowance in case of death of an insured person (due to industrial accident or occupational disease) LVL	7531.20	3363.00	11620.84	0.002	208868	0.003
3.	Compensation for damages, if industrial damage has occurred prior to January 1, 1997, LVL	6451651.72	7006716.60	7816234.60	1.19	6829676.90	0.93
4.	Compensation for damages, if industrial damage has occurred after January 1, 1997, LVL	10534041.84	14607680.40	21931774.22	3.33	26588351.25	3.61
5.	Disability pension, LVL	2680484.40	3057755.56	3884392.16	0.59	3534624	0.48
6.	Total	20034651.16	25018125.44	33944398.28	5.5	57192969.47	6.0

Source: *the State Social Insurance Agency.*

Table 3

Model for calculation of company costs due to weak labour environment

No	Description of expenses	Time in days, hours (R)	Average monthly salary (B) LVL	Additional expenses, LVL (C)	Direct cash expenditure, LVL (N)	Total expenses, LVL	Total expenses in % (K)
1.	**Company costs in respect of salaries and compensations paid to employees**						
1.1	Days of sickness of an employee (N)				X	N=Rx80% D, where D- average daily salary	$K=\frac{N}{E}\times 100$, where E- total expenses
1.2	Compensation for the first 14 days of sickness (S)	X	X	X	S= 13 x D	S= 13 x 80%D where D- average daily salary	$K=\frac{S}{E}\times 100$, where E- total expenses
1.3	Working days, if an external specialist stands in for a sick employee (U)			20%	X	U= R x B +20%B	$K=\frac{U}{E}\times 100$, where E- total expenses
2.	**Time spent due to an accident at a workplace**						
2.1	Working hours lost by the employees been next to the place of an accident (G)				X	G=RxHxL +Rx I_e where H-number of employees, L- average salary per hour, I_e – equipment idle time	$K=\frac{G}{E}\times 100$, where E- total expenses
2.2	Working hours spent for tidying and repair of the place of an accident O)				X	O= RxHxL	$K=\frac{O}{E}\times 100$, where E- total expenses
2.3	Time spent for the investigation of an accident, in hours (Z)					Z= Rx L, where L- average salary per hour, R- expenditure of time	$K=\frac{Z}{E}\times 100$, where E- total expenses
2.4	Time spent by the company management, in hours (F)				X	F= RxL, where L- average salary per hour, R- expenditure of time	$K=\frac{F}{E}\times 100$, where E- total expenses
2.5	Training of a new employee in hours due to an occupational accident (Y)				X	Y=Rx J_C, where J_c – salary per hour of a trainer	$K=\frac{Y}{E}\times 100$, where E- total expenses
3.	**Material losses suffered by the company on investments**						
3.1.	Repair costs of the company fixed assets and equipment (A)	X	X	X		$A=\frac{T}{Y_a}\times YL-M$ where T- all company investments in cash; Y_a – technical age of equipment; YL – remaining years for the operation of equipment, M – annual maintenance costs of equipment, due to the age of equipment	
3.2.	Costs for rent, installation and maintenance of equipment	X	X	X			
3.3	Loss of income due to cancellation of orders	X	X	X			
4.	**First aid and treatment expenses**						
4.1	Expenses related to the first aid rendered in the company, and transport expenses due to the transportation of a suffered person to hospital						
4.2	Other company costs related to health insurance						
5.	**Penalties, legal expenses**						
5.1	Penalties imposed to a company	X	X	X			
5.2	Legal expenses paid by a company	X	X	X			

Source: *Table made by the author according to the working papers of the State Labour Inspection of Estonia and Denmark.*

The government social budget expenses exclude payments to the employees retired prematurely due to worsening of health.

5. Model for calculation of weak labour environment costs covered by an employer

There are very few studies on costs related to low quality labour environment in Latvia, since the reports prepared by the State Labour Inspection mainly emphasize the number of accidents at workplaces, lost working days, damaged equipment, though no expenses directly attributed to the employers are stated. Therefore it is completely possible that an employer does not pay an adequate attention to the quality of labour environment in the company.

Table 3 gives the summary on possible company expenses, which may arise due to weak labour environment, i.e., accidents occur at workplaces, and the number of employees having occupational diseases increase with each year.

The elaborated model is suitable for the employers to calculate costs in case an occupational accident occurs at their workplace.

It is advisable to calculate the company's costs per salary of one employee by means of three or four average salaries, since a company has:

- management, administration;
- employees of Level 2;
- other employees.

The calculation of the average salaries is needed to obtain unified average results, as there may be different salaries for employees of one level, as well as for employees of one and the same level. Besides it is possible to calculate cost benefits of the company due to the decrease of the number of occupational accidents related to perfect labour environment.

It is assumed that the average number of days per month equals to 30 days, the average number of working days equals to 21.3, the average number of working hours equals to 170, the first day of sickness is not paid, and the State Social Insurance Agency compensates 80% of a salary to a suffered employee.

The following conditions have to be considered prior to the completion of the table:

Item 1.1 of the table shows the number of calendar days of sickness of an employee.

Item 1.2 includes the amount of sickness benefit paid to a person suffered in an accident or to his/her relatives.

Item 1.3 comprises only the number of working days and salary of a person substituting a victim, with a remark that a person replacing a victim is employed only for a time of sickness of the suffered employee and assuming that the person replacing a victim has higher salary than the permanent employee.

The costs stated in Item 2 "*Time spent due to an accident at a workplace"* of Table 3 might be considered as alternative costs, as they do not directly increase the company's wage fund, but state the time spent due to an accident at a workplace and which otherwise could be used in the process of production. To have the costs as precise as possible, it is very important to collect data on the time lost in a company and idle time costs in comparison with the costs if these services were purchased individually.

Item 2.1 shows total time spent by work colleagues due to the accident (idle time of equipment, rescue of a person suffered in an accident and rendering of first aid, etc.).

Item 2.2 includes time in hours spent for tidying of the place of an accident and repair of equipment, etc..

Item 2.3 includes time in hours necessary for an employee of Level 2 (foreman, manager, specialist, etc.) to investigate an accident.

Item 2.4 states total time in hours spent by the company management due to the accident (replacement of a suffered employee, repair of equipment, information of other employees, meeting with an inspector from the State Labour Inspection, etc.).

Item 2.5 comprises total time in hours spent on training of a person replacing a victim, other employees, additional training of a suffered employee, both as a trainer and a trainee.

Item 3 of the table comprises expenses for the damaged fixed assets (buildings, machinery, equipment, etc. used for several years). Expenses attributed to accelerated reinvestment may be included here as well.

Item 3.1 includes expenses related to renovation of fixed assets of the company, as well as company facilities operated only in cases, if the company facilities are used as long as possible and their replacement is not planned.

The company expenses, which can be calculated due to their efficiency, are classified into:

- costs for equipment that are subjected to replacement;

■ costs for equipment having short period of operation (several years);

■ advantages of new equipment in comparison with the old equipment.

Cash expenses related to repair works or readjustment of a workplace (i.e., damaged raw materials or materials, costs related to the use of services provided by other companies) are also included.

Item 3.2 consists of the expenses attributed to the provision of production, i.e., rent and/or installation of equipment, or other services.

Item 3.3 shows the income lost by the company, however loss of income may be calculated only in cases when the accident has direct economic consequences. The amount of lost income may be calculated according to working hours during which the production process has been terminated and employees were not provided with work. Besides penalties imposed by sales companies for delayed production may be included here.

Item 4 comprises all expenses related to the rendering of first aid and treatment.

Item 4.1 includes all expenses related to the rendering of first aid and transportation.

Item 4.2 consists of all the expenses attributed to the treatment, i.e., medicine, prosthetic appliances, auxiliary materials, etc..

Item 5 shall include penalties imposed on the company and legal expenses.

Item 5.1 includes only penalties paid by the company, excluding penalties imposed on employees.

Item 5.2. comprises legal expenses to be covered by the company.

The completion of the developed model allows the employer to determine the costs of an occupational accident and a victim of an occupational disease.

Conclusions

1. The number of employees suffered in occupational accidents decreases with each year, though the number of victims of occupational diseases has a stable tendency of growth. 0.13% of all the employees of Latvia have suffered in occupational accidents.

2. The number of registered accidents differs in the Baltic States. In Lithuania and Latvia the number of employees suffered from occupational accidents is smaller than in Estonia. Recently these differences have declined. In return Lithuania has the largest number of registered victims of occupational diseases, then comes Latvia and Estonia is a country with the smallest number of victims of occupational diseases in the Baltic States.

3. Costs related to labour environment are covered both by the employer and the government, however only the employees.

4. Costs related to weak quality labour environment and paid from the government social budget have increased from 3.7% to 6.0% between 2002 and 2005. The government social budget expenditure on incapable employees, compensation of damages, funeral allowances etc. due to occupational accidents and disability pensions increases with each year.

5. Cost calculation model of labour environment quality in the enterprise is suitable for employers to calculate costs related to cases when an employee suffers in an occupational accident or catches an occupational disease.

Rakstā ir apkopoti pētījumi par Latvijas uzņēmumu darba vidi. Nesakārtotas darba vides izmaksas ir sadalītas divās daļās, tās ir izmaksas , kas attiecas tikai uz darba devēju un izmaksas, kas tiek segtas no valsts sociālā budžeta. Nesakārtotas darba vides izmaksas no valsts sociālās apdrošināšanas budžeta sastādīja 2002. gadā 3.7%., 2003.g. – 4.3%, 2004.g. – 5.2% un 2005.g. 7.7 %. Neskatoties uz to, ka nelaimes gadījumu skaitam pastāv tendence ar katru gadu samazināties, taču izmaksas no sociālā apdrošināšanas budžeta ar katru gadu paaugstinās.

Izstrādāts darba devēja nesakārtotas darba vides izmaksu aprēķināšanas modelis, kurā apkopoti iespējamie uzņēmuma izdevumi, ja uzņēmumā nav sakārtota darba vide, t.i. uzņēmumā notiek nelaimes gadījumi, kā arī ar katru gadu pieaug darbinieku skaits, kuri ir iegūst arodslimības.

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DIVERSIFICATION

Corporate Governance: its definition and application in Latvia

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Abstract

The term " corporate governance" is just appearing in the developing economic environment in Latvia even though in the international business it is considered as one of the central issues. The pressure of the company type shift from the private owned to the ownership by the stock holders and afterwards going to the open ownership and being listed on the stock exchange; the gap between executive compensation and company performance and inability of the minor shareholders to influence this process, drives the need of the clear definition of the "corporate governance" applicable for the local business conditions.

Currently in Latvia corporate governance is not perceived as one of the company leading and operating policies. As the result national companies are learning and re-learning the lesson that there are summarizes in the concepts of the corporate governance practices. The government currently revises the obstacles in the form of corruption and not appropriate legislation.

The situation is made more complicated because of the "corporate governance" term covering too broad economic concept and the definitions available cover mostly the specific parts of the issue.

The following definition can be offered for the corporate governance:

Interrelation of four components: company executives, company owners, legislative framework, independent auditors; which in the transparent company results in its self-governing corporation and delivers fair benefits to the owners.

Key words: Corporate governance, general shareholder meeting, the owners of the company, definition.

Introduction

Corporate governance has recently attracted much interest within and outside companies because of its apparent importance for the economic health of corporations. Dealing with the potential problems of company owners and managers automatically deals with the problems of the company transparency, independent audit as well as the appropriate legislative framework and its control. Those are also among the main factors insuring the properly functioning economy and the healthy market conditions.

Corporate governance is an important issue for all joint stock ventures- traded or not on the stock exchange, including the companies, which are operating in the agriculture sector of the Republic of Latvia.

Even though basics of corporate governance are being defined in the companies operating in Latvia there is still not clear understanding of the need and effectiveness of the latter.

The laws of the Republic of Latvia where one of the most problematic areas remains inability to use their rights by minority shareholders strictly regulate Latvian joint stock venture companies' activities.

Shareholders can participate in company decision making by exercising their voice during

the general shareholder meeting (GSM). In the GSM, shareholders can participate both in monitoring management and corporate decision-making.

Although managers usually have the mandate to take the bulk of everyday corporate decisions, virtually all jurisdictions have left certain "significant corporate actions" and decisions to the exclusive authority of the shareholders. Examples are decisions to appoint directors and decisions regarding mergers and acquisitions.

In many Latvian companies the leading and operating situation remains unchanged for the last 10 years, where one or two persons in the direct or indirect way (off-shore schemes) own the majority of shares thus being able to ignore the interests of minority shareholders and making company functioning not effective; GSM are typically poorly attended and only rarely do GSM carry shareholder resolutions or oppose management proposals.

This article focuses on the concept and clear definition of corporate governance besides to the methods that could be introduced into the local company operation. The article discovers the necessity of the shift from single company best practice discovery in the area of corporate governance to the introduction of country corporate governance policy incorporated in the legislation, audit practices and other stakeholders' rights and responsibilities.

Corporate governance definition

Even though corporate governance has attracted much attention in the international business environment its basic concept remains vague because of the attempt to cover too many economic ideas and company perspectives with the single term. The number of authors and presenters have tried to define "corporate governance" but even though not being contradictive to each other their definitions not always overlap and more compliment each other than substitute thus leaving the space for too many economic issues to be covered by the term. However several main focuses can be discovered:

1. "Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment" (A. Shleifer, R. Vishny, 1997)

2. "Corporate governance is a field in economics that investigates how to secure/motivate efficient management of corporations by the use of incentive mechanisms, such as contracts, organizational designs and legislation. This is often

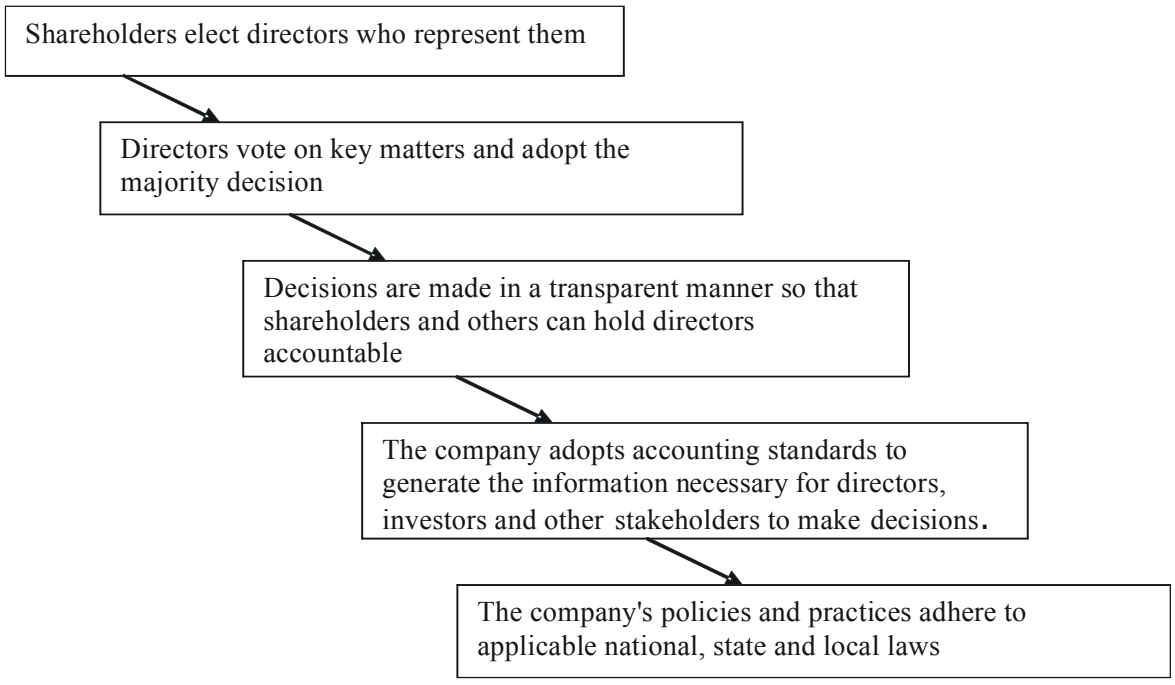

Fig. 1 **The corporate governance scheme developed by the Central European University and Center for International Private Enterprise involves the set of basic controls**

limited to the question of improving financial performance, for example, how the corporate owners can secure/motivate that the corporate managers will deliver a competitive rate of return" (Mathiesen, 2002).

3. Corporate governance deals with "problems that result from the separation of ownership and control" (OECD Principles of Corporate Governance).

4. "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance" (OECD conference, 1999).

5. "Corporate governance - which can be defined narrowly as the relationship of a company to its shareholders or, more broadly, as its relationship to society -…." (Financial Times, 1997).

6. "Corporate governance is about promoting corporate fairness, transparency and accountability" (J. Wolfensohn, 1999).

7. "Some commentators take too narrow a view, and say it (corporate governance) is the fancy term for the way in which directors and auditors handle their responsibilities towards shareholders. Others use the expression as if it were synonymous with shareholder democracy. Corporate governance is a topic recently conceived, as yet ill-defined, and consequently blurred at the edges…corporate governance as a subject, as an objective, or as a regime to be followed for the good of shareholders, employees, customers, bankers and indeed for the reputation and standing of our nation and its economy" (Maw *et al,* 1994).

Corporate governance traditionally defines the framework for company leading and operating both internally by the managers supervised by the board of directors and externally by the company owners- shareholders; and controlled by the independent supervisors. Corporate governance defines the system for designing a self-governing organization.

The introduction and operation of the corporate governance policies involves four major participating groups:

1. company executives
   - clear remuneration policy
   - company executive clear responsibility to the owners of the company (shareholders)
   - controlled by independent auditors on the annual basis
2. company owners
   - transparency in the company documents
   - ability to participate in major company decision making
   - minority shareholders' voice importance
3. legislative framework (provided by the government and usually based on the OECD developed principles)
   - the rights of shareholders: secure ownership of the shares, voting rights, participation in decision making
   - protected rights of minority shareholder
   - the share ownership by the company executives: the obligatory share minimum owned, the rules of reporting when buying/selling significant amount of shares
   - the amounts of significant amount of shares: reported ownership
   - strict insider trading control
   - bankruptcy procedures

Recent research has also shown that countries with stronger corporate governance protections for minority shareholders also have much larger and more liquid capital markets. Comparisons of countries that base their laws on different legal traditions show that those with weak systems tend to result in most companies being controlled by dominant investors rather than a widely dispersed ownership structure. (La Porta R. et al, 1997)

4. business community
   - the commonly set practices and the corporate governance in the business community making the company operation more predictable and thus more transparent for the investors
   - the collaboration between companies on the monitoring and evaluation of the corporate governance system

The interaction of the four groups based on the company transparency results in the effec-

tive operation of the company with the high potential to attract investments for future development.

The transparency in this case includes:

- full disclosure of financial and key performance information
- accounting reports clear and readable even for the people not involved in day-to-day company business stakeholders
- the clear scheme of executive remuneration
- property rights

In the transparent company the interaction of four components of executives, owners within the developed legislative framework and controlled by the independent auditors result in self-governing company, which is the competitive player in the market economy.

The issue of corruption can complicate the situation and is faced by the local companies in Latvia, where the legislative and auditing components from the defined four corporate governance components are lucking their transparency. In order to decrease corruption and improve the economic environment the government launched number of programs especially in the provision of transparency in corporate transactions, in accounting and auditing procedures, which is a large-scale effort.

Conclusion

Corporate governance has always attracted much attention in the business environment being particularly discussed during the last 5 years. The corporate governance structure introduced in market companies also results in the overall health of the market economy. Moreover creating sound system of corporate governance is a high priority for both the public and the private sectors.

The definition of corporate governance is rather vague and is the sum of a number of different very exact definitions complementing each other. The lack of one common definition delivers certain amount of complication and misunderstanding to the term.

Corporate governance can be defined as the interrelation of four components: company executives, company owners, legislative framework, independent auditors; which in the transparent company results in its self-governing and delivers fair benefits to the owners.

Currently corporate governance is not perceived as one of the parts of the company leading and operating policies in Latvia. Corporate governance is being introduced into the local market economy by adapting the legislation, defining minority shareholder rights, ensuring the proper division company profit and the reasonable executive remuneration. Moreover the shift of the company ownership from a single owner to the stockholders and going to the stock exchange make the need for clear definition and introduction of corporate governance more evident. The obstacle of corruption complicates the situation. Still the latter is reducing because of the significant actions by the government.

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Anotācija

Uzņēmuma pārvaldes shēma tiek pākāpeniski ievadīta Latvijas ekonomikas praksē kaut arī daudzas valstīs ta tiek izstrādāta un pielietota ļoti bieži.

Pašlaik Latvija notiek uzņēmumu īpašnieku struktūru maiņa, kur sabiedrības ar ierobežotu atbildību (tradicionāli viens vai daži īpašnieki, kuri paši pārvalda firmu), aizvieto akciju sabiedrības, kurās papildus kapitāls tiek piesaistīts ar akciju izlaišanu un pārdošanu. Līdz ar jaunu īpašnieku sturktūru paradās arī jaunas problēmas, jo nevisi līdzīpašnieki vienādi var vai arī grib saņēmt uzņēmuma informāciju vienāda apjomā. Pākāpeniski uzņēmuma īpašnieki un

uzņēmuma valde tiek sadalīti divas grupās un parādās kontrola problēmas.

Lai uzņēmuma darbība un kontrole būtu optimālāja līmenī tradicionāli tiek pielietota kompānijas pārvaldes shēma. Gadījuma, ja uzņēmuma netiek istrādāta šāda shēma, uzņēmuma vadība ar laiku sāk pielietot daļu no kompānijas pārvaldes shēmas, neievērojot visus kompanentus un atkartojot vienādas kļūdas.

Situācija Latvijā ir sarežģitāka, jo nav pilnīgi izstrādāta likumdošanas bāze, kas aizsargātu mazumakcionārus un pastāv korupcijas problēma.

Uzņēmuma pārvalde apvieno sevī parāk daudz komponentu lai varētu to īsi nodefinēt- daudzi autori pēta kadu daļu no uzņēmuma pārvaldes shēmas un definē tikai to daļu. Kā rezultātā daudzas uzņēmuma pārvaldes definīcijas papildina viena otru.

Uzņēmuma pārvalde varetu būt definēta kā:

Četru komponentu: uzņēmuma vadības, uzņēmuma īpašnieku, likumdošanas bāzes, neatkarīgu auditoru mijiedarbība, kas "caurspīdīgā" uzņēmumā rada pašfunkcionējušo struktūru un dod īpašniekiem taisnīgus ieņēmumus.

The model of wood resource flow

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Abstract

The authors analyze the wood resource flow in Latvia. From the obtained data they develop the model of resource flow. The main goal of the model of wood resource flow is to indicate the problems existing in the flow and to analyze the future scenarios. The paper comprises the description of the development of wood resource model, results and the simulation methods to check the functioning of the model.

Key words: Wood resources, flow, model, simulation.

Introduction

Latvia is rich in forests, because forests occupy about 45% of its territory. In Europe forests occupy on average 33% of the lands.

In 2004 there were 10.75 million m^3 of wood harvested. Forestry is one of the most important sectors of the national economy of Latvia; its contribution for GDP is 7.5%.

The transport sector is closely related with forestry, particularly - small ports and cargo transport, thus making it very sensitive to any changes in this sector.

The increasing use of wood resources raises the question - how appropriate it is used. Still the question exists, how appropriate is the processing of wood resources and how the waste wood is realized.

By analyzing the flow of wood resources it is possible to obtain the data about the types of finished product and waste wood. To obtain the data concerning the present situation in the flow of wood resources, we must realize the process of flow from the place of resource acquisition – the forest, to the processing (timber production, veneer industry, etc.).

In the flow of wood resources three sectors are involved: the sellers of wood resources; the carriers of wood resources; the customers of wood resources (pre-processing enterprises, ports). Each of the three sectors provides information. Analyzing this information we can determine the flow of resources and potential scenarios.

To perform the analysis of the wood resource flow it is necessary to develop the model, which describes the flow. There should be all sectors included into the model, which are connected with the resource flow. The common model of wood resources characterizes the market on the whole. In order to understand some of the processes deeper, there should be developed scenarios, which can be tested by means of simulation methods.

Materials and methods

The main aim is to develop the model of resource flow, which can characterize the situation in Latvia, and, using this model, to analyze the future flow.

There are three sectors singled out of the model of wood resource flow, which can characterize the entire flow. These sectors are interdependent, and, when including them into the model, we should be aware exactly of the extent of their influence and the factors that could affect the flow.

In the beginning there is a part separated from the entire flow of resources, which characterizes the flow from the forest to the pre-processing object. The exactness of model results depends on the input data and the factors that regulate the flow.

The geographical location of wood resources and pre-processing enterprise is very important for the functioning of model, because one of the flow indicators is the distance between the location of wood resources and the pre-processing.

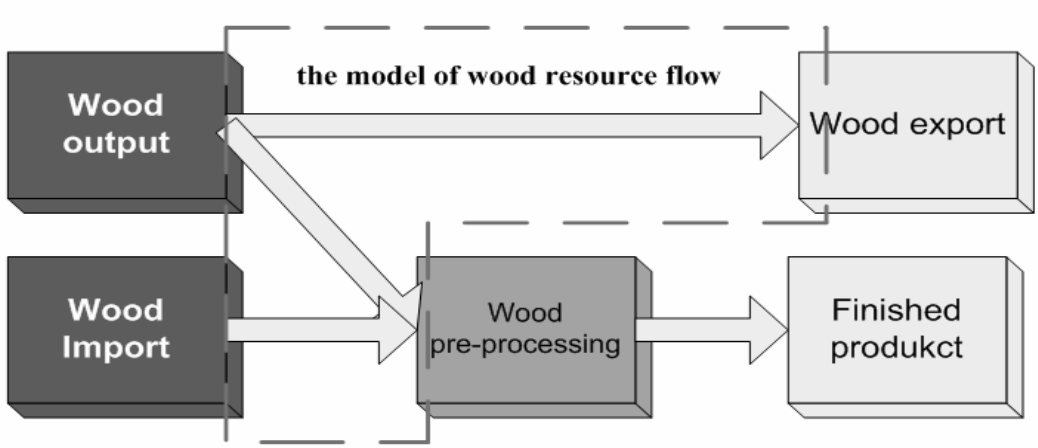

Fig. 1 **The model of wood resource flow**

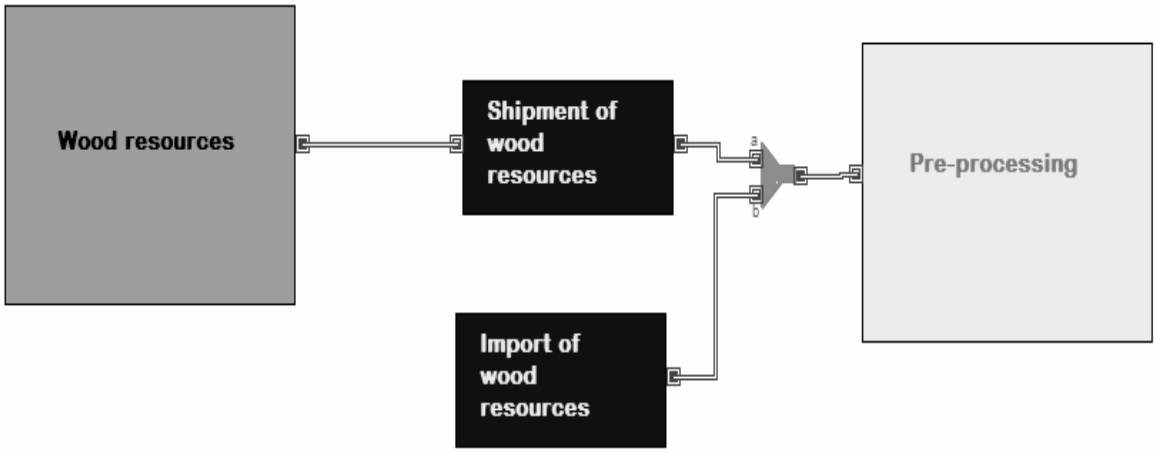

Fig. 2 **Scenario of resources**

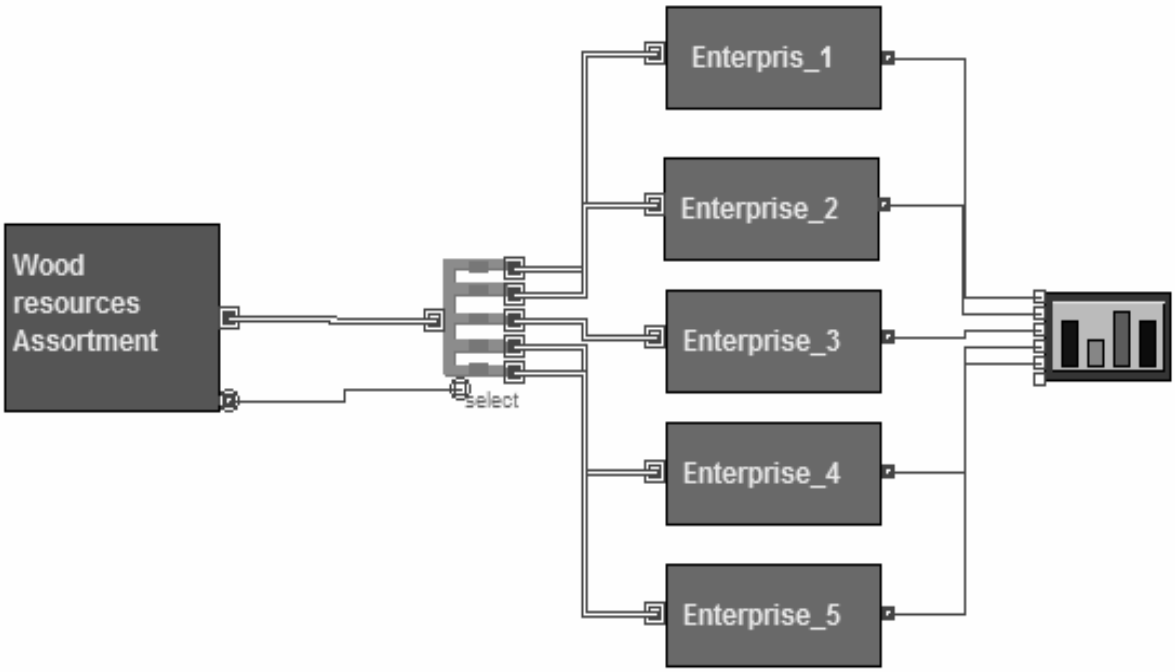

Fig. 3 **Scenario of demand**

There should be the types of wood resource transportation included into the model. In Latvia the services of road and railway transport are used for the transportation. The railway services are the most connected with the import of wood resources, but for the inland services the railway, in fact, is not used.

To characterize the flow of wood resources more precisely there are two types of scenario developed. Both scenarios supplement each other.

There is the scenario developed, which shows the flow of wood resources from the geographical location of wood resources to the nearest pre-processing enterprise. When analyzing the data of this scenario, we can obtain the information about the assortment demand. Using this scenario we can analyze the situation, when there is a pre-processing enterprise established near the wood resources, to answer the question: For how long time will the amount of wood resources be sufficient, if felling remains the same?

The second scenario characterizes the demand for the wood resources. By indicating the pre-processing enterprises that process the same assortment we determine the factor, which influences the flow of each enterprise. Using this scenario, we have a possibility to evaluate, whether the enterprise would have sufficient amount of wood resources and how much other enterprises can affect the flow.

Results

The developed system of the wood resource flow comprises the set of programs, which realize the data processing and their testing, using the system simulation.

There had been the system developed, which includes the geographical information system ArcGIS with Network Analyst extension and the modeling/simulation software EXTEND Industry.

There is a cadastre number given to every property in Latvia, which includes the information on the geographical location. Such cadastre numbers on the forest properties are registered in the single database, the maintenance of which is provided by law. Besides the cadastre number of the forest property there is information on the wood resources included in the database.

The task of ArcGIS is to process and pass down the data on the distances, road surfacing and the speed of driving between the geographical location of wood resources and pre-processing enterprise.

There had been the network of the roads of Latvia developed, whereupon the layer of the location of enterprises and wood resources are put (see Fig. 4). Using the functions of Network analyst the advantageous roads and distances for driving are analyzed. Most of the wood-roads are influenced seasonally. This influence indicates,

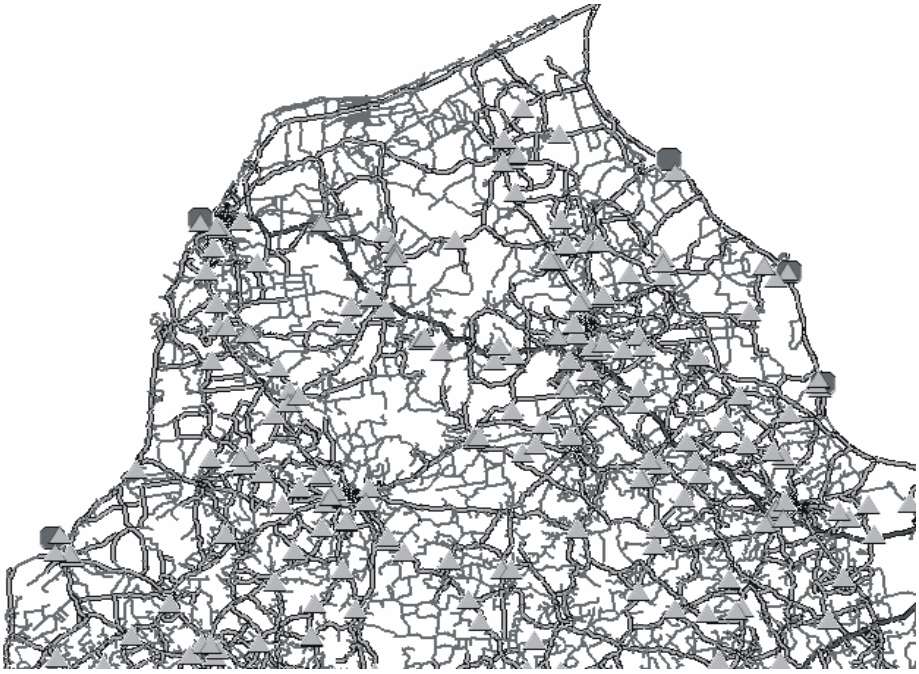

Fig. 4 **The network of the roads of Latvia.**

whether in a particular season the road can be used and what restrictions should be observed concerning the speed and the size of consignment. There are the data passed down to the data processing, which determine the performance of model scenarios.

The main process, where the data are analyzed and the simulation of flow is carried out, is developed using EXTEND Industry. There are standard components used, as well as developed special ones, in order to work out the model. The positive feature of EXTEND is that it is possible to form own components. ModL programming language is used within EXTEND system; the syntax of this language is similar to that of C++ language.

Discrete Event model is developed on the basis of Extend methodology. In Discrete Event model it is possible to add additional items to each value. The flow is formed using the data of items.

Modeling of Discrete Event is chosen on the basis that the addition of data and their size are not cyclic. This positive quality enables to input the values of any size into the model at any time (see Fig. 5).

The following division of a value and positions is developed in the model of wood resource flow:

- Value – the quantity, which should be included into the model. Each unit is equal to 1 m^3.
- Owner, wood species, assortment, wood age - items, which are added to the value as additional information.

Fig. 5 **Discrete Event time-line**

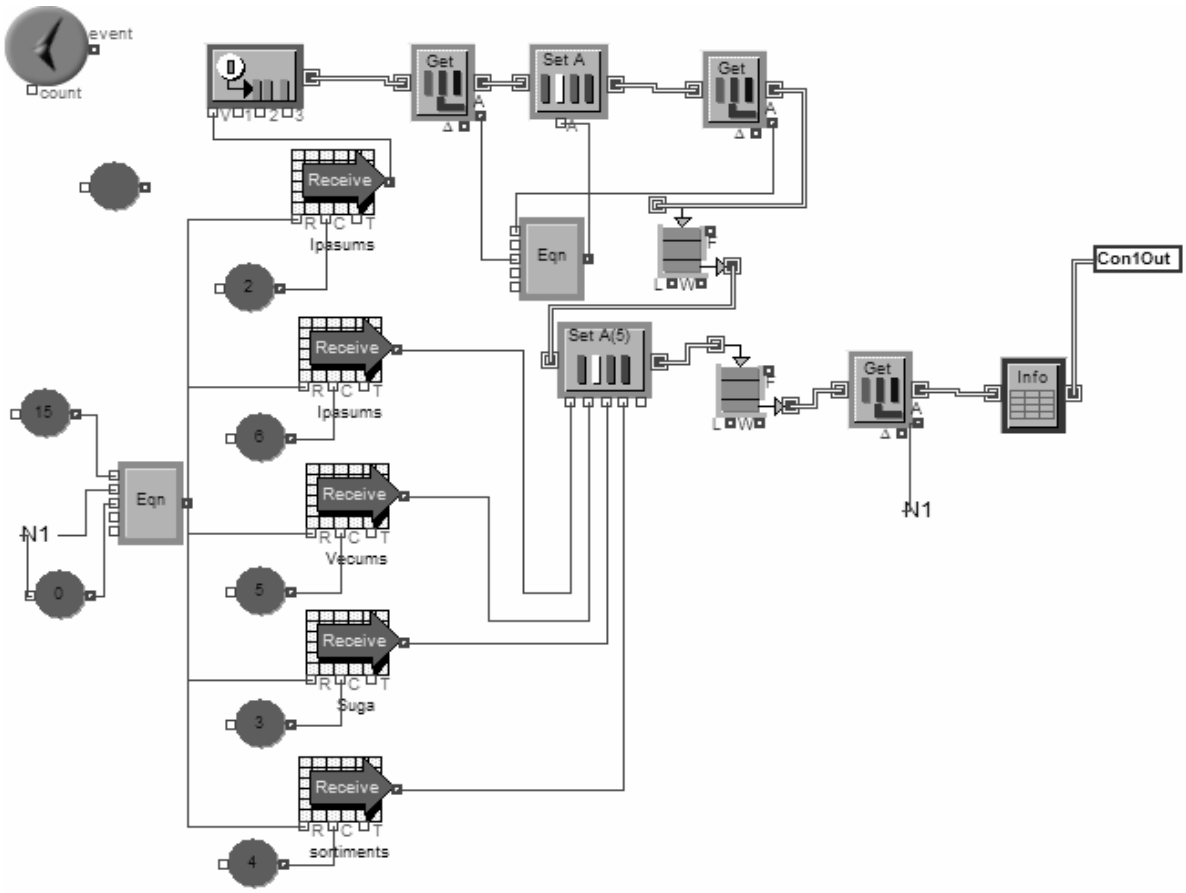

Fig. 6 **The input into the model and the defining of items.**

During the functioning of model the additional items are added to the unit, which are used for the analysis of data and the control of flow. At any stages of the model functioning there is a possibility to obtain the information on the unit that flows through the blocks.

The main parameter of model functioning is the wood resources. At the initial stage of model the amount of resources is provided in cubic meters, and to this quantity there are items added that identify the data (owner, wood species, assortment) – see Fig. 6.

The original model is developed according to the principle – the resources will be received by the customer, whose ratio of distance and purchasing price is the most advantageous. When finding such a customer, the testing is carried out concerning the correspondence of the ordered assortment to the supply. If this criterion does not correspond, the next most advantageous supply is accepted.

The data flow through the blocks as a separate unit, which is equal to $1m^3$. This feature enables to control each unit separately and to direct the flow more exactly. Certainly, there is a possibility to combine each unit in a larger package. It is used during the transportation of resources – the size of a package is determined according to the transport to be used. The size of the package can differ not only by the type of transport, but also in compliance with the law, which provides the load of cargo in a particular season.

The lat part of wood resource flow is a preprocessing enterprise. In order the enterprise could be involved in the model, it should have certain factors that characterize it. The model provides that the enterprise is characterized by the following parameters: the geographical location of enterprise, assortment and its amount, which the enterprise would like to purchase, and the processing capacity of enterprise.

At present situation the parameters, characterizing the flow, are kept in Excel table. As it was mentioned above, there should be accessible the parameters on each object, involved in the model. The functioning of model depends on these parameters.

Conclusions

1. The developed model of wood resource flow can be used to analyze the situation in the market, the competition, and the factors that influence resource flow.
2. By combining the model of wood resource flow and the information database on the wood resources it is possible to perform the analysis of the real market situation, as well as the future development alternatives.
3. In order the model would function perfectly, it is necessary to develop a system by means of which the data are imported into the flow model automatically.
4. To develop the functioning of model, it is necessary to work out the system that would ensure the data exchange with SQL database.

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Increase of West Pomeranian Competitiveness through Human Resources Development and Public Aid Utilization

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Abstract

The aim of this elaboration is to presents the possibilities of west Pomeranian region competitiveness increase and decrease marginalization of rural areas by use of public aid funds in years 2004 - 2006. The paper focused on programs relating to increase of region competitiveness through the development of human supplies. The growth of competitiveness should be understood as influence on economic structure changes and improvement of all Polish regions situation in relation to European regions, in range of productiveness of economy, efficiency of work, creation and absorption of innovation, citizens education, increase of population earnings as well as quantity and quality of technical infrastructure, and so these factors which decide about strength of economies of states and regions at present.

Key words*:* knowledge-based economy, competitiveness, development, EU, west Pomeranian.

Introduction

For the two last centuries the economists propagate, that the economy depends on three factors - work, capital and the soil which made up natural wealth. However at the end of XX century, under influence of development, education and science knowledge based economy appears. This that knowledge plays in economic processes basic part is obvious in all economically developed countries. At present the head meaning for country economy, as well as for enterprises is supplies of knowledge and really on the second place are the factors of production and materials. Productiveness, competitiveness and efficiency depends more and more from state of economic, technical and organizational knowledge, which permit to create new technologies and more skillfully to manage the company. On the other hand they in smaller degree depend from material factors of production. However, development of such economy in Poland requires, first of all, increase of the citizens' level education and counteraction of marginalization of some areas which will contribute in growth of enterprises, regions and country competitiveness (Mickiewicz P. 2005).

The growth of competitiveness should be understood as influence on economic structure changes and improvement of all Polish regions situation in relation to European regions, in range of productiveness of economy, efficiency of work, creation and absorption of innovation, citizens education, increase of population earnings as well as quantity and quality of technical infrastructure, and so these factors which decide about strength of economies of states and regions at present.

Counteraction marginalization of some areas should be understood as undertaking the interventionist workings in limited number of rural areas, dependent restructuring as well as the socio - economical degradation, municipal , after industrial and after military areas, which possess the smallest developmental possibilities as well as the most difficult socio - economical situation (Mickiewicz P., Orylska J. 2004).

Aim and research methods. The aim of this elaboration is to presents the possibilities of west Pomeranian region competitiveness increase and decrease marginalization of rural areas by use of public aid funds in years 2004 - 2006. The paper focused on programs relating to increase of region competitiveness through the development of human supplies. With regard to size of studied problem 4 activities of Priority 2 of Integrated Operating Program of Regional Development was chosen. The monographic method, analysis of sources as well as method of interview was used during research. Research was based on data gathered from Agency of Restructuring and Modernization of Agriculture as well as from Regional

Work Office. Research area was chosen with regards on occurrence marginalized areas, containing the problem of structural unemployment and covered the whole west Pomeranian region.

Profile of research object. Rural areas in west Pomeranian Region cover 94% of surface. The number of unemployed in 2003 carried out 27,1 % (in Poland 18%), it means that the region is on the second position in country. The number of unemployed living on the rural areas carried out 39,8 % the totality of unemployed. The inhabitants of rural areas make up 30,7 % the population of region.

Space structure is the important trump in the west Pomeranian agriculture and is one of the best in country. Average size of individual farm carried out 16 ha. The part of large farms (15 - 30 ha) carried out 17,3 %, and the very large farms (above 50 ha) 5,8 % (Mickiewicz P., 2005)

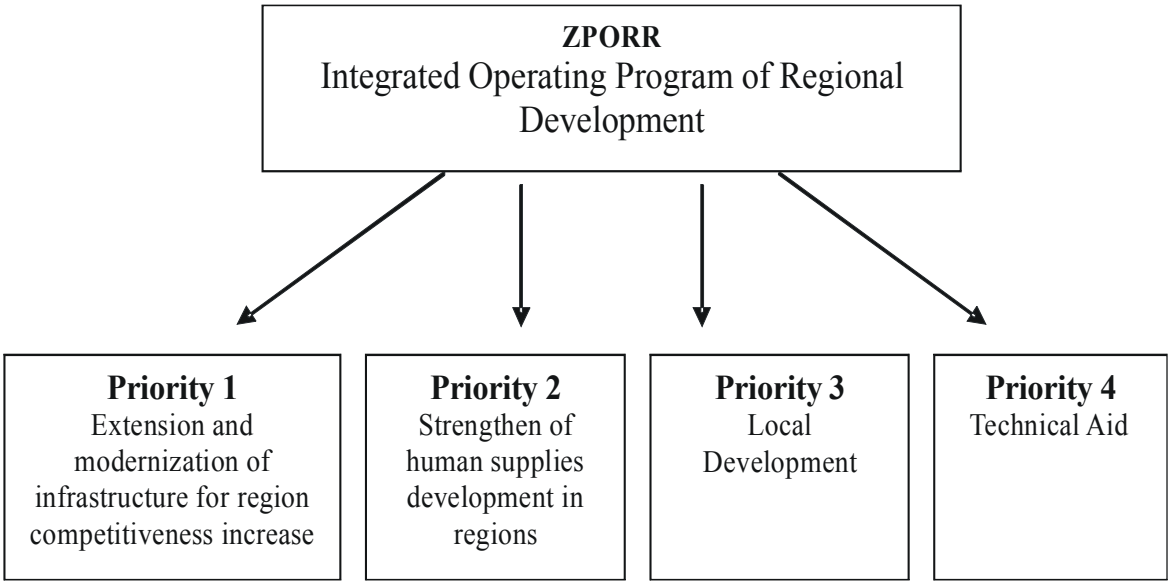
The analysis of statistical data indicates that the potential of agri-food industry is not fully used. The region characterizes with considerable superiority of the raw material production over processed. The key problems of region are:

- the low degree of education,
- the poor development of infrastructure,
- tendency of rural areas unemployment growing as well as rural poverty,
- the small number of rural leaders' and fall of rural institutions.

Activities of region competitiveness increase

The Integrated Operating Program of Regional Development (ZPORR) it is one of operating programs, which is use in realization of National Development Plan (NPR) for 2004-2006. ZPORR expands aims of NPR, defining the priorities and directions of regional policy of state in the first period of Polish membership in European Union. The Program will be managed on national level however its initiation, in significant measure, will be holding on regional level (Uzupelnienie 2005).

The growth of competitiveness should be understood as influence on economic structure changes and improvement of all Polish regions situation in relation to European regions, in range of productiveness of economy, efficiency of work, creation and absorption of innovation, citizens education, increase of population earnings as well as quantity and quality of technical infrastructure, and so these factors which decide about strength of economies of states and regions at present. Counteraction marginalization of some areas should be understood as undertaking the interventionist workings in limited number of rural areas, dependent restructuring as well as the socio - economical degradation, municipal, after industrial and after military areas, which possess the smallest developmental possibilities as well as the most difficult socio - economical situation.



Source: *Own studies depending on Uzupełnienie ZPORR 2004 – 2006.*

Fig.1 **Priorities in frames of the Integrated Operating Program of Regional Development (ZPORR)**

One ot the basic programs supporting the development of human supplies and being in competence and manage of self-government is the Integrated Operating Program of Regional Development. The aim of this Program is to create the conditions of regions competitiveness growth as well as counteraction of some areas marginalization in such a way to favor long-wave - economic development of country, economic, social and territorial cohesion as well as integration with European Union (Supplement ZPORR 2005).

Achievement of these aims will require the realization of particular priorities and activities of ZPORR. Priority 1 and 2 as well as realized in their frames activities (with except the working 1.6 *Development of public transportation in agglomerations,* realized on terrain of agglomeration above 500 thousands occupants) are settled for whole country. The division of priorities is presented on Fig.1.

However, the activities realized in frames of Priority 3 *Local Development* will be addressed to the centers of rural areas, the restructuring areas as well as demoted city and districts of cities, after military and after industrial terrains, according to plans of local development and programs of revitalization. Projects realized in all activities (except Activity 1.6) will be chosen on regional level (Supplement 2005).

Increase of competitiveness through development of human supplies

The creation of conditions for development of human supplies on local and regional level and also the improvement of ability to programming and the realization of projects in range of human supplies development on these levels is the aim of priority 2. Special meaning in this Priority is focused on the realization of activities aiming the workers' professional reorientation before they will stand up unemployed as well as the professional reorientation of farmers going away from agriculture.

Changes of social and economic conditions caused the need to prepare the men to be able to cope with new challenges. The most important task is to remove the feeling of threat caused by the lack of indispensable skills to execute new tasks. Though level of the adult persons' education grows, it is continually insufficient, and the level of part in constant (non-stop) education is still lower than international standards, in spite of this, that the constant education stood the obvious condition in keeping the employment. In comparison to different countries (Great Britain 45%, Sweden 54%, Ireland 22%, Portugal 13%), the level of part of constant adult education in Poland is on the rather low level 13%. To raise the level of employment among adults it is necessary to fit the standards of their professional qualifications to requirements of work market. This will contribute, simultaneously with improvement of regional infrastructure, to higher professional mobility and geographical strength of workers.

Young people, entering the first time on work market have the usually solid theoretical education, but the potential employers also require from them the practical professional experience. In solution of this problem very helpful will be the organization of programs of the professional practicing. It will help to gain the practical skills of future occupation.

Appropriate conditions of undertaking, by farmers and their family, additional activity in aim of improvement of economic situation of agricultural families should be created. In frames of Activity 2.1 the support of organization of services and advisory trainings for farmers and inmates to undertaking additional activity on base of the agricultural farm is provided.

Different problem is connected to children from rural areas and small towns, which have smaller educational possibilities than children form towns and cities. The limited number of after secondary schools on rural areas marks that many children having difficult financial situation hit the barriers of education continuing on higher stage. It is possible to notice the significant difference in results of education between children from rural areas and municipal, and the difference rise with every next stages of school career. The considerable costs of education at higher schools can make impossible for children from marginalized areas to complete education. In aim of chances compensation on conquest by young people coming from areas with difficult access to education, in frames of this Priority the scholarship

Table 1

Division of financial funds on activities in Priority 2 ZPORR for Poland (in euro)

Activity	Common public aid	Structural funds	National public funds	Private funds
	1=2+3	2	3	4
Skill development with regards to needs of regional labor market and possibilities of non-stop education in region	130 602 119	97 951 589	32 650 530	6 530 106
Chances compensation in education through scholarship programs	176 311 589	121 711 589	54 600 000	0,0
Professional reorientation of farmers	72 562 119	54 421 589	18 140 530	1 451 242
Professional reorientation of people in a group of restructuring processes	98 948 785	74 211 589	24 737 196	1 978 976
Entrepreneurship promotion	60 855 452	45 641 589	15 213 863	3 042 773
Regional Innovating Strategies and knowledge transfer	59 375 453	44 531 590	14 843 863	1 000 000
Sum	**598 655 517**	**438 469 535**	**160 185 982**	**14 003 097**

Source: *Uzupeùnienie ZPORR 2004 – 2006, Szczecin 2005.*

programs will be realized. For the realization of Priority 2 the funds from the European Social Fund (EFS), national budget and private are engaged (table 1).

The next important problem relating to Polish society is the large scale of employment as well as an unemployment in agriculture. The estimated sizes show, that the size of hidden unemployment is about 1 million people. During the last dozen years the agricultural were in the constant process of restructuring what caused the large growth of unemployment. From this reason, the ZPORR foresees the activities, in form of training and professional advising, for people who wants to stop working in agriculture and find a new job outside the farming sector. Activities planned in frames of ZPORR foresee persons' support planning activity beginning outside farming sector. With regard on differences between regions it must be closely related to the general strategy of region development, and also with activities in the frame of Priority 3 having on aim the creation of employment across investments in the infrastructure on rural areas. Also to this target group support for beginning economic activity is appointing.

The promotion of self-employment is, in perspective of coming years, one of the most important tasks. Except administrative barriers and difficult access to funding for sector of small and average enterprises (MSP), the limited access to the knowledge how to start and lead the company turns out to be next obstacle. The complex support relating to starting and leading an own economic activity is the aim of the promotion of enterprise. It consists with guidance, trainings, individualized advisory services, coaching and the grant-in-aid in first months of leadership of activity.

The promotion of enterprise will be replenished through strengthening the local and regional innovations of companies by the co-operation among Research - Development sector and the Economy sector. It will be done in aim of making possible the transfer of knowledge and quicker technological progress. The lack of strong connections among enterprises and sphere of research and development is one of the causes that the potential of these both spheres is not used to research and introducing into the life the new solutions adjusting the state of economy competitiveness. In the table below (table 2) there are financial sources divided for activities in west Pomeranian region for 2004 – 2006.

Table 2

Financial sources of chosen activities in Priority 2 for West Pomeranian Region (in PLN)

Activity	2004	2005	2006	Sum
2.1 Skill development with regards to needs of regional labor market and possibilities of non-stop education in region	7 411 362	10 585 848	13 715 935	**31 713 146**
2.2 Chances compensation in education through scholarship programs	14 269 172	14 269 151	14 273 411	**42 811 735**
2.2 a) Scholarships for pupils	12 249 986	12 250 464	12 254 617	**36 755 068**
2.2 b) Scholarships for students	2 019 185	2 018 686	2 018 793	**6 056 666**
2.3 Professional reorientation of farmers	4 117 729	5 881 463	7 620 529	**17 619 723**
2.4 Professional reorientation of people in a group of restructuring processes	5 615 105	8 020 206	10 391 669	**24 026 982**
Sum	**31 413 370**	**38 756 670**	**46 001 545**	**116 171 586**

Source: *Own study on the data gathered from Regional Work Office 2005.*

Table 3

Utilization of financial funds of chosen activities in Priority 2 for West Pomeranian Region (in PLN)

Activity	2004	%	Three quarters of 2005	%
2.1 Skill development with regards to needs of regional labor market and possibilities of non-stop education in region	1 841 627	25	10 836 113	102
2.2 Chances compensation in education through scholarship programs	14 252 000	99	14 269 151	100
2.3 Professional reorientation of farmers	1 048 195	25	4 102 179	69
2.4 Professional reorientation of people in a group of restructuring processes	506 951	9	4 466 449	55
Sum	**17 648 773**	**56**	**33 673 892**	**87**

Source: *Own study on the data gathered from Regional Work Office 2005.*

In West Pomeranian region, in scheme of activity 2.1, only four projects were approved in 2004 (amount of granted money was 1 841 627 PLN) and realized but during nine months 2005 there were 23 projects approved (10 836 113 PLN). It means that only 25% of financial funds were used in 2004. On the other hand it was the first (not the full year) year of Polish membership in EU and there was no experience in such projects. In 2005 situation changed completely. The money

was used totally for the first three quarters of 2005. More than 1100 people were trained in frames of this activity (table 3).

Activity 2.2 is directed to administrative districts and concern scholarships for students and pupils. Figures indicate that there is no problem in use of these funds. The total sum of granted money was used in 2004 and 2005. Almost 14 591 of students and pupils got scholarships. But the experience shows that scholarships are too small relating to pupils needs and procedure for money obtaining is too complicated.

In activity 2.3 only 2 projects in 2004 and 7 in 2005 were approved. It means that 25% of total granted money were used in 2004 and 69% in 2005. Such situation is caused by complicated procedure and weak essentially projects applied by institutions. Only 586 people were trained in this activity.

Similar situation occurred in activity 2.4 "Professional reorientation of people in a group of restructuring processes". In 2004 only 1 project was approved for 506 951 PLN and in 2005 there were 5 projects for 4 466 449 PLN. It means that only 9% of granted money were used in 2004 and 55% in 2005. Number of people trained in this scheme is 440.

The number of people who took a part in the programs is rather small but this is the first period of EU programs implementation so companies as well as the institutions have not been well prepared for realization. On the other hand the tendency of aid utilization by companies and people participation in projects can be observed.

Conclusions

It will be possible to drawn out the first conclusions from utilization of funds, in aim of region competitiveness improvement and building the knowledge-based society, after the end of the first period of ZPORR initiation, in 2007. However, the following conclusions can be drawn right now:

- the large part of projects concentrates on municipal areas, skipping rural areas,
- the part of projects participants gives up during training, it is caused by the lack of financial participation from the trainees and the weak offer of education,
- the majority of projects concentrates on the linguistic qualifications elevation, which does not every time contribute to growth of competitiveness of rural areas, with regard on short period of learning.

However, the future really shows, in what degree, funds were properly used on improvement of competitiveness, the growth of production, modernization of farms and in what degree and where they were wasted.

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Intellectual Resources and their Control in the Activity of Consultants of Agricultural Consulting Centre of Lithuania

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Abstract

The article deals with the recent conception of knowledge based business intellectual resources, their part in agricultural activity and development tendencies. The work reveals the place of intellectual resources in the system of other business organization resources, emphasizes the interaction with the surrounding, analyzes the influence of its potential in meeting the needs of users.

The article states that knowledge, directed to the products and services, forms the biggest part of society value, and applied technologies intellectualization guaranty a significant growth of productivity. The goods and services are systematically becoming more receptive for science knowledge.

The article treats intellectual resources as a good and shows that the attainability and the usage capacity of knowledge in economy usually depend on whether knowledge is of social or private value.

A theoretical research of the competence have been made on the basis of scientific literature analysis, with the intention to determine the strategies, methods and needs of qualification improvement in the works of various authors. There have been analysed the activity of foreign consulting centres and the improvement of consultants' qualification. A model of consultants' competence, reflecting all the versatile consulting activity: from the professional knowledge to the ability to communicate and understand the needs of the client was made according to the data of inquery through a method of modelling. For the observation and analysis, similar researches have been made in foreign countries and Lithuania. Summarizing the research material, it can be said that the improvement of consultants' qualification in the consulting centre is implemented constantly, systematically and readily, as well as different methods are used. Still, there is a lack of motivation for qualification improvement and self-seeking.

***Keywords**:* intellectual resources, information, knowledge, competence, consulting.

Introduction

Every historical period has its own dimensions, scopes, future visions, innovation altitudes, which change the face of a society. There are used even several terms for the definition of society evolution of the third millennium: post-industrial, informational, informational economy, global economy, knowledge, knowledge economy, society of net activity, age of information.

Therefore, three traditional factors have been determined: land, working power and the capital. In recent years, knowledge, which is the basis of intellectual sources, attributed to the mentioned factors and have become one of the main value. Knowledge has a particular importance in the activity of educational, and scientific researches, as well as planning. It is also very important to the organizations of culture and health secure, consulting, juridical services, advertisement and many other fields of economical activity.

At the beginning of the twenty first century, the intellectual sources are becoming the main source of the formation of business stable competitive advantages, as well as the improvement of their potential market value and dynamically developing supply of consumer needs. Consequently, knowledge is becoming the intellectual source of business subject or organization of any kind, or incentive, requiring the emphasis on the consistent pattern of their functioning, systematic evaluation of the interaction with other economical factors, provident view, wide and effective usage.

The analysis of the sources of academic literature shows that the problem of intellectual sources management is one of the new fields in management theory, and it attracts, first of all in West countries, a big part of attention (Brooking, 1996; Sveiby, 1987; Strassman, 1998; Stewart, 2003; Edvinson, 2002). There is no, however, united

opinion about the concepts, structure, the most important factors, methods and means of the management of intellectual sources in science society. Thus, the management of intellectual sources is not revealed properly. This determines the importance and contents of the **problem**.

The first scientific works of intellectual sources management and interpretation, the main constituent part of which is information and knowledge, have also occurred in Lithuanian field of education. This issue inrecent years has been analysed by the researchers V. Snitka (2002), R. Mikulėnienė (2004), Z. Lydeka, and V. Bareišis (2005).

The object of the research – the potential of intellectual sources of the consultants of agricultural consulting centre.

The aim of the research – to analyze and evaluate the management presumptions of intellectual sources potential of consultants of agricultural consulting centre in the context of competitive ability.

The tasks of the research: to determine the place of intellectual resources of consultants of agricultural consulting centre in the system of other resources; to define the main components of intellectual resources; to emphasize the interaction with the surrounding of intellectual resources of consultants of agricultural consulting centre; as well as formulate the main preconditions of intellectual resources of consultants of agricultural consulting centre.

Research methods: there have been used monographic, initial and accessory information systematization, summarization, and mathematical data treatment methods during the research.

Features of intellectual resources

The interest in the issue of the management of intellectual resources relates to the sixth decade of the last century, when the formation of post-industrial society in the most developed countries of the world had begun.

Economical activity was always based on knowledge. Knowledge, energetic resources and organization – these are the initial factors, which people disposed in past and take care of them now. Production technology is a knowledge based activity of groups and individuals. On the other side, nature resources are fully controlled by people. Thus, knowledge build-up, transfer and enrichment are becoming the main factors in society progress.

Post-industrial or knowledge economy society has several distinguishing features. Firstly, to product and services directed knowledge forms the major part of society created added value. This is because the intellectualization of consumer technologies guaranty a significant growth of working productivity. The other feature is a systematic growth of science knowledge receptivity by products and services. Besides, intellectual products and services dominate in the market in direct meaning. Intellectual products and services are taking more important place in international markets. Due to the mentioned phenomenon, the production, storage, treatment and usage of resources in knowledge based economy is taking essential part. Education, the character and importance of which is constantly changing, plays a special role in this field of activity.

Summarizing the given facts, there can be pointed qualificational pecularities of knowledge economy, describing it as expanded society production method (Klimov, 2000; Milner, 2003). One of its features is the remarkable educational technical rate and measure. The modern material production base and quality of working resources does not meet the potential of this progress. The other feature is transactional expenditure, concerning the growth of information search, markets analysis, contracts making and their control implementation, property rights protection, etc., which can be evaluated as the result of high competition. Another one feature of knowledge economy is the important role of intellectual resources.

Thus, the most important stimulus for given phenomenon and processes became so called informational, as well as communicational revolution. The expansion of the intellectual resources and effective their control is important not only for the leaders of the world economy, but for the whole society as well. P.Drucker (1999) has claimed that there won't be undeveloped countries in the future, there will be not informed, lacking of knowledge countries.

Konwledge as economical resource and its value

Analysing intellectual resources in the context of economical activity, two contradictory opinions are faced. Knowledge, abilities and other compo-

nents of intellectual resources are similar to the other known factors of production. On one side, it can be shown that these resources are especial, outstanding potential of economical activity. Besides, the attitiude exists that functioning of intellectual resources contradict directly to the essential principals of economy.

Accepting this opinion would mean that knowledge can not be treated as the object of economical and market relations. That's why knowledge must be treated as a value.

Knowledge can hardly be sold, but purchased or seld goods and services, and, especially, solutionios are made on the basis of gained knowledge. The benefit to the user of the latter depends on the value of solutions. One can state that information, as return of intellectual resource, is in different situation. On information based solutions are made solely, incorporating knowledge. In this case, however, there isn't advanced valuable information. The ratio of value of the latter depends on the level of solutions, made on the bases of it. Obviously, the value of knowledge depends on the value of solutions obtained. The solutions are changable, but knowledge can not be changed in the process of business management.

The restrain principle of values states that any outstanding value can be incorporated into the system of economical relations due to its rareness, in comparison with its need in society. Clearly, this attitude is not typical to knowledge as economical resource. There is an opinion that the principal difference between various kinds of resources and knowledge is formed by the excess of the latter (Stewart, 2003).

Differently to other resources, which exhaust during the period of their usage, information and knowledge can be separated and grow while using them in solving practical tasks (Skyrme, 1996).

Consequently, the value of knowledge as resource is determined according to the ability to use them in solving not only intellectual problems, but, first of all, economical, social, technical, as well as behavioral.

Knowledge as a separate part of economical property usually reveals through its usage in the gained goods and services; it is more rarely becoming an object of separate selling. Thus, knowledge is a resource, which is used in the production of appropriate goods and services.

Intellectual capital as a good

Society has been labouring at spreading knowledge in all forms of education. But the direct approach to knowledge was always limited by religious, caste interests, juridical and other measures. The reason of such a phenomenon can be explained by the need of required level of knowledge to the society, which could gurantee the development of the organization of production and the growth of society progress. Importantly, knowledge of a higher level was always the value of different kind – the factor of advantage taking by government and monopoly.

The attainability and usability of knowledge in marketing economy usually depends on whether the knowledge is the value of social or private property. In first case, knowledge distinguishes by uncompetitiveness. If they are open and reachable for large amount of users, its limitary value is close to zero.

The unrealized in practise knowledge can be treated as "clean" sources, transfered in form of information and not having such material form as industrial examples, prepared for the implementation projects, material products, etc. The existence form of such knowledge is the knowledge, coded and stored in particular files with different levels of approach.

There is another one form of knowledge, monopolized by authors through patent law– discoveries and inventions, which are practically used for a charge in a period of time. In this case, knowledge is a social, not private value. Differentaly from mentioned above, the social knowledge is acceptable for all users, but often it is related with some expenditure. The main constituent part of such approache's cost is not the utility of the knowledge, but the costs of the formation, exploitation and expenditure of appropriate informational systems. Consequently, the description of knowledge as social value becomes rather difficult.

The supporters of contrary opinion appreciate knowledge as private property and require tightening their jurisdicical security. The essential feature of such knowledge could be its patent power. The creators of all new ideas, however, use the works of the other authors, this way gaining benefit from general resources of ideas. Thus, the limit between patented and unpatented ideas is very conditional; it could not be a criterion of knowledge separation as society value and knowledge as private property or the object of posession.

One of the main reasons, allowing appreciating the knowledge of one or another type as the object of possession is the ability of its commercialization. Though, there are a lot of contradictions against full knowledge transformation to the object of market, which is dangerous due to the ability of their monopolization. Knowledge, as private property, can stop the development of science.

It should be noted that nowadays there are two forms of knowledge – as social resource and as private property. The criterion remains the commercialization of knowledge and its power in making additional income to the possessors. Knowledge, as social property, is not a good, although the access to them may have certain expenditure. Knowledge, as private property, has a value, conditioned by the income of usage. Hence, a conclusion can be maid that only constructive and utilitarian knowledge, directly expressed in industrial examples, having demand in technology, can become private property and the object of private possession.

The effectiveness of intellectual resources

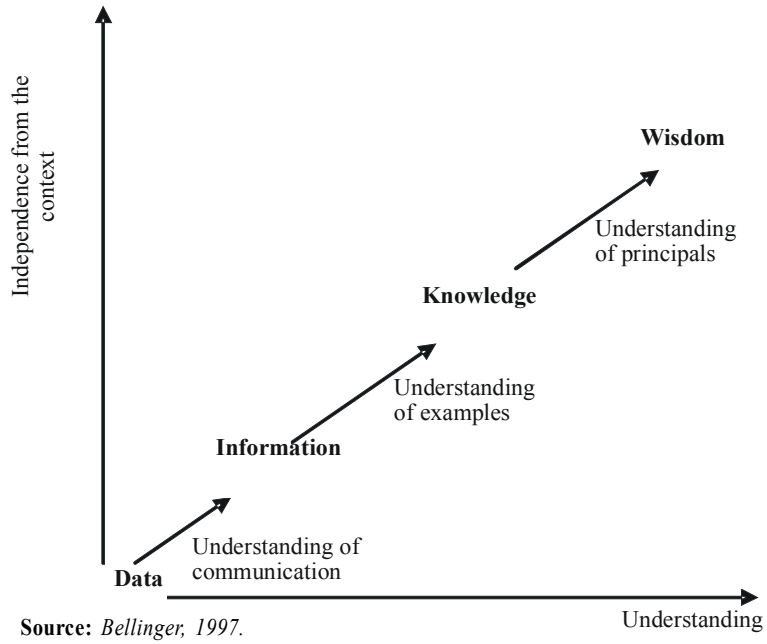
In marketing economy, a condratictory phenomenon occurs, where competition stimulates the creation and implementation of knowledge and slows down this process at the same time, requiring being in harmony with real opportunities of financial turnover. The speed of the implementation of new technologies depends on the expenditure. Too much expensive products and technologies occur as an obstacle not only for manufacture, but to the users as well, taking advantage to traditional goods. Consequently, the usage dynamics of knowledge as economical resource is defined by its economical effectiveness in common concepts of income and expenditure.

Consequently, in particular sense, knowledge property stops the development of social production, but this restrainment in marketing system is only imaginary refusal of knowledge transfer to the production. The mentioned knowledge monopoly, associated with the production innovations, stimulate competition in the field of practical engagement of the obtained results and in the implementation of new scientific technical projects.

Models of knowledge management

The researches have been trying to ground the analyzed categories of information and knowledge many times. One of them was R.Ackof (1972), a well known proficient in systematic researches, who suggested using the scheme of contents analysis of human sense, consisting of five consepts 1): *Date-Information-Knowledge-Understading-Wisdom.*

Obviously, every initial consept in the scheme is a stimulus or particular resource for the creation of later concept of new quality.



Source: *Bellinger, 1997.*

Fig.1 **Vector of knowledge creation**

According to R.Ackoff, the first four components are related to the past, that is, with the former and what is known and the fifth – wisdom – is directed to the future.

Later this scheme in the literature of knowledge management was modified (Bellinger, 1997) to a model of four components: *Date – Information – Knowledge – Wisdom* and was called DIKW model (fig. 1.).

Data – recorded unsystematized symbols, single initial facts about the real objects, processes, phonomenons and a particular human activity - are treated independently from any context. Usually data is grouped, differently summarized and recordered, this way giving to it a content of information. Directly data is not very valuable, but it can be conveniently stored in one or another form. Sometimes data is used directly in the processes of making single solutions.

Information is understood as recorded and treated data, which gained meaning and objective during the process of thinking and understanding, i.e. preparation for further usage. In other words, any attempt to interpretate, make presumptions, forsee content, i. e. to give a concrete context, converts data to information. It is of higher value than data, because it is used for the evaluation of real situation and solution making. The information, however, is not defined enough and can be understood or explained differently.

Knowledge is the determination of tendencies and essential links between the phenomenons in information. It is stored in human minds and is of very high value, because it is the base of the creation of new ideas and of the interpretation of events. Knowledge, differently from information, creates a context itself and can be a reference point of particular management solutions and subjects. Knowledge management is a complex phenomenon, because knowledge is the product of the nature of human thoughts, it is not visible and can not be directly measured. Its usage and transfer to other individuals depends on the motivation of the reporter. Knowledge has no value if it is not used for practical and useful purposes.

Understanding means regularity in a set of incoherent knowledge, giving the answer to a question "Why?" Understanding was not deleted from DIKW model; it became one of the coordinate axes, determining the vector of knowledge. The second measurement is independence from context.

Wisdom. This stage of vector of knowledge formation deals with the summation of information and knowledge, the emphasis on systemic principles and regularities, concentrated there in a past and present approach. A step in the direction of knowledge vector from data to wisdom is not a mechanical summation of data, information and knowledge. It is rather accepted understanding of regularities in a view of the past and the present of civilization. Sometimes wisdom stipulates keeping knowledge, which the society is morally not ready to use, till a particular moment.

There are more models of knowledge management in scientific literature, helping to determine the stages of knowledge formation. One of them was suggested by T.Durand (1996), who raised the experience to a much higher level, named competence content. In this case, knowledge is created gradually, with the accumulation of information and its convertion to a system of attitudes, giving consistency and structure to a gathered base of knowledge. Information is not just simple data. This is a recognized, selected, treated and adapted to an appropriate structure of knowledge. On the other side, experience should be interpreted as a higher level of knowledge, involving competences. Experience is not only attributed to the level of essentially forwarded competence, it also requires not only to harmonize the 'know how', but the ability to understand, explain and work in the field of competence as well. In some attitudes, experience exceeds the competence due to the essential

Competence

Knowledge	Familiarity	Attitudes
Data	Experience	Behaviour
Information	Abilities	Objectives
Knowledge	Familiarity	Identity

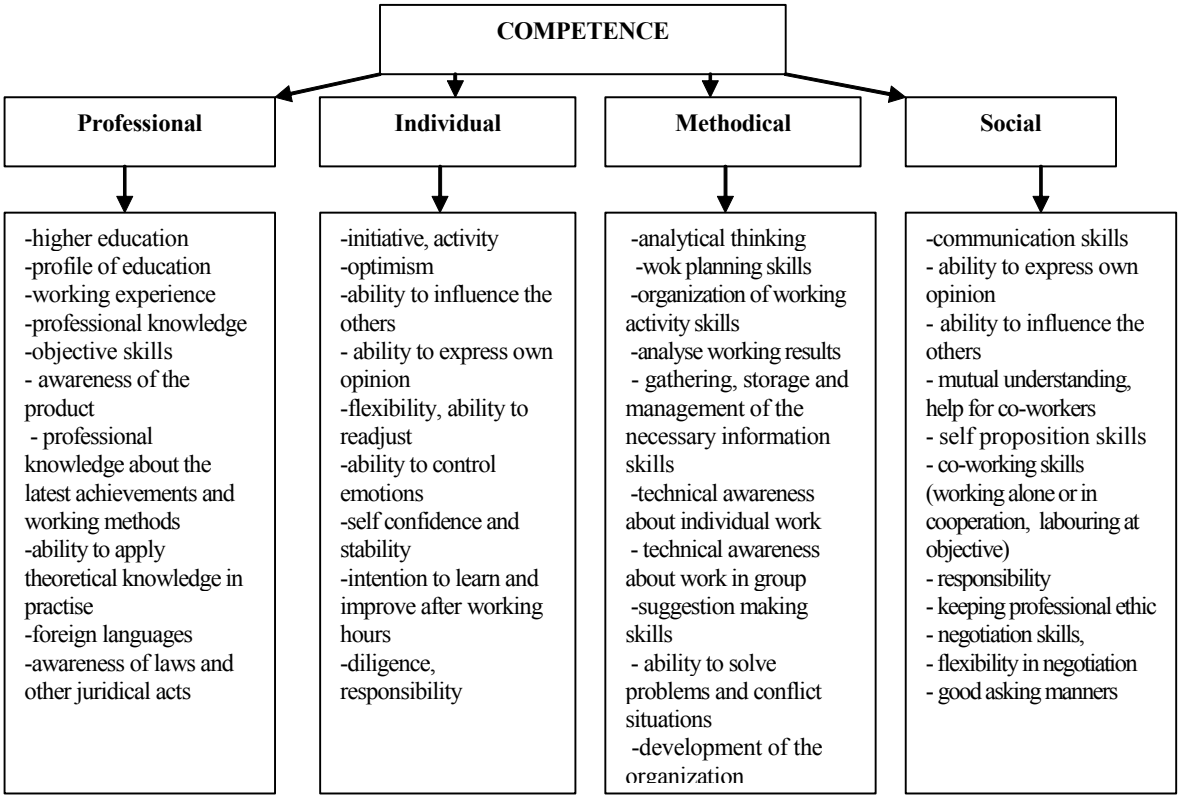
Fig. 2 **Competence dimensions**

bounce in the level of competence, as well as the recombination and conjunction of various elements of competence (fig. 2.). In other words, there exists a succession of knowledge stages, which leads from data and information to knowledge and experience.

The main results of the research of consultants' competence

The human intellect in consulting organizations is supposed to be the main capital of the organization. The quality of services and successful business of organization depends on the qualification and competence of the employees. This enhances new requirements to a consultant and his/her work. An appropriate competence is needed to the solution of any new problem, ability to apply knowledge in a concrete critical situation and suggesting the services of the highest quality (Erpenbeck, 1998; Achreman, 1998).

Each activity has its own features, raising the requirements to a person performing it. A consultation activity also has its features, conditioning the structure of consultants' competence. One of the essential elements of consulting activity is immaterial product. That is knowledge, transferred to a client as a service. The distinguishing feature of services is that they are mainly supplied and used contemporaneously, they can not be stored. Consulting is a service, where a supplier, i.e., a consultant and a recipient, i.e. a client are needed. A client should have in turn an incentive reason why he/she had chosen the service, and a consultant should have a motivation why he/she gives this service (commercial, public activity). Together with a large amount of factors, consulting process every time is unique and unrepeated. Accordingly, a specific requirements are set to a competence of consultants: to have professional knowledge about the needed product and service, which would help to solve a problem (ability to find quickly the needed information), to be an expert and a partner to the client, to apply analytic method for the solution of problem; to be persistent and emphatic, trustworthy and faithfull, to have innovatory features, to be of good esthetical appearance, posture, to speek understandably, to keep eyes contact etc (Laužackas, 1999). After the analysis of the diversity of theoretical structure



Source: *Greenhaus, 2000.*

Fig. 3 **Theoretical model of consultants' competence**

of competence and considering the features of consulting activity, the following essential competences of consultants are singled out: professional, methodical, social and personal.

Professional competence refer to the ability to accomplish certain tasks really realiai in particular fields of activity. Methodical competence involves the ability of employees to gather, treat, evaluate and supply the information and make the suggestions for the improvement of future activity. Social competence is conditioned by the system of human values, ability to communicate and collaborate with social objects of different levels, mastership in solving various conflict situations and ability to avoid them. Personal competence is self valuation (personal features), the wish to work effectively and the intention for education and improvement.

A theoretical model of consultants' competence is given in figure 3. In accordance to this model, the evaluation of the competence of consultants and its integration to the educational system of consultants were made.

Recently, the main problem of Lithuanian consulting organizations is that the educational systems of consultants are not oriented to the future perspectives; the prevailing traditional systems of qualification improvement are not effective. It is usually a spontaneous process, involving needs conditioned qualification improvement, but not essential competence training. Unfortunately, such traditional methods, as lectures and seminars are still broadly applied, but not very effective and new – studying management practice situations, active skill training and other methods.

Training of the competence of consultants is one of prioritetical trends in the creation of modern educational systems, which can be achieved by making general consultants education and training programs, involving the implementation of many objectives of the organization. For this purpose, an integrated educational system, based on competence training, should be formed. Such educational system is future oriented; it enables to react fast to the changing situation and give an advantage in a competition.

A research of the competence of consultants was accomplished with a purpose to determine essential presumptions of the creation of educational systems, oriented to the training of lacking competences. In Lithuanian Agricultural Advisory Service in the whole Lithuania territory. The mission of Agricultural Advisory Service is to help all farming people to develop their businesses profitably without causing damage to the environment, produce competitive production, to survive and be in a leading position under market economy conditions.

Background of personnel is suitable to requirements of Agricultural Advisory Service as well as Advisory Service care about personnel intensive learning and development of qualification. Different conventional methods of qualification development are applied. Some of them: seminars, classes, educational talks, discussions and etc. The excursions and internships are applied rarely because of lack of finance. Some non conventional methods are applied: software, observation, evaluation, and learning by working and etc (Lietuvos…, 2005).

There were questioned the employees of Lithuanian organizations, suggesting consulting services. Since the creation of educational systems, oriented to competence training in particular organizations, is a complex and complicated process, the article shows the results, reflecting the need and fulfilment of competence training.

The analysis of the need of consultants' competence In Lithuanian Agricultural Advisory Service was made from the attitude of four constitutional parts (professional, methodical, so-cial and personal). There were determined conditioned by the method of work and present competences (present and lacking), necessary for the consultants.

The results of professional competence research. Professional competence is necessary for the accomplishing of particular professional tasks of consultants. The main requirements in analysing professional competence of consultants were the following: higher economical or management education, at least three years experience of work in consulting services business, awareness of laws and other juridical acts and professional consulting knowledge.

It is strange to say, but from the mentioned necessary competemces dominate the lacking of higher education, some respondents lack of decision in seeking professional knowledge about the latest achievements and methods of work, computer skills, speaking English and other languages. The lacking professional competence res-pondents would kindly gain through learning in the organization and would improve the qualification in other

consulting organizations applying traditional methods: lecture, seminars, courses, teaching of work accomplishment procedures.

The results of methodical competence research. The necessary methodical competence is closely concerned and supplements a professional competence. The research clarified the main and the most necessary methodical competences of consultants, showing the ability to do a work independently from a professional content and using appropriate working methods and ways. It is evident from the following seven criteria, used in the researches: development of organization, problem solution skills, awareness of individual and group work technique, etc.

The research results showed that the most important methodical competences are: analytic thinking, skills of receiving, storing and managing the necessary information, as well as ability to solve problems and conflict situations. According to the research data, the organizations don't set very high requirements, concerning the development of the organization and awareness of individual and group technique for the consultants.

Again, the most lacking necessary methodical competences were the following: analytic thinking, as well as the ability to solve problems and conflict situations.

The results of social competence research. A social competence prolongs the professional and methodical competences and determines the level of their usage. The necessary consultants' social competences refer to the ability to persuade, state own opinion, as well as communicate and make contacts.

Each competence distinguishes by its own features, determining the field of activity. Though, communication, opinion and thoughts statement, as well as persuading and motivation skills are essential. Obviously, there is not enough attention payed in the consulting organizations for the analysis of communication situations, thus encouraging the employees to listen actively.

The results of personal competence research. A scale of twelve evaluation criteria, indicating personal features, the wish to learn and improve not only at work and similar was used for studying the necessary personal competence of consultants. According to the respondents, the main and most necessary values in the organization are the following: diligence and responsibility of the workers, self confidence and stability, ability to control emotions. The flexibility and ability to readjust, optimism, the attempt to learn and improve not only at work, spreading new ideas, incentive and activity were attributed to the important necessary competences in the organization.

The analysis of such competences, attributed to "important", showed that a reluctance to learn and improve after work, lackage of diligence and responsibility, incentive and activity, optimism and spread of new ideas exists.

After the determination of consultants' competence training demand, the next step in the formation of educational system is the preparation of educational plans for the liquidation of demand deficit. The constituent parts of these plans are specific teaching methods, allowing to train the lacking competences.

Conclusions

1. Intellectual resources have become the main source of stable competitive advantages attainment, enlargement of their potential value and dynamically developing consumer needs supply in the organizations of any kind. In the marketing economy, the value of human made work and the value of products and services, realized by the organizations of all branches of agriculture depend mainly on the information and knowledge used. Thus, organizations have to learn to control the intellectual resources..

2. Economical value of knowledge, disposed in many agricultural organizations, overtakes all financial actives, capital investments and other sources. Knowledge has become a value and knowledge management as a kind of management activity distinguishes by its nature of source and occurs as an object of management almost in all management stages and functions, because there is no kind of activity in agricultural organization, where knowledge would not be a source of development and improvement.

3. The researches showed that educational systems used in the departments of Lithuanian agriculture consulting centre are not properly oriented to the training of consultants competence, because there are no set requirements for future work place of consultants, the evaluation of workers' competence is not performed, educational objectives are not formed and educational programs for future perspectives are not prepared, short and long term plans for meeting the demands

of agricultural organizations are not made, the effective educational methods are not applied.

4. There has been revealed that consultants need the following professional competences: higher economical or management education, at least three years working experience in consulting services, awareness of laws and other juridical acts, as well as seeking for professional consulting knowledge. The lacking professional competences of consultants are the following: predominates lackage of higher education, lack of decision in seeking professional knowledge about the latest achievements and methods of work, computer skills, speaking English and other languages. The lacking professional competence res-pondents would kindly gain through learning in the organization and would improve the qualification in other consulting organizations applying traditional methods: lecture, seminars, courses, teaching of work accomplishment procedures.

5. There has been clarified that consultants need the following methodical competences: analytic thinking, skills of receiving, storing and distributing the necessary information, dispose the modern and innovative ideas, as well as ability to understand and solve complex problems of the clients, ability to control conflict situations, as well as ability to make suggestions. The lacking methodical competence is seeing a working process as a whole, not managing to solve problems and conflict situations, lack of analytic thinking, not managing to get the needed information. To obtain the lacking methodical competences would help studying at universities and other institutions of education and qualification improvement, as well as a large influence would have self studying. The methods chosen are: seminars, lecture, studying of particular situations and teaching of work accomplishing procedures.

6. There has been highlighted such social competence: communicational, communication skills, the ability to state own opinion and persuade, keeping professional ethics. Recently the consultants mostly need: ability to present an opinion, self presentation, ability to cater, communicate. Here would help learning inside the organization, at work palce, individual learning, education at universities, listening of lectures in actual issues, taking part in seminars.

7. There has been defined personal competence: consultants' deligence, responsibility, ability to control emotions, express thoughts, self confidence and stability. There have not been singled out important lacking personal competences, still consultants don't want learn and improve after working hours, they lack responsibility, seeking for new ideas, incentive and activity. The lacks may be liquidated by self analysis of science literature and learning from experience, studying at universities, consultants would kindly take part in lectures and analyse particular situations at work.

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The Role of Small and Medium-Sized Enterprises in Rural Development

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Abstract

The aim of this article is to present the structure and role of small and medium enterprises in food industry. General characteristics and barriers impairing further development of small and medium enterprises are described. It is worth saying that the greatest consideration has SME's which in reality liquidate local unemployment on rural areas. Small and medium enterprises in food industry develop on the local enterprise which gives occasion to active in the local area.

Key words: European Union, small and medium enterprises, food production sector.

Introduction

Activities aiming at multifunctionality of agriculture, reduction of unemployment and improvement of living standards in the country are important elements for economic development of rural areas in Poland.

Each market economy functions basing primarily on small and medium-sized enterprises activities. This sector is perceived as strategic because of creating new jobs, which at current unemployment rate is not without importance, it is also a key factor in the process of economic growth. Small and medium-sized enterprises are characterized by numerous good points which influence significantly the development of city agglomerations.

The most important features of small and medium-sized enterprises include a close link between the firm profitability and the owner's income, unity of ownership and control, a possibility of fast decision making and great flexibility in adjusting to market requirements. Until recently, the entities belonging to this sector focused their attention on local and regional markets and in them saw the potential competitors. At present these firms should consider various results of the globalization process, which affect the conditions in which they operate but also providing them with opportunities to compete on a global market.

The article aims at presentation of the role of small and medium-sized enterprises in rural development.

Discussion

Experiences of many countries show that over the last decades small and medium-sized enterprises (SMEs) are the group of businesses which definitely influence the processes occurring in the economy.

According to the classification recommended in the EU directives, there are three types of enterprises: micro (employing less than 10 persons); small (employing between 10 and 49 persons, their annual turnover does not exceed 7 mln euro and annual balance is about 5 mln euro); medium-sized (respectively: between 50 and 249 employees, 40 mln euro and 27 mln euro), and big enterprises which employ over 249 persons.

Almost 93% of the total number of economic entities operating in the European Union are micro businesses employing 34% of the total number of employed persons. Considering small enterprises, the indices are respectively between 5.9% and 19%, between 0.9% and 13% for the medium-sized entities, and between 0.2% and 34% for big units. Almost 2 mln new enterprises counted to the SME sector are created every year.

The structure of Polish sector of small and medium-sized enterprises is similar to the EU structure: small firms, employing less than 50 persons, constitute 99%; 0.8% are made up by the medium-sized firms; and 0.2% are big firms [Raport, 2002].

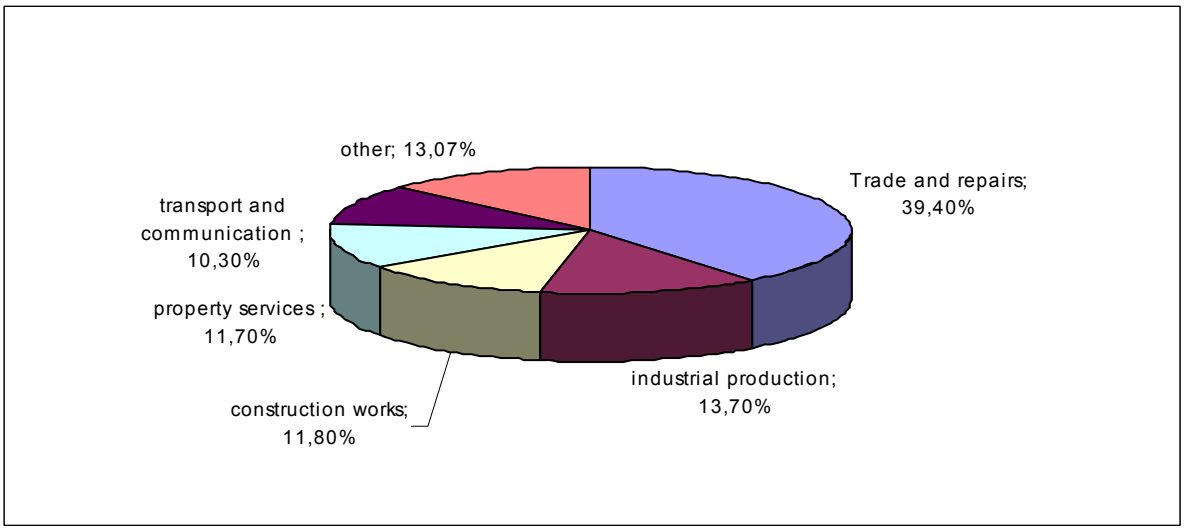
According to the data provided by Polish Agency for Entreprise Development, these units are mainly involved in trade or provide repair ser-

Table 1

Small and medium-sized enterprises in Poland according to the European Union criteria

Criterion	Microenterprises	Small enterprises	medium-sized enterprises
Number of employees	<10	<50	<250
Annual revenue Balance sheet	-	<7 mln euro <5 mln euro	<40 mln euro <27 mln euro
Independence	-	No more than 25% of capital or votes of the shareholders' assembly may be owned by the enterprise which is not SME	

Source: *Broda M., Szubra M., Small and medium sized enterprises in the EU, 2004.*



Source: *Report on the state of SME sector in Poland in 2000-2001, 2002, PARP, Warsaw.*

Fig. 1 **Structure of persons employed in the SME sector as of the end of 2002 (%)**

vices (39.4%), are engaged in industrial production (13.7%), construction works, provide property services or deal with transport and communication (Fig. 1).

Altogether 29% of the total number of small and medium-sized enterprises operate in the *śląskie* and *mazowieckie* provinces, whereas the greatest number per 1000 inhabitants are noted in the *mazowieckie* (56) and *zachodniopomorskie* (55). The index is the lowest in the *podkarpackie* (31), *lubelskie* (33), *podlaskie* (35) and *warmińsko-mazurskie* (38) provinces. In the *malopolskie* province, the index assumes value 47, i.e. approximate to the national average (45.6) [Raport …, 2002].

Small enterprises in food industry are seeking production niches, which allows them to extend their food product offer on the market. They also strive to extend the assortment of cheaper food products on local markets, at the same time increasing their accessibility for poorer social groups.

The role of SMEs is greatly diversified in individual branches of food industry (Table 2).

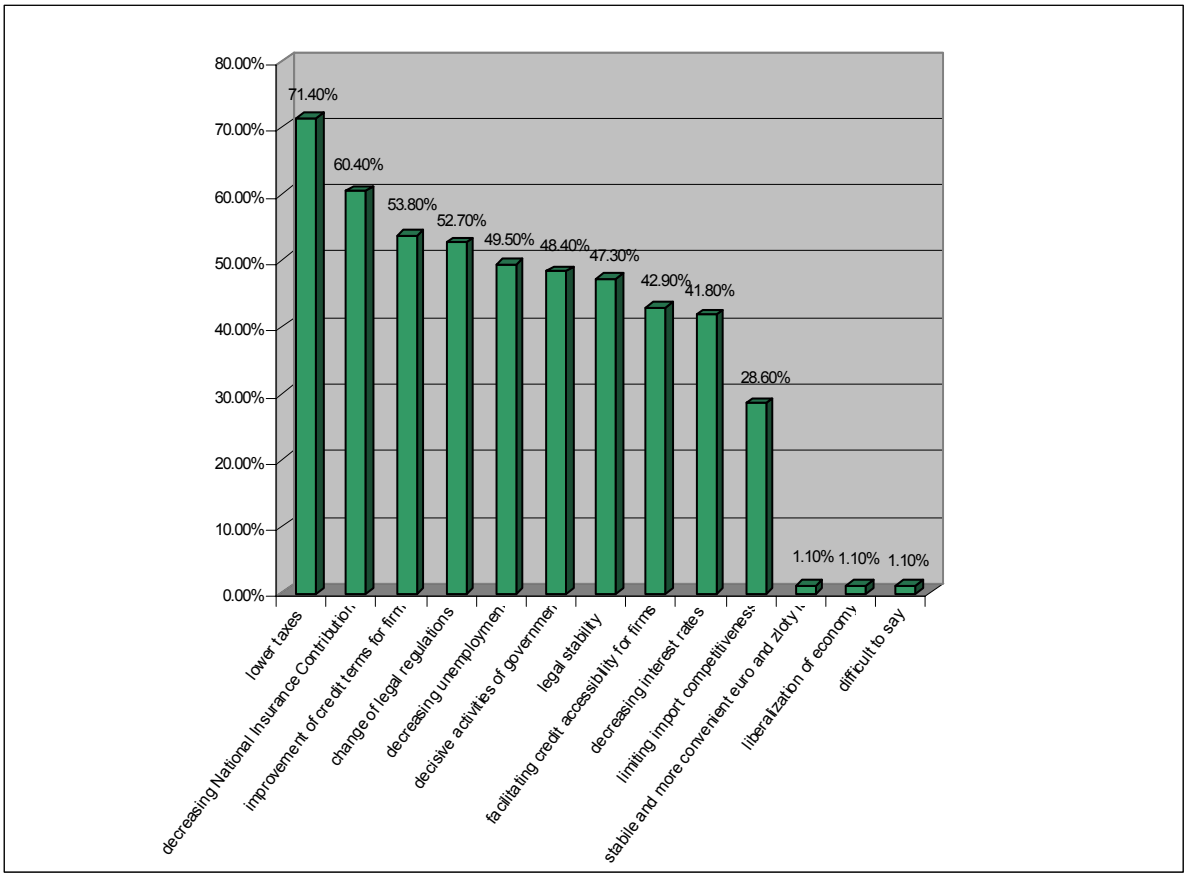
There are areas where big enterprises have already won the competition with medium-sized and small firms (bakery product manufacturing, meat processing or fruit and vegetable processing). Besides, there are departments of processing where small and medium-sized enterprises are of primary

Table 2

Structure of food industry enterprises in 2002

Food processing branches	Number of enterprises			Share in branch firm profits in %	
	small	medium sized	big	small	medium sized
Meat and poultry processing	1338	260	91	24.7	27.9
Fish processing	174	47	13	15.5	35.6
Milk processing and ice cream manufacturing	126	228	81	3.9	37.7
Fruit and potato processing	311	122	54	14.6	32.8
Oil and margarine manufacturing	6	5	10	0.5	6.0
Cereal processing	167	65	11	24.0	43.8
Fodder production	193	51	7	21.6	35.5
Sugar manufacturing	1	22	54	0.5	21.3
Bakery product manufacturing	2471	132	12	61.2	23.6
Manufacturing of other foodstuffs	600	144	60	11.6	30.5
Non-alcoholic beverages production	210	52	7	12.7	24.5
Alcoholic beverages production	153	70	38	11.6	17.9
Production of food and beverages	**5750**	**1198**	**438**	**17.2**	**28.9**

Source: *Statistical Yearbook CSO, 2004, Warsaw.*



Source: *Studies conducted by Agency of Market Studies "Opinia", 2002, Warsaw.*

Fig. 2 **The areas which should be changed, improved or adjusted to the entrepreneurs' needs**

importance (corn milling, fodder production, and non-alcoholic beverages manufacturing).

Activation of rural areas and liquidation of differences in development between various regions of Poland requires establishment of small enterprises engaged in production and processing of food.

Therefore small and medium-sized enterprises from the agri-food sector should seek their chances of development in:

1) initial processing of agricultural products to prepare these products for retail sales;
2) specialization of production of a determined line of food products;
3) production of customized commodities for large commercial networks;
4) production of regional food products, organic foods;
5) development of new directions in processing, e.g. catering;
6) filling market niches, omitted by large producers.

In their efforts to keep up with changes occurring on the market, Polish enterprises face numerous difficulties comprising mainly: deficiency of necessary information and comprehensible, clearly stated legal regulations which moreover are frequently changed thus thwarting any economic activity. Fiscal policy in Poland does not support financially the SMEs, which makes them use other sources of finance, favouring their competitiveness.

Studies conducted by the Agency of Market Studies "Opinia" revealed the areas which should be changed, improved or adjusted to the entrepreneurs' needs. It would make possible creating opportunities to overcome the stagnation. Tax cuts (71.4%), too high labour costs and National Insurance Contributions (60%) are the elements most contributing to stagnation.

Conclusions

1. The areas where big enterprises have already won the competition with medium-sized and small firms are bakery product manufacturing, meat processing or fruit and vegetable processing.
2. The small and medium-sized enterprises are of primary importance (corn milling, fodder production, and non-alcoholic beverages manufacturing).
3. The elements most contributing to stagnation are, for example tax cuts (71.4%), too high labour costs, and National Insurance Contributions (60%).
4. Polish enterprises face numerous difficulties comprising mainly deficiency of necessary information and comprehensible, clearly stated legal regulations which moreover are frequently changed thus thwarting any economic activity.

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Fuel Market in Latvia

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The paper focuses on the development of fuel market in Latvia in recent years. The biggest companies and market share occupied by them is shown, changes in fuel prices are analysed and causes for changes are depicted. The article is based on the unpublished materials of Latvian Gasoline Trade Association and State Revenue Service, the author's own investigations and research.

***Key words**:* fuel, market, sales, import, prices.

Introduction

Fuel market plays an important role in the macroeconomic policy of Latvia, as the excise tax received from the sold fuel constitutes an important part of the public budget income. Its proportion has increased from 5.5% in 1999 to 5.9% in 2004[1].

Fuel market influences the living standard of all the society either directly or indirectly (owners of private means of transport and users of public transport), its costs and the surrounding environment in general. As a result the surrounding environment and our health is influenced negatively by the substances originated from the burning of fuel.

At the moment the following types of fuel are used: oil products (gasoline and diesel fuel), liquid gas (gas), and in comparatively small amounts also biogas – biodiesel fuel and biogas acquired from biological mass (resource of organic origin) which can be used in internal combustion engines.

As the number of transport vehicles increase the demand for different types of fuel also increase. Environmental protection problems become more topical, as well as the demand for safe ecological resources. It is determined by the EU regulations, too.

The European Union regulations demand to increase the proportion of biofuel. The EU directives determine the use of ecologically cleaner heating fuel, recommend gradual transfer to renewable energy sources which would create changes in the perspective structure of fuel market.

The hypothesis of the research: fuel market shows increasing tendencies.

The aim of the paper is to study the development of fuel market and the changes in the fuel market players of Latvia.

The objectives raised for the achievement of the aim:

1. to study the changes in the total volume of fuel sales and its structure;
2. to show the increase of excise tax and its role in the public budget;
3. to estimate the biggest market players and their part in the market net turnover;
4. to analyse the increase of fuel prices.

Methods. Market research methods for defining the market share division, logical constructive method, method of comparison, monographic method, statistical research method and graphic method are used for the data processing.

The report is based on the author's theoretical and practical knowledge and investigations connected with the development of fuel market in Latvia.

Theoretical and scientific literature, as well as the information collected from the market players, materials of the Central Statistical Bureau,

[1]Public consolidated common budget, income mill. LVL http://www.csb.lv/Satr/rad/B1a.cfm?kurs3=B1a- resource was inspected on December 4 th, 2005

Internet materials, unpublished materials of the companies, and official unpublished materials of the State Revenue Service are used for the elaboration of the paper.

Results

Fuel market in Latvia gradually becomes coordinated and the progress finds expression in the increase of sales volume. Gasoline, diesel fuel, kerosene, and oil gas are systematically sold in the market, but starting from 2004 – also biogasoline and biodiesel fuel.

In Table 1 we can see that general sales of oil products in the period between 2000 and 2004 gradually increases. The chain increase rate is 4.2 %, but the base increase rate is 13.9% The largest volume of oil products is sold in 2001, but the least volume in 2000. Evaluating the general sales structure we can see that diesel fuel has the biggest proportion: from 41.5% to 55.9%, next follows the sales of gasoline, the proportion of which exceeds 30%.

The increase of fuel sales volume is closely connected with the increase in the number of transport vehicles. It is linked with:

Table 1

Total sales volume and structure of oil products (fuel) in the market of Latvia between 2000 and 2004

Oil products (fuels)	2000	%	2001	%	2002	%	2003	%	2004	%
Gasoline (benzine), th.t	245 .2	28.2	355 .7	33.8	348 .4	34.4	344.1	36.9	334,4	34.4
Chain increase rate,%			*45.1*		*-2.1*		*-1.2*		*-2.8*	
Base increase rate,%			*45.1*		*42.1*		*40.3*		*36.4*	
Diesel fuel, th.t	486 .2	55.9	437.4	41.5	437.0	43.3	475 .7	51.0	498,8	51.3
Chain increase rate,%			*-10.0*		*-0.1*		*8.9*		*4.9*	
Base increase rate,%			*-10.0*		*-10.1*		*-2.2*		*2.6*	
Fuel oil, th.t	120 .5	13.7	238 .5	22.7	201,3	19.9	86,7	9.3	80,1	8.2
Chain increase rate,%			*97.9*		*-15.6*		*-56.9*		*-7.6*	
Base increase rate,%			*97.9*		*67.1*		*-28.0*		*-33.5*	
Kerosene, th.t	1 .4	0.2	0.4	0	0.4	0.1	0.7	0.1	27,1	2.8
Oil gas, th.t		2.0	20.6	2.0	23 .7	2.3	25.6	2.7	28.1	2.9
Biogasoline, th.t	-	-	-	-	-	-	-	-	3.4	0.4
Biodiesel, th.t	-	-	-	-	-	-	-	-	0.1	0
Total:	**853,3**	**100**	**1052. 6**	**100**	**1010.8**	**100**	**932.8**	**100**	**972.1**	**100**
Chain increase rate,%			*23.4*		*-4.0*		*-7.7*		*4.2*	
Base increase rate,%			*23.4*		*18.5*		*9.3*		*13.9*	

Source: *Calculations done by the author according to the unpublished data of the State Revenue Service.*

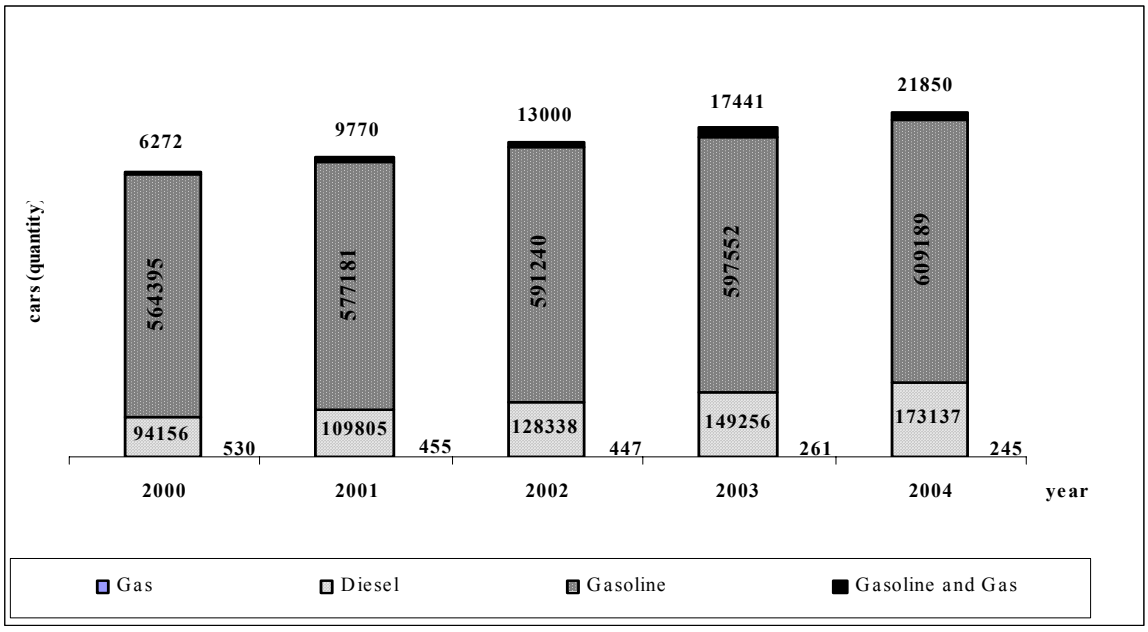
- the growth of welfare due to the economic development of the state;
- leasing possibilities used for the purchase of cars;
- the development of transporting sectors and their services.

The comparison depicted in Figure1 shows the increase in the units of transport registered by the Road Traffic Safety Department: the chain increase rate is 5.2%, but the base increase rate is – 20.9%. Depending on type of fuel used the largest rates of increase are for the car group using gasoline/benzine & gas: the chain increase rate – 25.3%; the base increase rate – 248.4%. Cars fitted for diesel fuel are the second largest group with the chain increase rate 16% and the base increase rate 83.9%. In 2004 proportionally the largest number of cars were equipped with gasoline/benzine engines– 75.7% and diesel engines– 21.5%.

Imported fuel is sold in Latvia. The biggest fuel importer is Mažeikiai Oil. Gasoline market share is approximately 80%, but for diesel market the share is smaller – approximately 30%[3]. At the moment 53.7% of Mažeikiai Oil shares belong to a Russian oil company Yukos, while the second largest share - owner is the state of Lithuania with 40.66% of shares [4]. The largest volume of gasoline is taken from Lithuania, also from Finland, Norway, a little bit from Denmark, Slovenia and Belarus.

Diesel fuel is imported from Belarus and Lithuania[5]. In 2004 the largest oil product importers in Latvia were Latvia Statoil, Lukoil Baltija and Kurzemes Degviela[6].

Table 2 reveals that in general the volume of imported fuels increase: the chain increase rate – 13.3% and the base increase rate 54.4%. The analysis of oil product import by groups of products show



Source: *author's figures according to*[2].

Fig. 1 **Dynamics of the number of cars by type of fuel used**

[2] Stroža M. Laws "incise".// Dienas Bizness. –Nr.199 (2005), page 2

[3] Lithuanian government will borrow three billion Litas for ransoming of " Mažeikiai Oil" shares. http://www.lukoil.lv/index.php: resource was inspected on September 21st,2005

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[5] Research on fuel market in Latvia: http://www.fm.gov.lv/print.php?id=2044: resource was inspected on November 3rd, 2005

[6] Gasoline retail prices in Latvia last year diminished by 2 %: http: //www.delfi.lv/archive/index.php?id=10631502 resource was inspected on March 15th, 2005

Table 2

Volume of imported fuel in the Republic of Latvia and its structure between 2000 and 2004

Oil products (fuels)	2000.	%	2001	%	2002	%	2003	%	2004	%
Gasoline/benzine, th,t	294.4	32.3	311.8	29,0	280.1	33.8	328 .4	33,6	328.7	29.7
Chain increase rate,%			*5.9*		*-10.2*		*17.2*		*0.1*	
Base increase rate, %			*5.9*		*-4.9*		*11.5*		*11.7*	
Diesel fuel, th.t	148.6	27,7	348.7	41.4	357.7	45.1	511 .0	52.2	579.1	52.2
Chain increase rate,%			*134.7*		*2.6*		*42.9*		*13.3*	
Base increase rate, %			*134.7*		*140.7*		*243.9*		*289.7*	
Fuel oil, th.t	241.1	35.8	271.7	26.7	228.2	17.6	113.4	11.6	135.3	12.2
Chain increase rate,%			*12.7*		*-16.0*		*-50.3*		*19.3*	
Base increase rate, %			*12.7*		*-5.4*		*-53.0*		*-43.9*	
Kerosene, th.t	2.7	0.6	1 .5	0.2	0.7	0.1	0.7	0.1	28.0	2.5
Oil gas, th.t	31.2	3.6	21 .5	2.7	25.1	3.4	25 .2	2.5	27.0	2,4
Biogasoline, th.t									10,5	1.0
Biodiesel, th.t									0.04	
Total	**718.0**	**100**	**955.2**	**100**	**891.8**	**100**	**978.7**	**100**	**1108.6**	**100**
Chain increase rate %			***33.0***		***-6.6***		***9.7***		***13.3***	
Base increase rate, %			***33.0***		***24.2***		***36.3***		***54.4***	

Source: *Calculations done by the author according to the unpublished data of the State Revenue Service.*

Table 3

Dynamics of the number or gasoline filling stations in Latvia (2001 – 2004)

Indicator	2001	*%*	2002	*%*	2003	*%*	2004	*%*
Liquid gas, gasoline filling stations (GFS)	98	*15*	112	*16*	122	*17*	122	*18*
Gasoline filling stations	564	*85*	581	*84*	577	*83*	572	*82*
TOTAL	**662**	***100***	**693**	***100***	**699**	***100***	**694**	***100***

Source: *Calculations done by the author according to the unpublished data of the State Revenue Service.*

that the largest proportion is constituted by import of diesel fuel– 52.2% and gasoline /benzine – 29.7%. The proportion of gasoline import has decreased compared to the previous years data (see Table 2). Most of all oil products were imported in 2004 and the smallest amount in 2000.

In retail fuels is purchased in gasoline filling stations (GFS), the number of which increases.

The data summarised in Table 3 on the number of gasoline filling stations (GFS) in Latvia show that the total number of GFS has changed between 2001 and 2004 – the base increase rate

is 4.8%. The total number of GFS has increased by 1% when comparing the years 2004 and 2001. The number of oil product FS has decreased for 1% comparing years 2004 and 2003.

The number of liquid gas FS has increased by 24% when comparing the years 2004 and 2001. During the last two years the number of liquid gas filling stations is stable.

Safety demands increase with every year. It is necessary to purchase new equipment to meet the demands. Thus a lot of investment is needed. The result is – the existence for many small scale gasoline filling stations will become non-efficient and non-profitable. They will be liquidated or integrated in to the other wholesalers' networks.

It is a problem to develop fuel sales business in less inhabited territories. Fuel smuggling from Russia and Belarus also obstructs. In the border area with Russia it is difficult to find a prosperous GFS. Latest activities and operations in combating smuggling are highly appreciated which is testified by detention of smugglers and increase in the excise tax collection. Especially successful is combating of diesel fuel thievery LatRosTrans Ltd, pipeline that is a significant source for smuggled fuel.

Oil product sales is excised and the tax is gradually increased.

The main aim for the levy of excise tax is to secure the public budget income. The comparison of the excise tax rates in Latvia with the ones in other EU countries, the lowest rates allowed by the EU directives are applied in Latvia. Latvia has been assigned a transition period for defining the excise tax rate – for gasoline until 2011 but for diesel fuel – until 2013[7].

In 2003 the total excise tax income for the income from oil product excise accounted for the highest rate or 6,1% [8].

In accordance with the law "On Excise Tax" (see Table 4) adopted on January 1, 2005 the excise tax rate for plumbiunferous gasoline is increased from LVL 174 to LVL 192 per 1000 litres, for diesel fuel and kerosene – from LVL 148 to LVL 164 per 1000 litres[9].

As you can see in Table 5 the income from excise tax from oil products increases: in 2004 the chain increase rate is 15.7% and the base increase rate is 38.7%. The income from excise tax from oil products in 2004 was LVL 148.4 mill. which is by LVL 20.2 mill. or 15.7% more than in 2003.

As it can be seen in Table 6 the proportion of excise tax in the public budget increases and it has been in the range between 5.1% and 6.1% for the last years.

Table 4

Excise tax rates for oil products, LVL per 1000 l

Indicator	01.01. 1999.	2000		2001		2002		01.01. 2003.	01.05. 2004.	01.01. 2005.
		01.01.	13.03.	01.01.	28.06.	01.01.	23.03.			
Plumbiunferous gasoline	140	160	160	160	160	160	160	160	174	192
Plumbiferous gasoline	160	190	190	210	210	210	210	210	255	281
Diesel fuel	100	130	130	130	100	100	100	100	148	164
Kerosene	100	130	130	130	100	100	100	100	148	164
Fuel oil	2	-	2	4	4	5	7	7	9	10

Source: *Calculations done by the author according to the unpublished data of the State Revenue Service.*

[7] On fuel excise tax : http://www.fm.gov.lv/page.php?id=1931: resource was inspected on November 4th, 2005

[8] Account on economic year on performance of budget and on municipality budgets Saimnieciskā gada pārskats par valsts budžeta izpildi un par pašvaldību budžetiem 2000 – 2004: http://www.vkase.gov.lv/?sadala=34: resource was inspected on December 12th ,2004

[9] Draft of development of macroeconomics and fiscal policy in 2006 – 2010 http://ppd.mk.gov.lv/ui/DocumentContent.aspx?ID=4256

Table 5

Excise tax collected from oil products (1998 – 2004)

No.	Year	mill. LVL	Chain increase rate %	Base increase rate %
1	1998	107,0		
2	1999	88,0	*-17,8*	*-17,8*
1	2000	89,5	*1,7*	*-16,4*
2	2001	85,7	*-4,2*	*-19,9*
3	2002	101,3	*18,2*	*-5,3*
4	2003	128,2	*26,6*	*19,8*
5	2004	148,4	*15,7*	*38,7*

Source: *Internet information summarized in the author's table.*

Table 6

Amount of the excise tax and its proportion in the public budget income (1999 – 2004)

Year	Excise tax for oil products, million LVL	Combined budget income, million LVL	Proportion %
1999	88,0	1589,2	**5,5**
2000	89,5	1623,2	**5,5**
2001	85,7	1696,9	**5.1**
2002	101,3	1874.0	**5.4**
2003	128,2	2107.4	**6.1**
2004	148,4	2522.2	**5.9**

Source: *Calculations done by the author according to the Central Statistical Bureau web site* [10].

The rise or fall in fuel prices is influenced by the price of crude oil in the world, the creation of fuel reserves in Latvia, and the rate of excise tax. Latvian market is affected by big companies, which are the following ones: Astarte nafta, Neste Latvija, Viada Ltd, Latvija Statoil Ltd, Shell Latvija Ltd, Hydro Texaco, and Lukoil. Since 2003 Latvija Statoil Ltd is a marked leader in the market controlling 14.2% of gasoline fuel retail sales in Latvia, but after taking over Shell GFSs, about 22% of the market is under its influence. If leaders of the market rise prices the rest of companies do the same. If they lower the prices the rest are forced to do the same. Gasoline companies in Latvia try to make accumulations after following gasoline price rises. Thus when a sudden jump-up of oil prices happen, theoretically the companies are able to sell fuel purchased before and without raising prices. The purchasing power of the population also influences the fuel market prices in Latvia and gasoline sellers take it into account.

Juris Paiders, a journalist of the newspaper "Neatkarīgā avīze" in his article commenting on gasoline prices say that Latvia is one of the EU member states and fuel prices in Latvia, Lithuania and Estonia are remarkably lower than the average fuel prices in the European Union. In the old EU member states gasoline price is more than EUR 1 per litre. It means that Latvian gasoline and diesel fuel prices gradually will have to approach the EU price level. But it is a perspective of several years. At the moment prices are rising in this country as well as in other countries of the EU. Two main factors are determining price level: firstly, the changes in oil prices, and secondly, the relations between EUR and USD exchange rate.

[10] Public consolidated common budget, income mill. LVL http://www.csb.lv/Satr/rad/B1a.cfm?kurs3=B1a: resource was inspected on December 4th, 2005

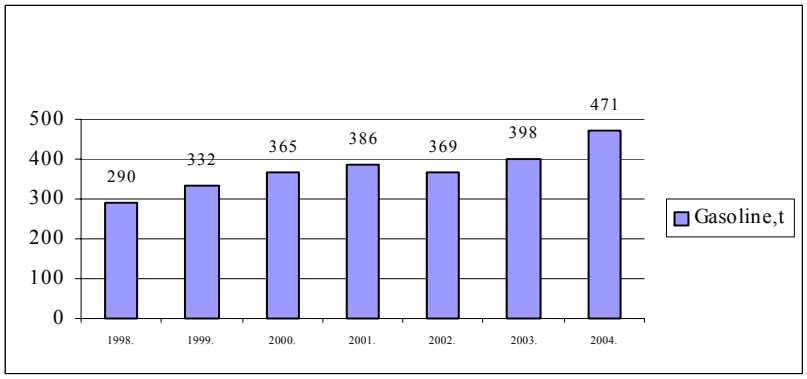
Oil prices in the world market are determined by demand for oil and oil production/extraction (offer) volume. For more than one year now the demand for oil increases faster than its production because more and more oil is necessary for economies in China which has become the fourth biggest world economy. Due to China's demand at least now there are no tendencies for prices to fall.

Gasoline and oil prices in the world market are determined in US dollars. It means – if oil (and gasoline) prices stay stable but the exchange rate of USD increases in relation to EUR and LVL (which is pegged to EUR) oil prices in EUR and LVL increase even if the price level for oil and gasoline in the world stay the same. If oil prices go up and at the same time the US dollar rate increases, fuel (gasoline) prices in Latvia rise twice faster.[11].

In Latvia there is a conventionally most expensive fuel in the European Union if commensurable values are compared: wages and gasoline price, since the lowest minimum wage in the EU, i.e., LVL 80 per month is determined in Latvia.

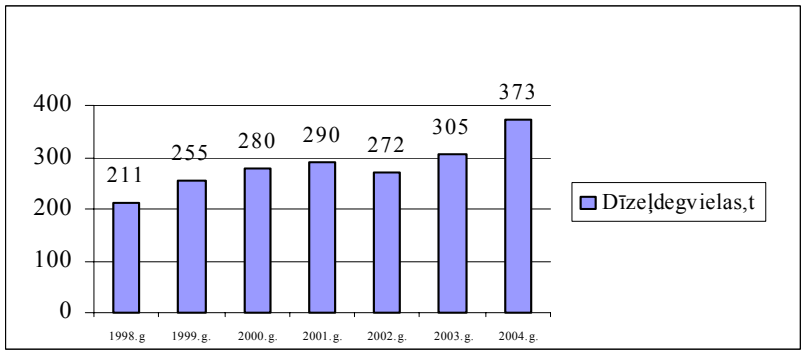
We could notice gasoline price fall in Latvia in 2002, which was caused by the fall of crude oil price in the world market. In 2003 there was a rise in gasoline prices due to the war in Iraq, rebellions in Venezuela and rise of crude oil prices. The difference between gasoline and fuel price for different companies in gasoline filling stations fluctuates in the range of 1- 1.5 santims.

Remarkable price growth is seen in 2004. It is connected with several reasons: the news on an impressive decrease in crude oil resources in the USA, and blocking of the Russian oil giant Yukos account. The officials of the company Yukos answered with a warning on the possible fall in crude oil export volume.



Source: *Calculations done by the author according to the Central Statistical Bureau* [12].

Fig. 3 **The average wholesale prices for diesel fuel (excluding VAT) in LVL per 1000 l**



Source: *Calculations done by the author according to the Central Statistical Bureau* [12].

Fig. 2 **The average wholesale prices for gasoline (excluding VAT) in LVL per 1000 l**

[11] Paiders J. Fuel prices upstage all records // Neakarīgā. –Nr.79(2005), page 2

[12] Energy balance in 2004.(2005) Central Statistical Bureau, Riga, page 74

As it is seen in Figure 2 the average wholesale prices for car gasoline have a tendency to go up. The largest chain increase rate was in 2004 - 18.3 % and the smallest chain increase rate was in 2002: -4.4%. The base increase rate in 2004 is 76.8%.

In Figure 3 the average prices for diesel fuel show a tendency to rise: in 2004 the chain increase rate was 22.3%, the base increase rate 76.8%. The smallest chain increase rate in 2002 was 76.8%.

The biggest fuel seller (see Table 7) following by net turnover in 2002 was the stock company Kurzemes degviela that kept the leading position also in 2003. The biggest rise in net turnover in 2004 was observed for the company Latvija Statoil Ltd – 200.1%. In comparison with 2002 Latvija Statoil Ltd is the leader in Latvian market.

The evaluation of the biggest market players, and market shares shows that they have fluctuated during the last three years.

In 2002 (Figure 4) the biggest share is taken by the JSC Kurzemes degviela - 42%. The share of the rest players ranges between 11% and 19%.

In 2003 the company Kurzemes degviela as a market leader has decreased its share in the market by 5% compared to year 2002, but the share of Latvija Statoil Ltd has increased by 6%.

In 2004 a new member has joined the market – Mažeikiai Nafta Tirdzniecības nams Ltd, which acquired 23% of the market. The biggest share of the market belongs to Latvijas Statoil Ltd – 27%. During the period of analysed the market share of the company Latvija Statoil Ltd has increased by 8%, as the company has purchased and incorporated another company – Shell Ltd.

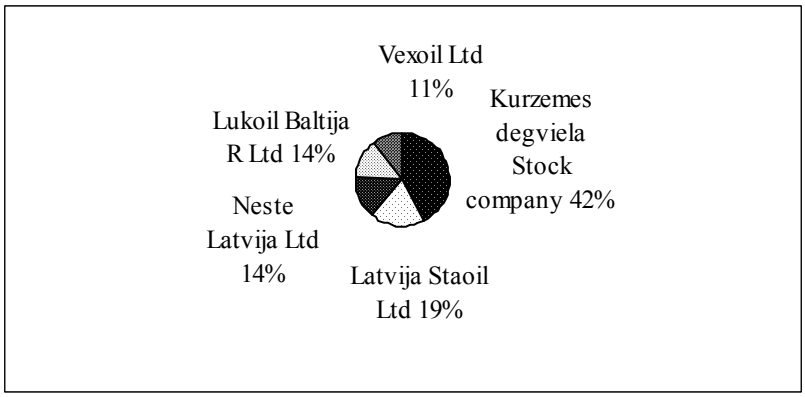
Company Vexoil Ltd. has tipped out of the market, as it could not stand the existent competition.

Table 7

The biggest gasoline traders by net turnover mill. LVL (2002 – 2004)

No	Company	2000	2003	2004	2004 % comp. to 2002
1	Latvija Statoil Ltd	55,29	77,81	110,64	**200.1**
2	Mažeiķu nafta Tirdzniecības nams Ltd	-	-	89.53	
3	Kurzemes degviela, Stock company	127,15	111,03	81,56	**- 35.9**
4	Neste Latvija Ltd	42,59	56,98	58,31	**136.9**
5	Lukoil Baltija R Ltd	40,43	35,35	56,21	**139.0**
6	Vexoil Ltd	31,57	29,24	28,87	**- 8.6**

Source: *the author's table according to the data of DB Top500* [13] [14].

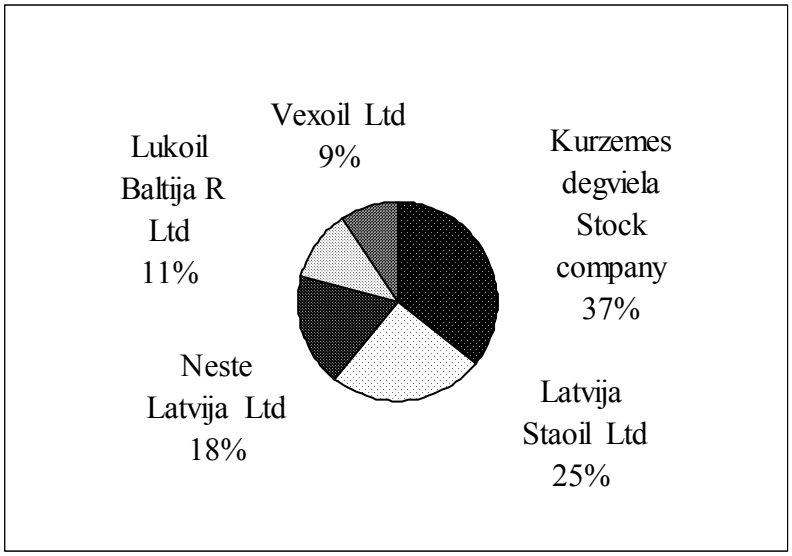


Source: *the author's figure according to the data of Dienas Bizness TOP* .

Fig. 4 **The biggest market players–wholesalers and their shares in the market in 2002**

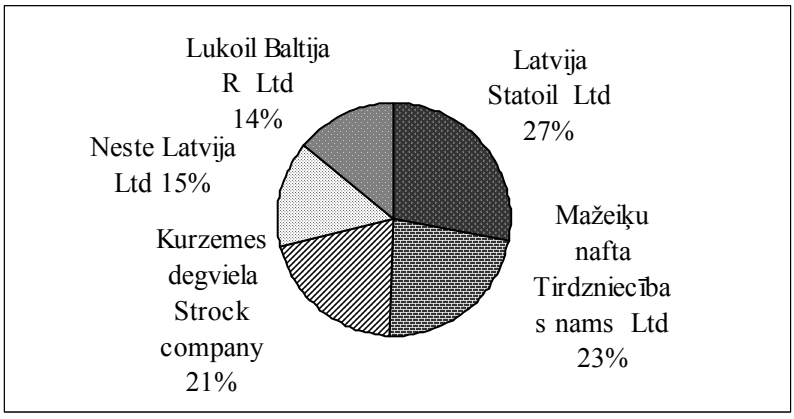
[13] Stroža M. Legalization of the market goes on. Leaders do not give up their places//Dienas Bizness Top500 (2004). page 68

[14] Stroža.M. Rise in prices does not diminish consumption // Dienas bizness Top500 (2005) page 78



Source: *the author's figure according to the data of Dienas Bizness TOP.*

Fig. 5 **The biggest market players–wholesalers and their shares in the market in 2003**



Source: *the author's figure according to the data of Dienas Bizness TOP.*

Fig. 6 **The biggest market players–wholesalers and their shares in the market in 2004**

Conclusions

1. Latvian fuel market is stable and it has a tendency to grow.
2. Mainly gasoline/benzine and diesel fuel are used by transport vehicles in Latvia. The sales volume of these fuels has grown in the last years.
3. The number of gas filling stations (GFS) in Latvia has increased from 662 in 2001 to 694 in 2004 or by 5.6 %.
4. The income from collected tax has increased and its proportion in the public budget exceeds 5% with the increase of the excise tax rate.
5. The wholesale prices for fuel gradually increase. It is connected with the rise of crude oil price in the world.
6. Latvija Statoil Ltd is a leader in the fuel market. Its market share has increased from 19 % in 2002 to 27 % in 2004.

Proposals

1. To increase the number of fuel importers thus preventing position of Mazeikiai Oil as a monopoly importer in Latvian fuel market.
2. To continue operations and actions on the state level to prevent the entrance of smuggled fuel into the fuel market.
3. In the coming years to increase the use of income received as the excise tax for the improvement and repair of motorways with the aim to decrease car fuel consumption.

4. On the state level to stipulate enterprises for faster development of biofuel production in Latvia.

Anotācija

Darbā apskatīta degvielas tirgus attīstība Latvijā pēdējo gadu laikā, parādīti lielākie tirgus dalībnieki un to aizņemtās tirgus daļas izmaiņas, analizētas degvielas cenu izmaiņas un atsegti izmaiņu izraisošie faktori. Darbs pamatojas uz Latvijas Degvielas tirgotāju asociācijas un VID nepublicētiem materiāliem un autora personīgajiem novērojumiem un pētījumiem.

***Atslēgas vārdi**: degviela, tirgus, realizācija, imports, cenas.*

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Loģistikas centru izveide laukos kā partnerības aktivizētājs
Establishment of Logistics Centers in the Country as Activation of Partnership

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Abstract

Success in business mainly depends on the ability and possibility to sell and not on production. Many businesses do not develop successfully as they have problems with delivering products to the market and with adoption of market. Long distances, poor transportation infrastructure and transportation costs cause financial losses. Worldwide experience shows that farmers' corporation can be a great help in solving this problem. By doing this there is a possibility for division of labor, realization of financially large projects such as advanced storage areas, pretreatment workshops and creation (establishment) of common transportation base. Formation of logistics centers in the country's territories is a possibility for farmers to hand expensive and complicated functions over to specialists. This will allow paying more attention to basic activities and optimizing costs of product promotion, as a result lowering products' costs and increasing individual farmer's ability to compete at global market. Activity of logistics centers will include all possible services that are connected with product delivery to its direct consumers.

Atslēgas vārdi: kooperācija, integrācija, globalizācija, loģistikas centri.
Key words: *cooperation, integration, globalization, logistics centers.*

Ievads
Introduction

Pēc Latvijas nokļūšanas ES un globalizētajā tirgū, arvien vairāk Latvijas zemnieku saprot, ka, ražojot un piedāvājot nelielus produkcijas apjomus, nav iespējams nopietni konkurēt ar produkcijas piegādi pārtikas vai lauksaimniecības izejvielu tirgū. Tirdzniecības modernizācija lielveikalu tīklos pieprasa lielas partijas drošas, lietošanai sagatavotas un kvalitatīvas produkcijas, ko nevar piedāvāt sīkzemnieki vai mazas zemnieku saimniecības.

Tāpēc arī laukos palielinās nepieciešamība pēc integrācijas procesiem, t.i., piegādāt tirgū patēriņam piemērotu, apstrādātu produkciju vai pat pusfabrikātus. Zināms, ka pirmapstrāde kvalitatīvi ir veicama ar dārgām iekārtām, kādas ne katrs komerciālais lauksaimnieks spēj iegādāties un uzturēt. Pat piesaistot bankas hipotekāro kredītu, zemniekam draud briesmas nonākt maksātnespējas situācijā un pazaudēt savu īpašumu. Pasaules pieredze liecina, ka šīs problēmas sekmīgi var risināt loģistikas uzņēmums. Viena no loģistikas organizācijas formām var būt zemnieku kooperācija, jo tās ietvaros ir iespējama gan darba dalīšana, gan arī finansiāli lielu projektu realizācija, kādi varētu būt modernu noliktavu, pirmapstrādes cehu un kopīgas transporta bāzes izveidošana. Loģistikas problēmas Latvijā pētītas vēl ļoti maz. Vispārēji ieteikumi ir ASV profesora G. Ķeniņa-Kinga grāmatā „Modernā apgāde" (2000). Vairāku pētījumu rezultātu apkopojums atrodams N. Krūmiņa grāmatā „Rokasgrāmata loģistikas sistēmu vadīšanai" (2004). Abi minētie autori galveno akcentu liek uz preču plūsmu nodrošināšanu un laika un izmaksu ekonomiju saistībā ar transporta un uzglabāšanas pasākumiem, īpaši neuzsverot integrēto loģistiku un pirmapstrādes vai pārstrādes funkciju pārdali tās ietvaros. Visjaunākie pētījumi un tieši par loģistiku primārajā sfērā – dārzeņu ražošanā – publicēti A. Radželes un K. Špoģa rakstā „Loģistikas kvalitāte primārajā sfērā" (2005). Nav publicētu pētījumu datu par kooperācijas izmantošanu loģistikas uzņēmumu veidošanā. Gan loģistikai, gan kooperācijai var saskatīt daudz kopīgu iezīmju, tādēļ konceptuāli pieņemams, ka kooperācijas pamatprincipi varētu noderēt loģistikas centru veidošanai.

Veidojot loģistikas centrus lauku teritorijās, iespējama zemniekam dārgo un sarežģīto funkciju nodošana speciālista pārziņā, kas ļautu ne tikai vairāk uzmanības veltīt pamatdarbības jautājumiem, bet arī optimizēt ar produkcijas virzīšanu saistītās izmaksas, tādējādi pazeminot preces pašizmaksu un palielinot atsevišķo zemnieku konkurētspēju globālajā tirgū.

Situācijas analīze arī rosināja pētījuma tēmas izvēli, un autore izvirza hipotēzi, ka loģistikas procesi laukos varētu veicināt lauku teritoriju attīstību, jo to pamatprincipu ieviešana nodrošinātu lauksaimnieciskās ražošanas integrāciju un kooperāciju.

Pētījums balstās uz monogrāfiskās, analīzes un sintēzes, dedukcijas un indukcijas, statistisko datu izpētes un grafiskā attēlojuma metodēm.

Darba mērķis: izvērtēt loģistikas pamatprincipu ieviešanas iespējas Latvijas lauku teritorijās, veidojot loģistikas centrus.

Darba uzdevumi:

- izvērtēt pašreizējo lauksaimnieciskās ražošanas funkcionālo struktūru zemnieku saimniecībās;
- izstrādāt funkcionālās struktūras iespējamās izmaiņas, izveidojot un ieviešot loģistikas centrus;
- izpētīt loģistikas centru ieviešanas piemērus Latvijas laukos.

Pētījuma rezultāti
Results

1. Loģistikas un kooperācijas teorētiskās kopsakarības

Pēdējos gados, kad ražošanas un sadales process ir apgrūtināts ar resursu izmaksu un pārvadājumu attālumu palielinājumu, kooperācija var pozitīvi ietekmēt jebkura ražotāja saimnieciskos un finansiālos rezultātus. Globalizācijas procesi ir tie, kas rada nepieciešamību ieviest un izmantot pasaulē plaši pazīstamos loģistikas pamatprincipus un sistēmas, jo loģistikas teorētiskās nostādnes būtībā izaugušas no tādām jau sen apgūtām teorētiskām nostādnēm, kā mārketings, kooperācija un integrācija. Pētot Oksfordas Universitātes atzīto Ekonomikas un biznesa terminoloģijas vārdnicā [14] sniegto terminu "kooperācija, integrācija un loģistika" teorētiskos traktējumus, saskatāmas zināmas līdzības. Kooperācija tiek traktēta kā divu vai vairāku dalībnieku apvienošanās atsevišķu specifisku funkciju veikšanai, bet horizontālā integrācija savukārt kā divu vai vairāku uzņēmumu darbību apvienošana vai kombinēšana atsevišķos ražošanas procesa līmeņos. Latvijā spēkā esošais „Kooperatīvo sabiedrību likums" [4], 3. pantā skaidrojot kooperatīvo sabiedrību funkcijas un pamatprincipus, šo procesu traktē kā brīvprātīgu fizisko un juridisko personu apvienošanos ar mērķi palielināt savu biedru saimnieciskās darbības efektivitāti, norādot, ka kooperatīvās sabiedrības ir tiesīgas sniegt vienīgi pakalpojumus. Daudzos gadījumos uzņēmējdarbības veiksme atkarīga ne tikai no preces ražošanas, bet galvenokārt no prasmes un iespējām to realizēt. Daudziem uzņēmējiem tieši preces nogādāšana tirgū un tirgus apguve ir faktori, kas neļauj veiksmīgi attīstīties, jo lielo attālumu, sliktās transporta infrastruktūras un pārvadājumu dārdzības dēļ nelielie preču pārvadājumi rada zaudējumus. Šo iemeslu dēļ arī būtu lietderīgi veidot kooperatīvus, taču Latvijā to darbība galvenokārt vērsta uz augsnes apstrādi. Šeit lieti noderētu loģistikas pamatprincipi, jo iepriekš minētajā terminoloģijas vārdnicā loģistika traktēta kā materiālu un informācijas plūsmu veidošana un vadīšana caur uzņēmumu līdz tā galapatērētājam [14]. Šāds skaidrojums konkrētajā situācijā ir maz noderīgs, jo pamatā risina tikai viena uzņēmuma vai, labākajā gadījumā, produkcijas realizācijas jautājumus. Līdzīgas problēmas risina arī Latvijā nepopulāra, bet teorētiski formulēta kooperācijas forma "kanālu kooperācija", kurā kopīgi sadarbojas divi vai vairāki sadales kanāla dalībnieki [14], lai harmonizētu savu tirgus stratēģiju un kopīgi risinātu svarīgākos uzdevumus. Arī šis sadarbības veids risina tikai atsevišķas problēmas ceļā no ražošanas vietas līdz patērētājam.

Vairāk uzmanības, risinot saimnieciskās darbības efektivitātes kāpināšanas problēmas laukos, vajadzētu pievērst to pakalpojumu attīstīšanai, kas laukos ražoto produktu tuvinātu pircējam, tam pieprasītajā formā, iesaiņojumā un piegādes laikā jeb nodrošinot integrētu produkta piegādi „lauks–patērētājs". Šim mērķim vispiemērotākā, pēc autores domām, ir integrētā loģistikas sistēma, kuras viens no definējumiem ir: vienotas piegādes sistēmas veidošana, kas orientēta uz patērētāju vajadzību un vēlmju pilnīgu apmierināšanu.

2. Ražotāja funkcijas autonomā darbībā

Lai izzinātu patērētāja vēlmes un tās pilnībā apmierinātu, ražotājam jāveic šo vēlmju izpēte,

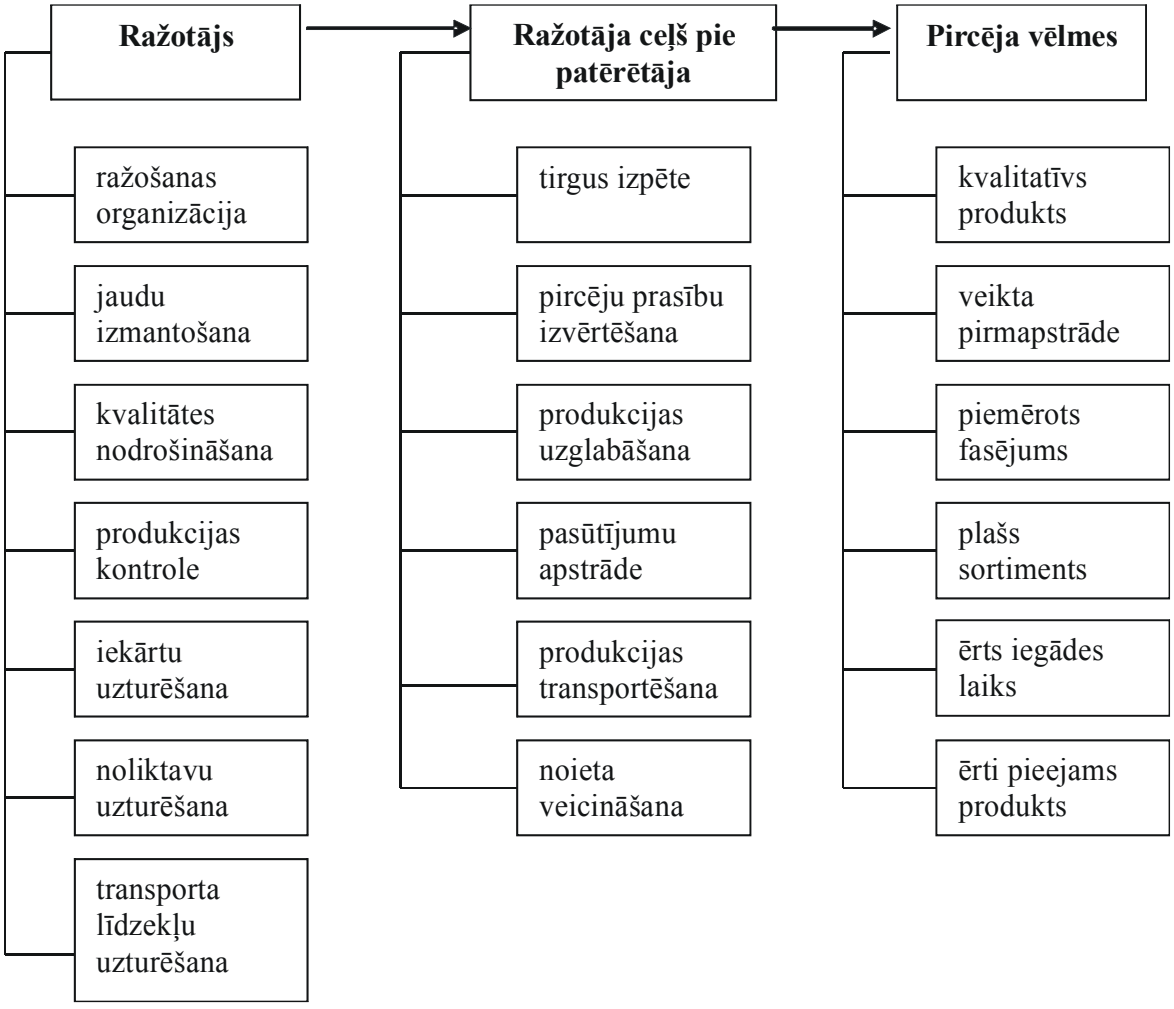
sortimenta izveide un pasūtījuma apstrāde tādā līmenī, kā to vēlas patērētājs, jo to diktē pieaugošā konkurence Latvijas pārtikas tirgū.

1. attēlā apkopotās veicamās funkcijas, lai nodrošinātu saražotās produkcijas veiksmīgu nokļūšanu līdz tās tiešajiem patērētājiem nelielai zemnieku saimniecībai, kādas pārsvarā tās ir Latvijā, ir dārgs un bieži vien neizpildāms nosacījums. Ražojot mazus apjomus, nav iespējams katras funkcijas veikšanai piesaistīt speciālistus un tos apmaksāt, kā arī ekonomiski nav izdevīgi iegādāties speciālas iekārtas produkcijas pirmapstrādes vai pārstrādes procesu veikšanai.

Pēdējos gados, īpaši pēc Latvijas iestāšanās Eiropas Savienībā, arī Latvijas ražotājus un pakalpojumu sniedzējus lielā mērā skar globalizācijas process. Notiek reģionālās darba dalīšanas tālāka attīstība. Globalizējas ne tikai pasaules tirgus, bet arī Latvijas tirgū veidojas lielas tirdzniecības organizācijas ar prasībām pēc plaša sortimenta un liela apjoma piegādēm, kādas Latvijai tradicionālie sīkražotāji nav spējīgi nodrošināt.

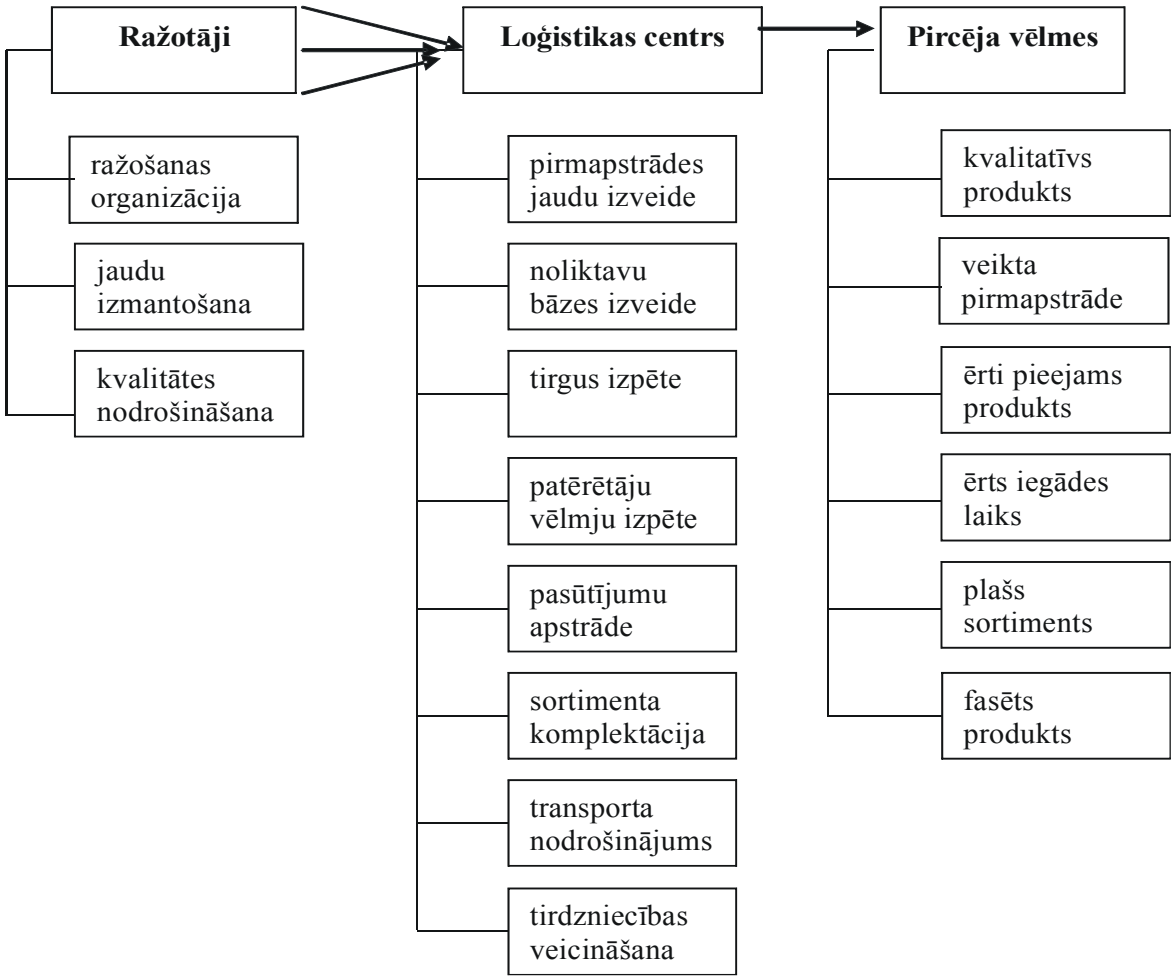
3. Funkciju sadale integrētā sistēmā

Integrētie darbības veidi laukos varētu būt lauksaimniecības produkcijas pirmapstrāde (mazgāšana, tīrīšana, fasēšana, uzglabāšana u.c.), kas palielinātu piegādāto produktu kvalitāti, pievilcību un iespēju piegādāt produkciju noteiktā laikā un plašā sortimentā. Šādas papildu darbības ir grūti realizēt katram nelielam zemnieku saimniecības īpašniekam, kas bieži vien ražo šaura sortimenta produkciju bez tās pirmapstrādes, jo finansiāli tas ir pats lētākais ražošanas variants, bet tirgus apguvei – sliktākais variants.



1. att. **Ražotāja funkcijas integrētās sistēmas "lauks–veikals" individuālā līmenī**

Fig. 1 ***Producer's functions on individual level for the integrated system "field-store"***



2. att. **Funkciju sadale integrētās sistēmas "lauks–veikals" kooperatīvā līmenī**
Fig. 2 ***Division of functions of integrated sistem "field-store" in cooperative level***

Loģistikas attīstības procesi Latvijā nu šīs sasāpējušās problēmas var risināt jau citā līmenī, jo loģistikas centri pēc savas būtības ietver gan integrācijas, gan arī kooperācijas iezīmes. Veidojot loģistikas centrus lauku teritorijās, kā tas redzams 2. attēlā ir iespējama zemniekam dārgo un sarežģīto funkciju nodošana speciālista pārziņā, kas ļautu ne tikai vairāk uzmanības veltīt pamatdarbības jautājumiem, bet arī optimizēt ar produkcijas virzīšanu saistītās izmaksas, tādējādi pazeminot preces pašizmaksu un palielinot atsevišķo zemnieku konkurētspēju globālajā tirgū. Veidojot integrētus kanālus, tajos tiek ietverti visi iespējamie pakalpojumi, kas saistīti ar saražotās produkcijas piegādi tās tiešajam patērētājam (produkta tīrīšana, fasēšana, uzglabāšana, sortimenta veidošana un piegāde patērētājam nepieciešamajā sortimentā un laikā). Būtībā loģistikas centrs veido integrēto piegādes sistēmu „lauks–patērētājs".

Loģistikas centri šajā gadījumā pilda arī sava veida kooperatoru funkcijas, jo, sniedzot uzglabāšanas un transportēšanas pakalpojumus mazajiem produkcijas ražotājiem, apvieno tos un nodrošina to attīstību, atvieglojot to piekļuvi tirgum. Savukārt plaša produkcijas sortimenta nodrošināšanai nepieciešama darba dalīšana starp atsevišķiem ražotājiem un to apvienošana kopīga mērķa realizēšanai. Šāds process Latvijā ir tikko sācies un ir pirmie veiksmīgie piemēri, kas liecina par izvēlētā ceļa pareizību un nepieciešamību.

Ieviešot loģistikas pamatprincipus un sistēmas Latvijas laukos, varētu veiksmīgāk risināt tās problēmas, ko radījuši nepārdomātās privatizācijas procesi, ražošanas sadrumstalotība, daudzo resursu neprognozējamais sadārdzinājums un nepietiekamība. Faktiski loģistika veido integrētas sistēmas, kurās rodas nepieciešamība un tajā pat laikā iespēja veiksmīgi kooperēties gan šo sistēmu ietvaros, gan arī piesaistot papildu

pakalpojumus ārpus sistēmas, taču jau augstākā domāšanas, sadarbības un procesu uztveres līmenī.

Daudzi uzņēmēji jau sāk izvērtēt loģistikas pieejas radītos ekonomiskos ieguvumus un priekšrocības. Lai optimizētu izmaksas un veiksmīgāk konkurētu ar lielajiem mazumtirdzniecības veikalu tīkliem, mazie tirdzniecības uzņēmumi veido apvienības, kuras jau nopietni apsver iespējas veidot vienotus izplatīšanas centrus. Pagaidām šādus veikalu apgādes risinājumus izmanto tikai lielie mazumtirdzniecības tīkli, kā „Rimi", „Kesko Food", „VP Market" u.c., bet no vietējiem tīkliem vienota loģistikas sistēma izveidota tikai „Elvi Grupas" veikalu tīklam [12].

Pēc „Elvi Grupas" valdes priekšsēdētāja Jāņa Čerņavska viedokļa, vienota loģistikas sistēmas izveide atrisina piegādes problēmas tieši uz tirdzniecības vietām ārpus lielajām pilsētām.

Pēc autores domām, iespēja iegādāties jebkuru produktu un pakalpojumu sev vēlamajā laikā un vietā ir viens no nosacījumiem jebkuras teritorijas apdzīvotībai un līdz ar to arī attīstības iespējām. Gan daudzi tirdzniecības, gan ražošanas uzņēmumu vadītāji prognozē, ka nākotnē, attīstoties piegāžu ķēdēm, tiešās piegādes tirdzniecībai no ražotājiem izzudīs vai būs nerentablas. Piegādātāji visticamāk kooperēsies vai būs gatavi maksāt naudu par loģistikas pakalpojumiem, nevis veikt autonomas tiešās piegādes. Katrs izvērtēs iespējamās ekonomiskākās loģistikas shēmas – piesaistīt loģistikas pakalpojumus kā ārpakalpojumus vai veidot pašiem savu (varbūt uz kooperācijas principiem) piegādes centru.

Pasaules praksē gan pamatā ir izplatīta pieredze veidot lielas specializētas loģistikas kompānijas, kas darbojas kā starpnieki starp ražotāju un tirgotāju. Latvijas situācijā, kad nopietna loģistika attīstīta tikai lielajos tirdzniecības tīklos, ražotāji savu produkciju uz daudzām tirdzniecības vietām pārsvarā ved paši. Sadārdzinoties pārvadājumiem, ražotājiem rodas interese sniegt pārvadājumu pakalpojumus un piesaistīt arī citus produktus, lai tirgotājiem varētu piedāvāt plašāku produktu sortimentu, kā arī samazināt pašu ražošanas un piegādes izmaksas.

Tieši no šādām iniciatīvām nākotnē arī Latvijā varētu veidoties lielas loģistikas kompānijas. Latvijā lielākā piena pārstrādes akciju sabiedrība „Rīgas Piena kombināts" ir izveidojusi lielas kapacitātes loģistikas sistēmu, kas sniedz plaša spektra Eiropas Savienības prasībām atbilstošus pakalpojumus, ko izmanto arvien pieaugošais klientu skaits. Pašreizējo klientu vidū ir gan piena pārstrādes uzņēmumi, gan arī saldēto un atdzesēto pārtikas produktu ražotāji un tirgotāji [12].

Līdzīgu darbību uzsākusi arī zemnieku saimniecība „Ezerkauliņi", kas izveidojusi uzņēmumu SIA „Latvijā audzētu dārzeņu loģistika" un veic liela apjoma starpniecības darījumus pēc kooperācijas pamatprincipiem. SIA „Latvijā audzētu dārzeņu loģistika" dārzeņus piegādā apmēram 25 uzņēmumi, un piegādes tiek veiktas gandrīz visām lielveikalu ķēdēm [9].

Apvienojot vairākus ražotājus, uzņēmums var piedāvāt produkciju plašā sortimentā un lielā apjomā. Racionāli savstarpēji vienojoties, var organizēt iekšēju specializāciju, kas ļauj nodrošināt augu seku rotāciju un ražot produkciju ar zemākām izmaksām, tā paaugstinot šo uzņēmumu konkurētspēju un ekonomisko rezultātu.

Nedaudz atšķirīgu loģistikas centru veido arī zemnieku saimniecība „Galiņi" [10], kurā plānota dārzeņu produkcijas padziļināta pirmapstrāde, atvēsināšana, uzglabāšana un komplektēšana. Uzņēmums gan tuvākajā laikā neplāno sniegt loģistikas pakalpojumus citiem dārzeņu audzētājiem, tomēr neizslēdz iespēju veidot dārzeņu ražotāju grupu.

Iepriekšējo gadu tendence bija izvietot dārzeņu un citas svaigās produkcijas ražošanu tuvu tās patēriņa vietai. Šodienas loģistikas centru izveide ar modernām pirmapstrādes un uzglabāšanas tehnoloģijām šādas produkcijas ražošanu ļauj veidot neatkarīgi no patērētāja atrašanās vietas. Savukārt zemes un citu resursu dārdzība Rīgas reģionā vai lielo pilsētu tiešā tuvumā rada problēmas jaunu lauksaimniecības produkcijas pirmapstrādes vai loģistikas centru izveidošanai. Šie procesi zināmā mērā ir pozitīvi, jo rosina uzņēmējus lauksaimniecības produkcijas pirmapstrādes, uzglabāšanas un citas palīgdarbības izvietot līdz šim maz aktīvajās un maz izmantotajās lauku teritorijās.

Jau šobrīd izdevīgo ekonomisko nosacījumu dēļ daudzi lauksaimnieki savas zemes platības Rīgas tuvumā pārdod un ražošanu pārceļ uz attālākiem reģioniem, kā Kurzemi un Latgali [11].

Neapšaubāmi ražošanas izvietošana no centra attālinātajos reģionos saasina citu problēmu, proti, transporta infrastruktūras zemo kvalitāti un tās

ietekmi uz pārvadājumu izmaksām. Minētie faktori varētu rosināt gan uzņēmējus, gan valsti apvienotiem spēkiem risināt ceļu tīklu un citu satiksmes infrastruktūras objektu sakārtošanu un kvalitātes paaugstināšanu, kas savukārt varētu būt pozitīvs stimuls iedzīvotāju piesaistei lauku teritorijām.

Secinājumi
Conclusions

■ Daudzos gadījumos uzņēmējdarbības veiksme atkarīga ne tikai no preces ražošanas, bet galvenokārt no prasmes un iespējām to realizēt. Daudziem uzņēmējiem tieši preces nogādāšana tirgū un tirgus apguve ir faktori, kas neļauj veiksmīgi attīstīties, jo lielo attālumu, sliktās transporta infrastruktūras un pārvadājumu dārdzības dēļ nelielie preču pārvadājumi rada zaudējumus.

■ Mazie produkcijas ražotāji ierobežoto finanšu līdzekļu dēļ nespēj veikt visas funkcijas, kas nodrošinātu preces veiksmīgu noietu.

■ Kooperācijas process laukos nav guvis vēlamo zemnieku atsaucību.

■ Kooperācijai un loģistikai ir līdzīgas iezīmes gala rezultāta efektivitātes kāpināšanai.

■ Latvijā veidojas pirmie „loģistikas centri", kuru pieredzi nepieciešams popularizēt.

Priekšlikumi
Proposals

■ Attīstot uzņēmējdarbību laukos, vairāk uzmanības jāpievērš to pakalpojumu attīstīšanai, kas laukos ražoto produktu tuvinātu pircējam, tam pieprasītajā formā, iesaiņojumā un piegādes laikā, jeb nodrošinot integrētu produkta piegādi „lauks–patērētājs".

■ Zemniekam dārgās un sarežģītās funkcijas, kas saistītas ar produkcijas pirmapstrādi – fasēšanu un transportēšanu – jānodod speciālistu pārziņā, veidojot loģistikas centrus, kas ļautu zemniekam ne tikai vairāk uzmanības veltīt pamatdarbības jautājumiem, bet arī optimizēt ar produkcijas virzīšanu saistītās izmaksas, tādējādi pazeminot preces pašizmaksu un palielinot atsevišķo zemnieku konkurētspēju globālajā tirgū.

■ Loģistikas centra darbība var aptvert visus iespējamos pakalpojumus, kas saistīti ar saražotās produkcijas piegādi tās tiešajam patērētājam.

■ Loģistikas centriem jāpilda arī sava veida kooperatoru funkcijas, jo, sniedzot uzglabāšanas un transportēšanas pakalpojumus mazajiem produkcijas ražotājiem, tie varētu tos apvienot un nodrošināt to attīstību, atvieglojot zemnieku piekļuvi tirgum.

■ Loģistikas centru izveide ieviestu arī būtisku uzņēmējdarbības diversifikāciju laukos, jo attīstītos lauksaimniecības produkcijas pirmapstrādes vai pārstrādes cehi, noliktavu saimniecības un transporta, kā arī tā remonta bāzes.

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Development of Services' Market in Agricultural Branch in Latvia

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Abstract

The development of agriculture in Latvia, which has taken place in the last decades, as well as changes in legislation, due to Latvia entrance in European Union, have favoured demand for new experts in services' market of agricultural branch in Latvia. The publication reflects economical factors of services' market in agricultural branch in Latvia. Special attention is paid to assessment of Latvia training and advisory centres' policy in frames of providing services for agricultural enterprises.

Key words: services' market, provider of the service, purchase of the service, assessment of the service.

Introduction

The demand for new specialists in services' market in agricultural branch of Latvia has arisen in the last decade due to the development of agricultural economics and changes in legislation which resulted from Latvia joining the European Union. Continuous changes in the legislation regulating entrepreneurship and directives of the European Union often cause problems, as entrepreneurs must react immediately.

Latvia is very sparsely populated in comparison with other countries. There are rural territories where the density of population comprises 2 residents per km². Structural changes in agriculture, which started in 1990, associate with low income from agricultural activities, insufficient financial means, limited market for agricultural production (especially the local market) and lack of experience in economics for starting a new self-dependent non-agricultural venture. Deterioration of social and economic infrastructure is also characteristic of this period. It is difficult to follow the continuous changes and amendments of EU directives for those rural entrepreneurs, whose agricultural farms are located in the remote areas of Latvia without direct access to the global network. In many cases these farms, which really have a promising potential for development but unfortunately restricted communication possibilities, cannot receive complete and extensive information about the possibilities how to develop their enterprises using EU structural funds available for agricultural branch. The reason is the lack of precise information what kind of documents are to be submitted, what are the latest tendencies for the development of agricultural branch and what kind of agricultural activities could be perspective for rural entrepreneurs in the future.

According to indicators of agricultural census, only 21.4% leaders of economically active entrepreneurships have higher or other professional education in agriculture. The majority or 70% of leaders have acquired their knowledge in the result of practical experience[1]. The practical research gives evidence, that economic knowledge for activity in the market economy conditions is insufficient for the majority of the leaders of rural enterprises. Many farmers are not able or are afraid of undertaking any credit obligations for the further development of their enterprise. This uncertainty can be explained due to the lack of experience and skills necessary for starting a venture, as well as they do not have enough knowledge about markets. Another reason is insufficient amount of financial resources. There is lack of co-operation among producers in terms of information exchange and development of economic activities with stimulating of the economically weaker farmers for commercial development.

The advisory services and further education in Latvia is provided mainly by Latvian Rural

[1] Latvia Rural Development Plan for implementation of Rural Development program 2004-2006

Advisory and Training Centre (furthermore in the text LLKIC) with its 26 regional offices. Rural entrepreneurs can receive there help in problems connected with agricultural and non-agricultural entrepreneurship, including compiling of business plans.

Producers and processors can obtain information about possibilities of production markets in Latvia State Institute of Rural Economic agricultural market promotion centre. However only the most economically active and experienced farmers use such possibilities. These are entrepreneurs who are knowledgeable and are leaders of commercially capable rural enterprises.

Often LLKIC advisory offices are located too far from the farms; therefore farmers purchase services from the small companies which specialize in providing advisory services for entrepreneurs.

However these small providers of the services lack modern experience in EU context, as they use out-of-date and non-effective methods. Solutions are being searched how to motivate the bigger part of farmers (those who produce the goods for self-supply or who sell only part of their production) to get involved in more active economic activity.

Till now market of agricultural services in Latvia has been investigated mainly from the position of agricultural enterprises. Maira Lescevica, candidate for a doctor's degree, has analyzed economic development of agricultural farms and has investigated possibilities for entrepreneurship environment in Latvia. In the above mentioned research work entrepreneurship environment of Latvia has been analyzed, economic analysis of agricultural farms' activities has been performed, as well as modelling of demand-supply pattern of agricultural goods and research of competitiveness for particular agricultural products has been presented.

Some research works are also available on the development of services in particular branches in Latvia. The market research has been carried out in frames of separate regions without distinguishing agricultural branch. On the international scale there are research works of many countries available, where the role of public and private sectors in the development of agricultural branch has been analysed. However in Latvia this problem has mainly been investigated from the position of the private sector without any detailed research on problems, how government could optimize its services available for rural entrepreneurs and how government could overtake some part of services from the private services' providers.

The novelty of the problem is defined by the fact that services' market separately in agricultural branch has not been investigated yet. In this article it was envisaged to investigate economic factors of services' market development. In the practical research part of the article special attention was paid to the assessment of Latvian Rural Advisory and Training Centre's policy in terms of services' provision

The target of there research work was to perform analysis and find out which services are most often demanded and what kind of services will be necessary in the future, as well as perform analysis on marketing perspectives for the development of these services.

The following tasks were set up in order to achieve the above mentioned target:

1. Perform analysis of LLKIC existing customers.
2. Perform demand-supply analysis of LLKIC services, find out the most demanded LLKIC services and determine necessity for new services in agricultural branch.
3. Define the level of satisfaction of rural enterprises with the services purchased from LLKIC.

Materials. The main sources of information were Latvia Rural Development Plan for implementation of Rural Development program 2004-2006, Regulation No.1783/2003 of Council of Europe, as well as works of foreign authors Blythe J. Essentials of Marketing. Riga: Zvaigzne ABC, 2004. 284p.; and Hamblin C. Briefly about Marketing. Riga: RKS, 1994. 95p.

Cropley A. Qualitative and Quantitative Methods in Social Sciences. Riga: Zinatne, 2002. 172p. was used for compiling of questionnaires and data collection.

LLKIC website www.llkc.lv subdivisions "About us" and "Services" were used for description of services and legal status of LLKIC.

Methods. Descriptive method was applied for the fulfilment of tasks 1 and 2 in order to perform detailed research of services. Analytical method was applied to divide LLKIC services in separate groups and perform analysis of each group. Methods for mathematic data processing were applied: the calculation of arithmetic mean, correlation

analysis and data graphic description. In order to fulfil task 3, marketing research methods were applied to find out possibilities for improvement of LLKIC strategies. Logical construction method was applied in the conclusion part to present author's conclusions about results of the research.

Possibilities and risks for the development of services market in agricultural branch in Latvia

Regulation No.1783/2003 of Council of Europe defines that all EU member states, including Latvia, have to establish their household advisory services' system. This is necessary in order to help the farmers to meet modern and high quality agricultural standards related to environment and animal protection, plant protection and food harmlessness, animal well-being and good agricultural and environment conditions.[2]

On 9th May 2005 European Agriculture Guidance and Guarantee Fund approved National program „Establishment of rural advisory and farms' extension service" and its project „Establishment of rural farms advisory system" (furthermore - Project). Besides on 7th July 2005 LR Ministry of Agriculture issued the ordinance No143 „Realization of National program „Establishment of rural advisory and farms' extension service"". The recipient of project finance is LLKIC. The total amount of the project is Ls 2 151 756. The period of project's realization is 16 months – from 19th September 2005 to 31st December 2006.[3]

The Latvian Rural Advisory and Training Centre (LLKIC) was established in 1991 as a training and advisory institution for farmers and rural entrepreneurs. The staff of LLKIC is 220 employees. Status—a non-profit limited company, owned by the State (99%) and the Farmers Federation (1%).[4]

The direct purpose of the Project is to increase capacity of LLKIC in order to adjust agricultural activities to the standards of European Community related to environment protection, hygiene, animal well-being and good agricultural practice and to work out computer software for management of farms and agro environment planning and to provide availability of information for farmers in order to favour the development of economically viable farms. One of the activities of the Project is creation of new staff in LLKIC central office and regional offices, organizing of training courses and experience exchange trips for the new employees. For this reason it is important to plan what kind of specialists, according to the actuality of the nearest EU directives, will be necessary in order to satisfy the demands in services' market of agricultural branch in Latvia.

After the realization of the Project, the trained advisors of rural advisory offices will independently provide consultations for the farmers about the standards demanded by the Council of Europe related to environment protection, hygiene and animals' well-being and good agricultural practice. But specialists of LLKIC central office will ensure the process of the advisory system (providing of further education for the advisors and organizing of seminars, as well as, in the process of co-operation with administrative institutions, the latest information about changes in legislative acts will be systematized and consultants will be informed about them). Other purposes of the project are to favour the development of professional skills for those rural entrepreneurs who are involved in agricultural, forestry and other activities, which is provided by memorandum of European Parliament about the life long education. The significance of preparing the farmers for qualitative reorganization of the production is emphasized.

It is envisaged that the new services will replace the old ones. LLKIC, the same as any other enterprise, has to decide which of the existing LLKIC services should be retained, which should be refused of and what is the best way how to put these new services into practice of services' market in the agricultural branch. In this situation it is highly essential to assess the needs and wishes of the existing and potential customers.

The marketing theory defines that any service can be considered as a set of benefits received by the customer. The purchase of the ser-

[2] Regulation No.1783/2003 of Council of Europe

[3] Latvia Rural Development Plan for implementation of Rural Development program 2004-2006

[4] LLKIC website www.llkc.lv

vice in customer's opinion is associated with higher risk than the purchase of the goods, since low quality goods can be returned and refund is provided. However it is impossible to return back incompetent advice or project, which has not been prepared in the way advantageous for the customer. Customers have very little chances to evade from the payment for the service if its incompleteness is not so obvious. For this reason services associate with several risk elements in customers' opinion.[5]

Misunderstandings often arise in the process of service rendering, as it is impossible to try the service before. Providers of professional services should clearly explain to the customer what exactly is being done, so that the customer could understand the most detailed procedures of the received service. When the customer purchases particular service, its means that the customer purchases promise. This means that often quality of the service is evaluated according to indirect criteria, for example according to its price.

When the final decision has been taken, customers tend to feel personal affection for providers of the service. Therefore rural entrepreneurs have their favourite places where they can obtain information – either it is a company that provides accounting services, council of the parish, bank, local newspaper, LLKIC or other place.

In the services' market Blooms and Bitner mention three factors that have to be attached to the marketing set: people, process and physical evidence. Since services, in most of cases, are connected with personal contact between the customer and the provider of the service, then it means that peoples' behaviour and relations with the customer are a part of the product itself. Most often customer personally participates in the process of the service rendering, and this finally makes participation equally important with the result of the service. It is essential for the customer to be aware of being a special one, the one who will be met by competent specialists in a friendly atmosphere.[6]

Customers' servicing could be defined as a wide system which effectively motivates the customer to ask for more information, motivates customers to get them educated about the services being purchased, as well as invite them to take an active part in the process of introduction of new services and express their opinion about the existing services. It is observed that customers' behaviour to some event, which can even seem insignificant for the services' provider, can differ dramatically. However, in the moment of decision making on services' purchase, it can turn out to be of crucial importance. Therefore it is essential for the enterprise to broaden experience about these differences, where they come from, how they interact with each other and what are those factors that affect their character. [7] Specialists who work on the development strategies of the services' market can obtain part of the information in their archives of the customers' data base, however the most important part of the necessary information they can obtain from marketing research. Marketing research is a special part of company's activities, which works out and organizes questionings and receives information in order to find out the opportunities of marketing, possible threats and ways how to improve and assess marketing activities; and finally take the right decisions.[8]

Results and discussion

In the process of practical research an original questioning form for rural entrepreneurs was created in co-operation with LLKIC. In October of 2005 the research work was started in order to find out the level of satisfaction of LLKIC customers with the received services, as well as define necessity for extension of the present set of services and develop the possibilities of further co-operation. The research was practiced among 140 LLKIC customers from different regional advisory offices (Tukums, Ogre, Balvi, Aizkraukle etc.). The first results of the research are analyzed further in the article.

[5] Blythe J. Essentials of Marketing. Riga: Zvaigzne ABC, 2004, p.108.

[6] Blythe J. Essentials of Marketing. Riga: Zvaigzne ABC, 2004, p.108-109.

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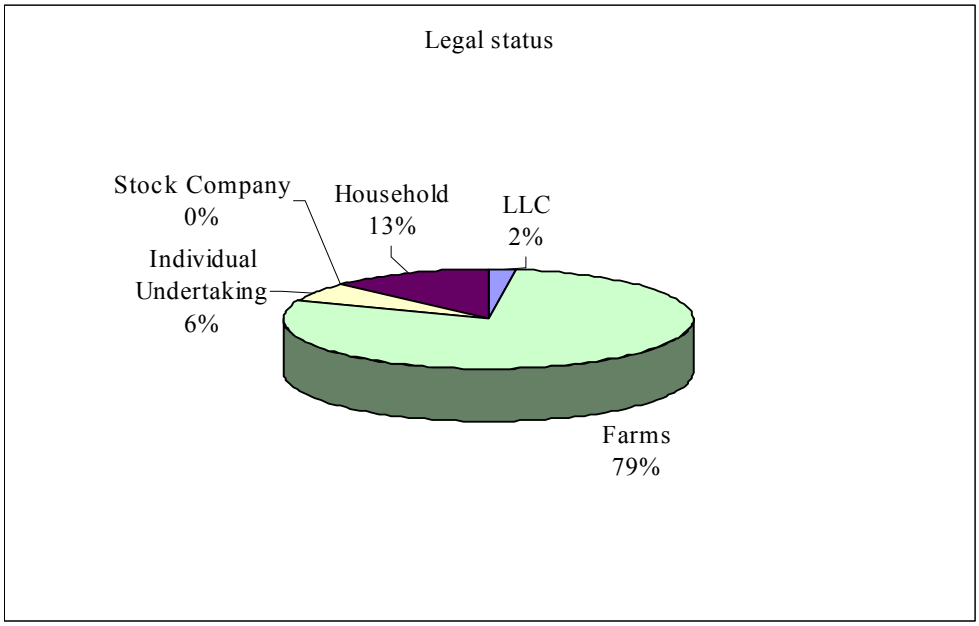
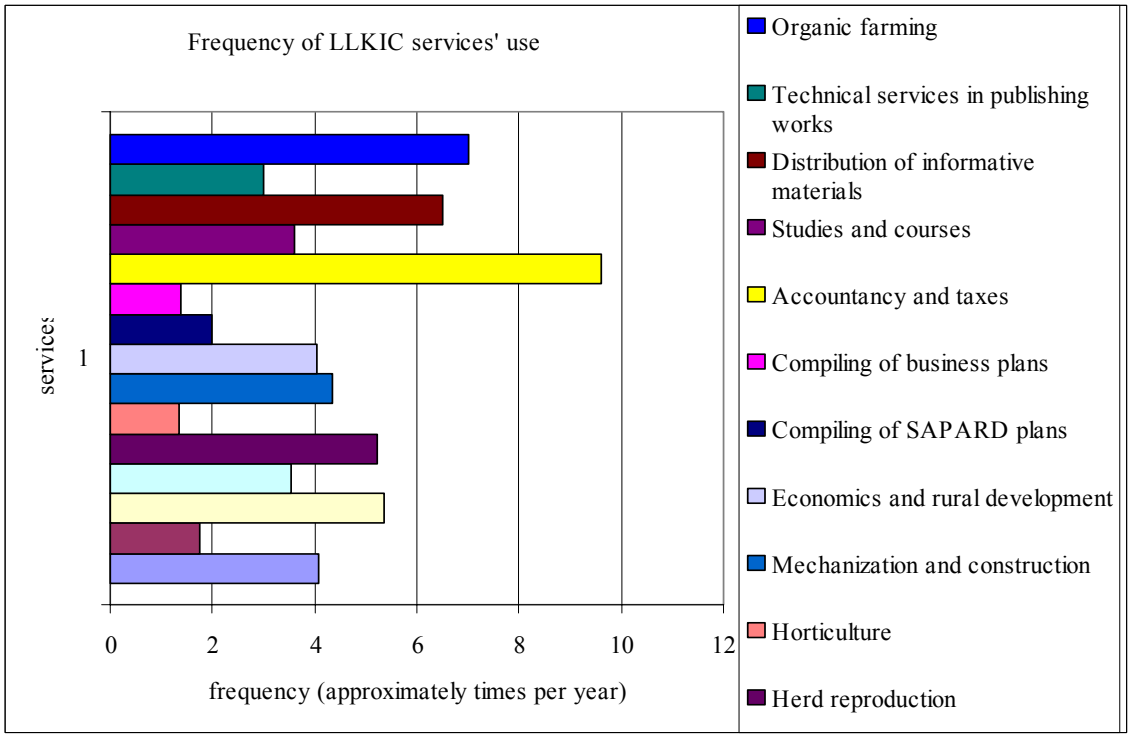


Source: *figure made based on author's research data.*

Fig. 1 **Legal status of LLKIC services' purchasers.**



Source: *figure made based on author's research data.*

Fig. 2 **LLKIC services, which are most often used by respondents.**

Figure 1 reveals the fact that legal status of the majority of LLKIC customers was defined as "Farms". 13% of respondents defined their status as „Households". However the majority of this category claimed that they use LLKIC provided accountancy services 12 times a year. This fact implies that respondents have insufficient knowledge in legislation, as in LR Commercial Register such legal status is not defined.

The research found out that average number of employees is 2,08 people. Almost one half has claimed that there are 2 people working in their

enterprise but one quarter indicates 1 person. There are no enterprises where number of employees is bigger than 9. This means that bigger size enterprises do not tend to apply for advisory services.

77% of services' purchasers are operating in the market 4-14 years but 15% are more than 15 years in the market. In this connection correlation analysis was performed and its result proved that there is no interconnection between the duration of enterprises' operation and choice of LLKIC services. This means that rural enterprises apply for services regardless of duration of their existence. Regarding future plans, 22% of respondents claimed that they were planning to implement some kind of additional activity. The most often responses were meat cattle-breeding and provision of services. The research of task 1 indicated that all of the additional activities, envisaged in the future, have already been offered by LLKIC. This makes the author draw conclusion that the present set of services, offered by LLKIC, is complete and LLKIC should put more effort for the improving of the existing services.

The most demanded LLKIC services were found out in frames of task 2. Figure 2 reveals that the most often used service was claimed "consultations in accountancy and taxes" (9,6 times per year). Besides 59 of 140 respondents use this service every month, this means that they have a permanent contract with LLLKIC about accounting servicing. The next most demanded service was "consultations in organic farming" and "Distribution of informative services".

Task 3 envisaged to perform analysis on LLKIC customers' opinion about their satisfaction with received services. During the research work it was found out that only 4 positions provide 100% satisfaction (consultations in pig breeding, compiling of plans for environment management, publishing services and consultations in horticulture). Besides, the weakest position was indicated as "assistance in mechanization and construction". Unfortunately not all of advisory centres offer complete set of services, however respondents would like to use services which at the moment are not available in their particular office but are offered in other offices in Latvia. One of the problematical positions in LLKIC set of services is "studies and courses". Qualitative courses are provided in Riga district and Tukums district advisory centres but respondents from other districts had expected higher level. In spite of the fact that total level of satisfaction in general was assessed positively, remarkable part of the respondents claimed that they use LLKIC services because of lack of other services' providers. For further analysis it is advisable to find out the reasons why LLKIC customers have a wish for other providers of services.

One of the tasks was to find out assessment of LLKIC services' criteria. Respondents were asked to assess which of the 10 criteria are the most important in the process of receiving the service. The most important one was "quality of the service", which was followed by "kind attendance" and "price of the service". The least important was "possibility to communicate via electronic means of communication". This is evidence of the fact that Internet is very little available in rural areas, which was also claimed by respondents.

Regarding the price of LLKIC services, respondents claimed that the price is acceptable for them. However 15% of respondents consider that the price for accounting and tax consultations is too high. Another 15% of respondents claimed that, in their opinion, the price is too high for compiling of business plans and projects, which are necessary to access EU structural funds.

Regarding question of communications, 90% of all respondents chose communication with LLKIC employees in person, but 61% chose telephone consultations. To certain extent this could be explained by the number of individual farms in Latvia, which are characteristic of lack of personal contacts with fellow-creatures.

Conclusions

1. Latvian Rural Advisory and Trainings Centre is the biggest provider of agricultural services, which offers wide range of services. The most demanded services are consultations in accounting and taxes. More and more rural enterprises become interested in organic farming. Therefore it is necessary to develop services in organic farming so that they are available in LLKIC centres in all Latvia. It is advisable to promote LLKIC service "studies and courses". Research work should be performed to find out the most demanded courses and regular quality control measures should be taken. It is necessary for LLKIC to evaluate its marketing communication policy, since majority of respondents claimed

that they had obtained information from their acquaintances but not from mass information media.

2. The obtained results showed that in general the range of services is complete enough (none of respondents showed interest in receiving a service which is different form services provided by LLKIC). Therefore it is necessary provide complete set of services in all advisory centres in Latvia.

3. In further research analysis on LLKIC competitors and their customers should be performed. It is necessary to find out the ratio of all rural enterprises in Latvia which use advisory services.

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Composition and Structure of Forms of Entrepreneurial Activities (Commercial Activities) and Land Managed by Groups of Commercial Farms of Different Size in the Regions of Latvia

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Abstract

The commercial activities in the countryside of Latvia are performed in agricultural enterprises and business companies of different size, the legal forms of which vary within a wide spectrum. Unfortunately no published information on the changes of situation in small, medium and large farms is available.

The aim of the research was to study the composition and structure of the entrepreneurial forms in the new situation and by groups of agricultural enterprises and companies of different size.

The article focuses on the exposition of the research results for the forms of entrepreneurial or commercial enterprises in four largest groups of commercial farms which each manage more than 50 hectares of the agricultural land.

The results obtained show that some large and largest farms operate in the form of holding companies, while the form of co-operative companies is also used, still the dominant entrepreneurial forms are farms and limited liability companies. The form of an individual merchant is widely used as well.

The composition of entrepreneurial forms is very different in small (50-99 hectares), medium (100-499 hectares) and large (500 hectares) farms, as well as by the regions of Latvia.

The land areas managed by the entrepreneurial forms of different size are diverse: 70-85% of land is managed by small farms (50-99 hectares), while 60-100% of land is managed by capital companies.

Key words: entrepreneurial forms, commercial farms, agricultural enterprises, business companies.

Introduction

The choice and variability of forms of entrepreneurial or commercial activities may be influenced by several factors, circumstances or processes. The influence of some factors has already been ascertained in the previous researches (Jurgena, 2003, Špoģis, 2003, Špoģis, Jance, Radžele 2005). Though the composition of factors and circumstances leaving an impact, as well as the intensity of various influencing circumstances may change.

The process of coming into force of the Commercial Law of the Republic of Latvia, which continued during the recent years, especially in 2005, may have a substantial influence on the mentioned factors.

Merchants' attitude developed when solving problems related to farm management may also have some kind of influence.

Rural entrepreneurs may also change legal forms due to the terms and conditions of the European Union and national financial support.

Besides the farm size, changes in land areas, and production capacity may be of great influence. The large farms are free to choose the form of capital companies and thus their number increase continuously.

The co-operation of farms for the achievement of various certain goals may create a new wider application of the form of co-operative societies.

Also the forms of one proprietor have become more diversified: farms is not the only form registered in the countryside, also sole proprietor limited liability companies and companies of individual merchants (economies) are founded.

These multiform processes and circumstances have promoted the choice of the research theme and consequently **defined the aim of the paper**: to study the composition and structure of the entrepreneurial forms in the new situation and by groups of agricultural enterprises and companies of different size.

The following objectives of the research are subjected to the aim of the paper:

- to ascertain the application of entrepreneurial forms under the new circumstances of the Common Rural and Agricultural Policy;

■ to analyse the composition and structure of entrepreneurial forms by the four groups of the largest and large commercial farms;

■ to study the differences of the composition and structure of entrepreneurial forms by groups of the largest and large economies in the regions of Latvia;

■ to analyse the land areas managed by different entrepreneurial forms by the four groups of commercial farms in the regions of Latvia.

Research methods and materials. The methods of grouping, analysis, and synthesis and the method of logical constructions have been used for the purpose of the research.

Scientific publications, special theoretical literature, information of the register of farms, statistical information and other materials have been used.

Results and discussion

1. Entrepreneurial forms of agricultural enterprises and business companies of different size

The composition of entrepreneurial forms by four groups of commercial farms was studied: small (50 – 99 hectares), larger (100-499 hectares) and the largest commercial farms (500-999 hectares), as well as the large (≥ 1000 hectares) agricultural enterprises and business companies.

At first the composition and structure of entrepreneurial forms in these four groups of farms in Zemgale region were analysed. The results of analytical calculations are included into Table 1.

The information included into Table 1 leads to the following conclusions:

■ only some business companies of Zemgale region have chosen the form of joint stock companies, where the famous Agro-firm Tērvete is one of them;

■ the proportion of capital companies consistently increases in the direction from small to larger and the largest commercial farms;

■ the form of co-operative companies is used only in some cases;

■ small and smaller size commercial farms are frequently chosen and registered in the form of a peasants farm;

■ the form of an individual merchant has started to appear in agriculture;

Table 1

Entrepreneurial forms of Zemgale region by groups of agricultural enterprises and business companies (farms) of different sizes in 2005, %

Entrepreneurial forms	Groups of managed agricultural land areas, hectares											
	≥ 1000 districts			500 - 999 districts			100 - 499 districts			50 - 99 districts		
	Bauska	Dobele	Jelgava	Bauska	Dobele	Jelgava	Bauska	Dobele	Jelgava	Bauska	Dobele	Jelgava
Joint stock companies, state joint stock companies	-	7.7	-	-	-	5.3	-	-	-	0.9	-	-
Limited liability companies	64.3	80.8	61.5	32.1	30.8	13.2	4.4	9.0	9.8	1.8	3.1	1.4
Co-operative companies	-	7.7	-	3.6	-	-	1.5	-	0.9	-	-	-
Farms	35.7	3.8	38.5	60.7	69.2	73.7	91.1	82.6	87.0	89.7	82.5	88.3
Individual merchants	-	-	-	3.6	-	2.5	2.0	7.6	1.3	7.6	14.4	10.3
Stock companies	-	-	-	-	-	5.3	1.0	-	-	-	-	-
Unlimited liability company	-	-	-	-	-	-	-	0.8	-	-	-	-
Educational institutions	-	-	-	-	-	-	-	-	1.0	-	-	-
All forms, number	14	26	13	28	26	38	203	144	224	224	228	214

Source: *Calculations done by the authors according to the data of LURSOFT and the Ministry of Agriculture.*

■ the form of capital companies, mainly as limited liability companies absolutely prevail in the group of large size farms;

■ the form of a peasants farm prevail in the group of the largest (500 - 999 hectares) enterprises and business companies;

■ the proportion of peasants farms increases in the group of larger (100 - 499 hectares) farms, still individual merchants are also registered here;

■ small commercial farms operate in the traditional form of peasants farms, however the proportion of new form of an individual merchant is considerable;

■ there are substantial differences between the regions :

- the large farms of Dobele have used the form of peasants farms ten times rarer than the farms of Bauska and Jelgava;
- in the group of the largest farms the district of Jelgava is distinguished as a district with relatively smaller choice in the form of capital companies;
- the differences among the districts lead to the conclusion that the process of transformation and restructuring of the forms still continue and not all farm owners in the district have chosen the most suitable form.

Therefore a similar analysis was carried out in Kurzeme, but due to substantial ecological and traditional differences, the research is done separately for the agricultural management regions of the Southern Kurzeme and the Northern Kurzeme.

The calculations are arranged in Tables 2 and 3.

The calculations included into Tables 2 and 3 clearly evidence the differences among these districts and / or especially – among districts of each region:

■ in the group of large farms the farmers of Liepāja operate only in the form of capital companies and they have chosen only the form of a limited liability company, but the farmers of Kuldīga who have large farms have different opinions and thus half of them continue to operate in the traditional form of farms;

■ in the group of the largest (500 - 999 hectares) farms the polarization of opinions has increased – the farmers of Kuldīga avoid the use of the form of a capital company, and only every fifth farmer operates in the form of a limited liability company;

Table 2

Entrepreneurial forms of the agricultural enterprises and business companies (farms) in the region of the Southern Kurzeme by groups of different sizes in 2005, %

Entrepreneurial forms	Groups of managed agricultural land areas, hectares											
	≥ 1000 districts			500 - 999 districts			100 - 499 districts			50 - 99 districts		
	Saldus	Liepāja	Kuldīga	Saldu	Liepāja	Kuldīga	Saldu	Liepāja	Kuldīga	Saldu	Liepāja	Kuldīga
Joint stock companies, state joint stock companies	-	-	-	-	-	-	0.5	-	-	-	-	0.6
Limited liability companies	88.9	100	50.0	40.9	71.4	22.2	10.9	10.7	8.0	1.7	2.6	1.7
Co-operative companies	-	-	-	-	14.3	5.6	1.0	2.0	1.0	-	-	-
Farms	11.1	-	50.0	59.1	14.3	61.1	87.6	77.6	84.0	84.3	69.8	77.3
Individual merchants	-	-	-	-	-	11.1	-	12.7	5.0	14.0	27.6	20.4
Stock companies	-	-	-	-	-	-	-	-	2.0	-	-	-
All forms, number	9	7	4	22	14	18	193	197	100	230	345	176

Source: *Calculations done by the authors according to the data of the Central Statistical Bureau of Latvia, LURSOFT and the Ministry of Agriculture.*

Table 3

Entrepreneurial forms of the agricultural enterprises and business companies (farms) in the region of the Northern Kurzeme by groups of different size in 2005, %

Entrepreneurial forms	Groups of managed agricultural land areas, hectares											
	≥ 1000 districts			500 - 999 districts			100 - 499 districts			50 - 99 districts		
	Tukums	Talsi	Ventspils	Tukums	Talsi	Ventspils	Tukums	Talsi	Ventspils	Tukums	Talsi	Ventspils
Joint stock companies, state joint stock companies	15.8	-	-	10.0	20.0	-	2.9	1.4	-	-	-	-
Limited liability companies	57.9	66.7	57.1	60.0	50.0	22.2	9.2	29.0	15.1	2.1	4.3	-
Co-operative companies	-	-	-	-	-	-	1.7	1.4	-	0.5	-	-
Farms	21.0	33.3	42.9	30.0	30.0	77.8	80.3	63.4	75.5	75.8	66.4	62.2
Individual merchants	5.3	-	-	-	-	-	5.9	4.8	9.4	21.6	29.3	37.8
All forms, number	19	6	7	20	10	9	173	145	53	190	140	74

Source: *Calculations done by the authors according to the data of the Central Statistical Bureau of Latvia, LURSOFT and the Ministry of Agriculture.*

■ herein – the choice of farmers from Saldus district has changed in the group of the largest farms also, that is why the greatest part from them have remained in status of a peasant farm;

■ in small farms the points of view of districts have drawn closer and a general tendency is seen – to choose the form of an individual merchant.

Due to the essential divergence of ecological and economic circumstances the region of the Northern Kurzeme experiences large substantial differences, as Tukums district is influenced both by the farmers of Zemgale, the proximity of Riga, and the location of infrastructure and other industries, but Ventspils and Talsi districts more feel the influence of forestry and fishery:

■ in the group of large farms Tukums district certainty prevails in two main aspects – 1) with the largest proportion of large farms, and 2) with the largest proportion of capital companies, of which the majority is founded as limited liability companies;

■ in the group of smaller farms the farmers have similar opinion regarding the choice of forms, however the most radical changes of the structure of forms is seen Tukums district;

■ small farms, especially in Ventspils district, prefer the form of an individual merchant.

2. Land areas managed by different forms of entrepreneurial activities

Not diminishing the importance of the form of entrepreneurial activities, still the land area managed by each form of entrepreneurial activities has the determinant influence. The following research was done for the regions of Zemgale and the Southern Kurzeme, and subsequent calculations are included into Tables 4 and 5.

The calculations included into Table 4 regarding the breakdown of land areas managed in Zemgale region allow to formulate several estimations or interpretations:

■ in Bauska and Jelgava districts three fourths, but in Dobele district even 87% of the land is managed by large capital companies;

■ different situation is observed in the group of larger farms, since the land area managed by capital companies in Bauska and Jelgava districts amounts to 38% and 12% of the respective total agricultural land area; the farms of traditional form manage 55% and 72% of land respectively;

■ in the group of smaller farms the influence of capital companies has decreased to 4 - 13%, but the influence of peasants farms and individual merchants has increased to 86 - 91%;

Table 4

Agricultural land areas managed by different forms of entrepreneurial activities in commercial farms of Zemgale region in 2005, %

Entrepreneurial forms	Groups of managed agricultural land areas, hectares											
	≥ 1000 districts			500 - 999 districts			100 - 499 districts			50 - 99 districts		
	Bauska	Dobele	Jelgava	Bauska	Dobele	Jelgava	Bauska	Dobele	Jelgava	Bauska	Dobele	Jelgava
Joint stock companies, state joint stock companies	-	9.6	-	-	-	5.6	-	-	-	0.8	-	-
Limited liability companies	74.6	77.2	75.4	37.8	28.9	12.3	3.9	13.1	11.9	1.9	3.4	1.5
Co-operative companies	-	3.6	-	-	-	-	1.6	-	0.8	-	-	-
Farms	25.4	-	24.6	55.1	71.1	72.1	91.1	81.0	85.3	89.8	82.3	87.9
Individual merchants	-	9.6	-	2.8	-	3.4	2.3	5.9	0.8	7.5	14.3	10.6
Stock companies	-	-	-	4.3	-	6.6	1.1	-	1.2	-	-	-
All forms, number	30 610	59 105	22 877	19 046	17 915	25 428	42 103	28 395	45 716	15 784	15 740	14 633

Source: *Calculations done by the authors according to the data of the Central Statistical Bureau of Latvia, LURSOFT and the Ministry of Agriculture.*

Table 5

Agricultural land areas managed by different forms of entrepreneurial activities in commercial farms of different forms in the region of the Southern Kurzeme in 2005, %

Entrepreneurial forms	Groups of managed agricultural land areas, hectares											
	≥ 1000 districts			500 - 999 districts			100 - 499 districts			50 - 99 districts		
	Saldus	Liepāja	Kuldīga	Saldu	Liepāja	Kuldīga	Saldu	Liepāja	Kuldīga	Saldu	Liepāja	Kuldīga
Joint stock companies, state joint stock companies	-	-	-	-	-	-	0.2	-	-	-	-	0.4
Limited liability companies	94.3	100.0	58.1	38.6	75.6	27.3	15.0	15.7	12.9	2.3	2.8	1.9
Co-operative companies	-	-	-	-	11.5	4.2	2.2	3.5	1.9	-	-	-
Farms	5.7	-	41.9	61.4	12.9	59.4	82.6	71.1	77.3	85.5	70.1	77.7
Individual merchants	-	-	-	-	-	9.1	-	9.7	7.9	12.2	27.1	20.0
All forms, number	18 304	9498	5401	16 007	9174	12 623	40 028	36 600	19 800	15 546	23 775	12 107

Source: *Calculations done by the authors according to the data of the Central Statistical Bureau of Latvia, LURSOFT and the Ministry of Agriculture.*

■ in the group of small farms the form of individual merchants play a significant role, but the form of peasants farms prevails absolutely, as the role of large capital companies is insignificant in this group;

■ the fact, that in Dobele district almost half of the land owned by commercial farms is managed by large capital companies thus accounting for possibly better results, is very important.

The distribution of the land managed in the districts of the Southern Kurzeme region (Table 5) is different or radically diverse:

- the land areas owned and managed by the group of large businessmen operating in the form of capital companies are quite different, as in Liepāja these areas cover all the land, but in Kuldīga - only more than a half of the total land area;
- in Group 2 – the group of the largest farms a different situation is observed, as in Liepāja district capital companies is the prevailing entrepreneurial form (76%), but in Kuldīga capital companies manage only the fourth part of the total land area;
- in Saldus district 38% and in Liepāja district 20% of the total land is under the management of both the largest groups of farms;
- the group of larger (100-499 hectares) farms manage the majority of the total agricultural land area owned by commercial farms and farmers; the abilities and successes here is the governing factor, as capital companies manage only 13-16% of the total land area;
- in the group of small farms the land distribution is identical to the structure of legal form of farms shown in Table 2.

3. Coherence between the forms of business companies and their economic capacity in Latgale and Vidzeme

To obtain a sufficient basis for general assessment, there was a need to analyse analogical information also for the most characteristic districts of Vidzeme and Latgale regions.

The calculations are grouped into Table 6.

The information of Table 6 leads to the following conclusions:

- in Latgale large farms are established very rare, however the existing ones prefer the form of an individual merchant;
- there are many large farms in Vidzeme, but in Valmiera they prefer the observance of traditions, besides farms are large there, as 44% of these farms manage two thirds of the total land area owned by large farms;
- in the group of the largest farms mainly a traditional form is used both in Latgale and Vidzeme, but the form of co-operative companies is popular in both districts;

Table 6

Structure of the forms of entrepreneurial activities and structure of the managed agricultural land areas by groups of agricultural enterprises and business companies of different size in the districts of Daugavpils and Valmiera in 2005, %

Entrepreneurial forms		Groups of managed agricultural land areas, hectares							
		≥ 1000 districts		500 - 999 districts		100 - 499 districts		50 - 99 districts	
		Daugavpils	Valmiera	Daugavpils	Valmiera	Daugavpils	Valmiera	Daugavpils	Valmiera
Limited liability companies	Number, %	-	33.3	25.0	5.9	8.9	5.9	-	1.3
	Area, %	-	21.4	32.0	7.7	9.7	9.3	-	1.3
Co-operative companies	Number, %	-	-	25.0	23.5	8.9	4.3	1.5	-
	Area, %	-	-	17.5	23.1	13.6	5.2	1.4	-
Farms	Number, %	-	44.4	50.0	64.7	77.8	84.9	76.5	82.9
	Area, %	-	63.9	50.5	62.9	74.1	81.5	78.8	83.2
Individual merchants	Number, %	100.0	-	-	5.9	4.4	4.9	22.0	15.8
	Area, %	100.0	-	-	6.3	2.6	4.0	19.8	15.5
Stock companies	Number, %		22.2	-	-	-	-	-	-
	Area, %		14.7	-	-	-	-	-	-
All forms, number	Number	1	9	4	17	45	185	68	228
	Area	2053	20 355	2971	11 466	8764	36 910	4712	15471

Source: *Calculations done by the authors according to the data of the Central Statistical Bureau of Latvia, LURSOFT and the Ministry of Agriculture.*

■ in the group of smaller farms a large predominance is laid by the peasants farms, although on average they manage smaller land area than farms of other entrepreneurial forms.

Main conclusions

1. The numerical structure of agricultural enterprises and business companies (commercial farms) greatly varies by regions and districts: in Dobele district they are twice more than in Jelgava district and 25 times more than in the spacious district of Daugavpils.
2. The owners or managers of large (≥ 1000 hectares) land areas more frequently choose the form of a capital company, but in some districts farms are also run in the traditional form of a peasants farm.
3. In small (50 - 99 hectares) and smaller (100- 499 hectares) commercial farms the form of a peasants farm prevails everywhere, though the popularity of the form of an individual merchant increases.
4. Large and prestige business companies operate both in the form of joint stock companies and limited liability companies, as well as the form of an individual merchant is used.
5. The land areas managed by large and the largest agricultural enterprises and business companies greatly varies by districts.
6. The results of this wide research do not establish a quantitative basis to name one form of entrepreneurial activities to be the most perspective, and advisable one, however logical expert decisions lead to the conclusion that the proportion of capital companies would increase both in the structure of farms and in the managed land areas.

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Interrelationships between Farm Development and Social Capital in a Regional Context

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Abstract

The environment forms and influences people living and acting in it. This process is reflexive. Farms play an important role in Latvian rural areas, especially in Zemgale region. Farm development indicators are partially related to social capital indicators. Social capital research in the world was started by studying it mostly in a regional context. If we view social capital through spatial dimension, farm social capital may have several levels: small community, local, regional, and interregional levels. Farm development is closely connected with the existence of social capital in these levels. The involvement of farm owners in local municipal activities or participation in public organisations that function mostly at regional and interregional levels are used as indicators for the research and evaluation of farm owners social capital. Farms whose owners perform at regional and interregional levels are better developed and more viable than farms that are directed towards the use of local or municipal social capital. However, there are several specific social capital formation conditions regarding farm development, and all 4 levels of social capital are essential for farm development under their influence. This is an important fact in a regional development because the more enhanced social capital is, the greater opportunities are available for making investments in regional development.

Key words*:* social capital, farm, region, social activities, development.

Introduction

Routinely regions are defined as bigger parts of geographical space that are characterised by internal unity of an environment, mainly in cultural, economic and political processes (Jordan T., Domosh M., Rowentree L., 1994.). An understanding of a region could be very different and depends on interests, aims, and the era.

It is impossible to separate the region from its socio-economic processes because a spatial area is not only a reflection of society, but the society itself (Raagma G., 2002). The social spatial area contains many and different objects, natural and artificial, including cooperation and traditions, which facilitate the exchange of material things and information. These objects are not only things, but also relationships. A community or a region is the result of complex processes of production, reproduction or new formation of spatial areas.

The meaning and value of tangible, measurable and empirical things are much studied and interpreted at micro and macro levels. Though the evaluation of relationships between people in economics is quite a new thing, and it has close connection with such a term as social capital. Social capital characterizes the structure of relationship. The World Bank is involved in social capital research and is of the opinion that social capital has connection with institutions, interrelations and norms, which constitute quantity and quality of social interactions in society (World Bank, 2002). Nevertheless, A. Portes holds a view that social capital is a situation of opportunities for actors to get some goods for themselves, using their membership in social networks or other social structures (Portes, 1998).

The author of the paper has made her own definition of social capital, in which *social capital is the capital of relationships forming in the networks of social structures and influencing individual decisions*.

The aim of the paper is to ascertain the influence of social capital on farming in the context of regional development. To achieve the aim the following objectives were set:

1. to define the indicators prescribing the development of farms in Zemgale region;
2. to select the indicators for farm social capital in the spatial aspect;

3. to find out interrelationships between the above mentioned indicators by means of the survey method.

Due to the analysis of information on social capital, we can state that one of the research directions is the regional one. Actually the exploration of social capital was started at the regional level, as almost each research refers to R. Putnam's papers "Making Democracy Work. Civic Traditions in Modern Italy"(1993) and "Bowling alone: The Collapse and Revival of American Community"(2000). The first paper describes the difference between the north and the south regions of Italy from the social capital aspect. R. Putnam has stressed, that cities became rich because they were civic. In regions where there are strong civic societies, traditionally there is also a high level of income and local governments work better. Later he replicated that research in the USA. There he concluded that the level of social activities lowered and the level of individualism rose. Both papers and conclusions attracted great attention. Consequently since 1996 papers and researches were contributed to the journals of social sciences at the speed of geometrical progression. R. Putnam also stated that civic activities of society had very strong connection with political ones.

Human needs can also be arranged in a hierarchy. Social anthropologist A. Maslow's pyramid of needs says that every human being has the need to be belonged. Only after realizing own identity and being satisfied with it, humans start to fulfil their highest need – self-realization. Social groups usually have roots in the society in which they exist. A community could be defined as a small, relatively independent group of individuals that has common values and mindset, direct and all-round relationships (Raagma G., 2002).

Human capital is a measurable, and under-invoicing potential in a certain territory, but the existence of social capital in a region is only prevision. It seems to differ essentially by groups of population. Therefore, to evaluate this kind of capital, we need to find indicators of social capital in a certain group of population and only then to find interrelationships between them (Pelše M., 2004., Strīķis V., Pelše M. etc. 2004).

P. Bourdie stated that the amount of social capital of agent depended on the networks, which could be effectively mobilized and on the amount of capital (economic, cultural or political), which is available in every point of the net (Piazza-Georgi B., 2002). The faster, more networking and more mobile will be the world, the less there will be need to invest in social capital from the spatial point of view.

For the analysis of the role of social capital in regional development, R. Putnam has used the density of association and societies in a region as an indicator, but S. Knack and F. Keefer – the trust level in society in general (Knack S., Keefer F., 1997), while M. Freitag used social ties and the trust level (Freitag M., 2001), but E. Zingg and M. Benz have also involved political activities in local and state elections (Zingg E., Benz M. 2003).

In some parishes, social capital is totally different and mostly connected with the quality of human resources in that area. Spatial features of social capital are the results of investments, which are accessible for individuals living in a parish or a region. If a parish has quite a lot of mobile individuals then it is no surprise that there are more investments in interregional social capital.

Survey methods and organization

The author has made a survey of farm owners in the spring of 2005 in Zemgale. The objective of the survey was to find the most appropriate indicators, which characterize the spatial structure of farm social capital, and on this basis to assess the main interrelationships between the development of farms and regional development.

The results of the survey were processed by SPSS tools. All statistical indices were calculated with *Statistical Package for Social Sciences* (SPSS 11.01). c^2 – Chi square tests were used to evaluate interrelationships between variables of nominal scale. P-value was a criterion for decision making. It was assumed that the level of probability ļ was 0.05. The statistical probability coefficient Phi was used for characterization of ties between two indicators in the sample.

The general sample of the survey includes the farmers of Zemgale, which produce farm goods for the market and submit Individual Income Statements or Enterprise Income Statements to the State Revenue Service (SRS). The sample was selected randomly.

Since Zemgale has districts with different conditions for farming, and also under a recommendation of Latvian FADN Consultative Council,

Zemgale region was divided into two parts – subregions after processing farm production data. According to Latvian FADN (LVAEI, 2004), they are the following:

Zemgale-1: Bauska, Dobele, and Jelgava districts;

Zemgale-2: Aizkraukle, Jēkabpils, and Tukums districts.

K. Šproģis, a professor of Latvia University of Agriculture, and Ž. Zahārova in their paper "Zemgale as an Agricultural Region" have also drawn an attention to the fact that the current division of Zemgale region provides substantially different conditions for farming– only Jelgava, Bauska and Dobele districts, as well as the southern parts of Saldus and Tukums districts have more or less equal conditions (K. Šproģis, Ž. Zahārova, 2003). Therefore the following three districts were surveyed: Bauska, Dobele and Jelgava, which have more or less equal agricultural production, and sales conditions and territorial location.

The sample comprised 192 respondents, out of which 62 were women. The majority or 52% of the respondents had a secondary or a special secondary education. In Zemgale almost 40% of the sample were covered by the respondents between 50 and 64 years who had been engaged in agricultural production. Young farmers under the age of 35 were only 15.1% of all the respondents.

The following aspects were chosen as **economic indicators** for the farms:

1. respondents' opinion on the development of their farms';
2. the extent of farm turnover growth;
3. the extent of farm size growth.

Initially the indicators of production growth were also included into this group: the average growth rate in sugar-beet and winter wheat yield, and milk yield in the years before and now. Nevertheless, during the processing of the data they were excluded from the further analysis because the above mentioned farmers due to their business fields, created very uneven groups.

The respondents opinion on the development of their farm was evaluated with the answers "yes" or "no". The farms turnover growth was estimated by the questions "what was the turnover in 2004 in Lats", and "what has been the growth of turnover for the last 5 years". The author has made 2 levels for the turnover growth. The principle for the formation of levels is shown in Fig.1.

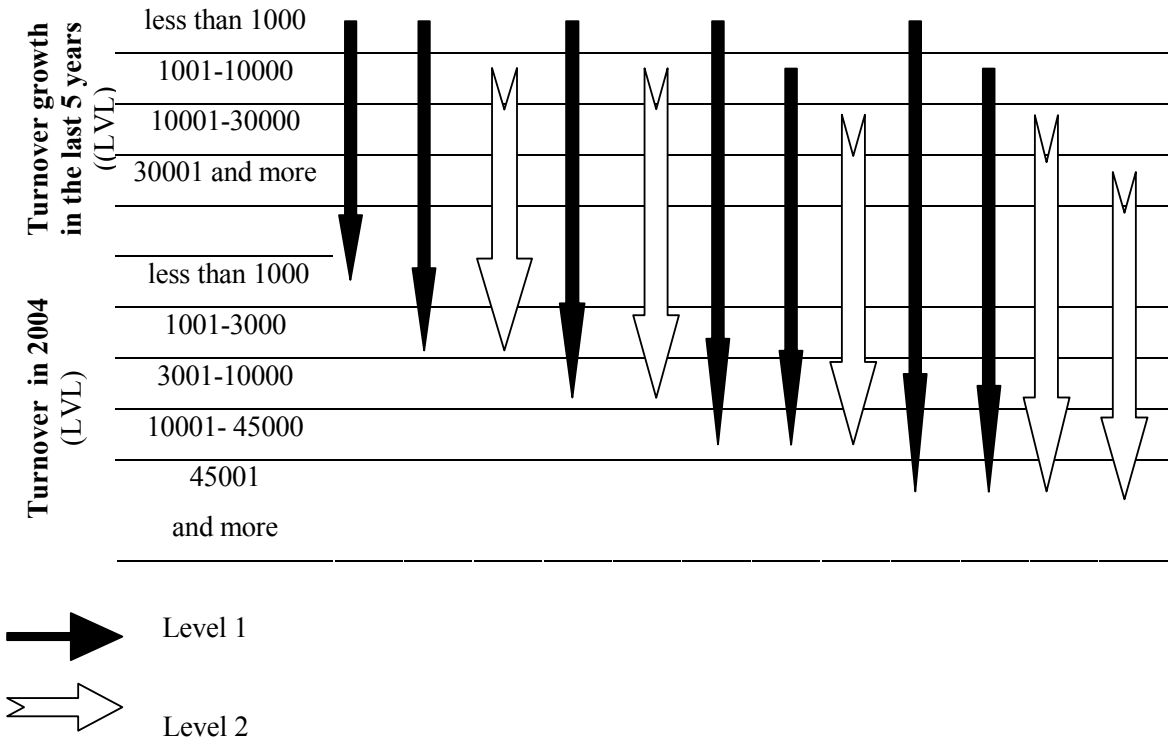

Fig.1 **The principle for the formation of the farm turnover levels**

Table 1

Increase in the size of farms (in 2004: start of farming)

Increase in farm size	Rank of increase	Number of farms	% of all farms
Less than 100 ha	Rank 1	82	42.7
101-300 ha	Rank 2	55	28.6
More than 301 ha	Rank 3	29	15.1
No increase	-	26	13.5

The growth of turnover was not observed in seven farms (out of 192), but the answers received from three farms were not credible, so these three farms were excluded from the further analysis. Thus 113 farms correspond to Level 1, but 69 farms – to Level 2. Regarding the changes in agricultural land areas used by farms, and according to the received answers the author has made 3 ranks. The principle for the formation of the ranks and numbers of farms are shown in Table 1.

The majority of farms (42.7%) correspond to Rank 1, the minority of farms - to Rank 3 (15.1% of all farms), and almost the same number of respondents (26) have not expanded their farms.

The indicators that characterize social capital are divided into two groups. First: owners of farms **take part in local governments activities** (hereinafter - activities):

- as a deputy or in local government work groups, commissions;
- membership in parish amateur collectives and/or organized sports activities;
- by donating aid for the needs of local government.

Second: **membership in societal organizations**, which was measured by a question "To what extent does your membership in any organization, professional association or partnership influence your farm business?". In order to estimate the social capital of farm owners, the author divides social capital into four spatial levels:

1. small communities;
2. local government;
3. intra-regional;
4. inter-regional.

Table 2 shows the mutual condition for the selected indicators and the social capital spatial aspect. The author uses the term farm social capital as farms are a special form of entrepreneurship. In fact farms are a family enterprise, and if we talk about social capital this enterprise owns, we cannot talk only about the farm owner's social capital, and social capital of the other family members is also essential. The explanation of four social capital levels is as follows:

Small community social capital: individuals mostly contact only the members of their households. They do not participate in any public activities neither at local, nor regional levels. Economic transactions outside the local neighbourhood are made formally; no informal relations exist.

Local social capital: individuals mostly contact only the members of their households and relatives, friends and people from the local neighbourhood. They participate in public activities on the territory of a local municipality. Economic transactions outside the local neighbourhood are made only formally.

Regional social capital: individuals contact the members of their households, employees working on their farms, people living and working outside the local municipality. Economic transactions outside the local neighbourhood are made both formally and informally.

Inter-regional social capital: individuals have a wide network of contacts both at the local level and outside it. They participate in public activities held by the local government, get involved in the network of informal organizations that perform at the regional level. When making economic transactions, both formal and informal contacts are made.

Here the fact that Latvian public organizations perform mostly at regional and inter-regional levels is taken into account.

Correlation between the spatial levels of social capital and other indicators are shown in Table 2. The fact is taken into account that societal organizations in Latvia are actually active at regional and/or interregional levels.

Table 2

Spatial levels of the farm owners' social capital

Level of social capital	Indicators of social capital	Number of owners
small communities	Activities-no, societal organizations-no	40
local government	Activities yes, societal organizations no	26
intra-regional	Activities no, societal organizations yes	51
inter-regional	Activities yes, societal organizations yes	75

Here a question could be raised - why such indicators are used for regional and interregional social capital? Those farms, which produce farm goods for the market, are more or less in equal positions (regarding production and sales), but the difference appears exactly through informal relationship networks. If we look at a local government territory as one separate regional category, and a district, region and state territory as another one, then we can assume that the networks of relationships, which exist in a local government, together with networks outside the local government area creates vertical dimension of social capital. Besides, there are several specific factors, which limit farm owners' social mobility in general and mobility in these networks or structures, and they are:

1. very strong ties with the farm, which at the same time often is their house. That binds to a concrete place or territory. A hypothesis: people, who are engaged in agriculture and have private homes, are less mobile;
2. heritable business, a need for an offspring, which would continue to work in agriculture. A hypothesis: families with children are less mobile;
3. income level and education level in agricultural sector in Latvia in general are lower than in others fields of business. A hypothesis: people with higher income and a higher formal education level are more mobile. The higher income is gained, the higher possibility exists that people feel free, have a flexible life style, enjoy culture, travelling, etc. The higher education, the higher possibility to get a job, to change it for a better one, etc.

For those, who have low mobility, such mental components of social capital like trust, cooperation, relationship networks start to be of greater importance. For the farmer, these components are created a little bit different compared to other rural and even more to town inhabitants. Relationships in a narrow sense (between family members, as well as kin) are of extremely great importance. This fact is determined largely by the process of agricultural production, which demands the labour force and the closest people can help here very well, because there is a catastrophic lack of a qualitative and trusty labour force in rural areas of Latvia.

Also the contacts with the closest neighbourhood and other farmers who live in the territory of the local government are very important. Good relationships with farmers in the neighbourhood create a feeling of safety for one's property and also a good basis for informal cooperation. In turn, involvement in local activities enforces the above mentioned networks, and offers satisfaction. In business, the contacts and nets available on the regional level are important for the farmer, i.e., contacts with consultation companies, farm products buyers, etc.. Consultants give advice how to increase agricultural production, but long and trusty collaboration with the buyers of farm products offers the best solutions for both parties in trade. These contacts at the intra-regional level are important for the economic growth of a farm. At the inter-regional level, the owner and his/her family member activities are largely connected with the organizations, which are more or less engaged in agriculture and its policy making (professional associations, unions, agricultural organizations). These networks exceed the borders of one region, as district or regional level organizations also function at the state level. These are organizations, which quite strongly influence the common agricultural policy making process in Latvia.

All these social capital hierarchy steps are important, therefore, the author has developed four levels of spatial structure for social capital. Of course, there are farmers who are not involved in any local government activities and do not care about the situation in their municipality. But is such an attitude not influencing their own economic growth?

Results of the survey

The following statistical hypotheses were made:

H_0 – there is no interrelationship between the owners of farm social capital in the spatial aspect and their economic development level.

H_1 - there is interrelationship between the owners of farm social capital in the spatial aspect and their economic development level.

In testing hypotheses, economic indicators of farms and social capital were used and they were grouped according to the spatial aspect. All 192 questionnaires were used for the analysis. The distribution de facto and percentage rates of the responses are shown in Table 3.

The owners who live in a social capital group of small communities have the smallest changes in the farm size, the respective figure amounts to 62.4%, while the inter-regional group shows only 24% of cases (Table 3). Rank 3 increase in the mentioned group was 26.7%. Rank 3 increase was observed only in one case in a social capital group of small communities. The most represented group by means of columns is Rank 1 group, but the group with no registered changes in their farm size had the fewest respondents.

Table 3

Increase in the size of farms and farmers' social capital

Spatial aspect of social capital		Changes in the size of farms by ranks				Total
		Rank 1	Rank 2	Rank 3	no changes	
small communities	number	25	8	1	6	40
	%	*62.5*	*20*	*2.5*	*15*	*100*
local government	number	13	2	4	7	26
	%	*50*	*7.7*	*15.4*	*26.9*	*100*
intra-regional	number	26	17	4	4	51
	%	*51*	*33.3*	*7.8*	*7.8*	*100*
inter-regional	number	18	28	20	9	75
	%	*24*	*37.3*	*26.7*	*12*	*100*
total	number	82	55	29	26	192
	%	*42.7*	*28.6*	*15.1*	*13.5*	*100*

Table 4

The turnover of farms and farmers social capital

Spatial aspect of social capital		The rank of turnover				Total
		Rank 1	Rank 2	no changes	impossible	
narrow communities	number	29	7	4	-	40
	%	*72.5*	*17.5*	*10*	-	*100*
local government	number	17	8	1	-	26
	%	*65.4*	*30.8*	*2.8*	-	*100*
intra-regional	number	29	19	1	2	51
	%	*56.9*	*37.3*	*2*	*3.9*	*100*
inter-regional	number	38	35	1	1	75
	%	*50.7*	*46.7*	*1.3*	*1.3*	100
total	number	113	69	7	3	192
	%	*58.9*	*35.9*	*3.6*	*1.6*	*100*

Table 4 shows the relationship between the turnover of farms and the owner social capital. Rank 1 includes the majority of owners of the sample, but Rank 2 includes more such owners who have regional and interregional social capital (see Table 5). Rank 1 comprises the turnover of quite an opposite tendency.

Due to the lack of information, the last two groups (no changes, impossible) were excluded from the further analysis. This is also quite understandable because prices increase with each year. During the last 5 years the sales prices of agricultural products have slightly increased, while the prices of inputs (like fuel etc.) have increased extremely at the same time. Thus the exclusion of these both groups from the analysis provides us with a complete information.

In general the opinion of farm owners is positive in all groups. There are very few farmers who suppose that there is no development. The farmers who belong to the regional and inter-regional group of social capital and have a negative opinion are in fact the smallest part of all respondents, i.e., 7.8% and 4% accordingly (see Table 5). Every fourth farmer from a small communities group holds a view that his/her farm stagnates.

Table 6 reflects c^2, Phi and p-value as it is already mentioned in the methodological part of the paper. P-value is used for stating correlation between variables. The correlation is observed between all variables, because p-value is lower than 0,05 (0.000<0.05; 0.033<0.05; 0.000<0.05). The coefficient of correlation magnitude Phi shows that the strongest correlation exists between the changes in farm sizes and the spatial aspect of social capital, since the coefficient has the highest magnitude there. The interrelationship between the increase in farm turnover and farm social capital is very weak, but the interrelationship between the opinion on the viability of farms and farm social capital is somewhere in the middle.

According to the analysed data and the identified interrelationships, we should deny H_0 and accept H_1, - there is interrelationship between the farm social capital in the spatial aspect and the economic level of their development.

The above-analysed interrelationships between economic and social capital indicators firstly are

Table 5

Owners opinion on the development of their farm in general and farmers social capital

Spatial aspect of social capital		Is farm developing?		Total
		yes	no	
small communities	number	30	10	40
	%	*75*	*25*	*100*
local government	number	17	9	26
	%	*65.4*	*34.6*	*100*
intra-regional	number	47	7	51
	%	*92.2*	*7.8*	*100*
inter-regional	number	72	3	75
	%	*96*	*4*	*100*
total	number	166	26	192
	%	*86.5*	*13.5*	*100*

Table 6

Interrelationship between farms' economic indicators and farmers' social capital

Economic indicators	χ^2	Phi	p - value	Correlation
Changes in land area	35.834	0.432	0.000	is
Increase in turnover	8.766	0.219	0.033	is
Opinion of development	21.595	0.335	0.000	is

oriented towards the development of farms. The development of farms means:

1. income – welfare for the farmer and family;
2. income –taxes in the local government budget; improved local environment;
3. income – taxes in the public budget; the development of industries connected with agriculture and, finally, a constructive rural policy.

The growth process is inductive. The process of investments takes place, first of all, through the expression of real money, second – through conditions of social capital, though more indirectly. These investments originate from mutual interaction, trust, cooperation and cohesion.

Conclusions

1. There are several specific factors leaving an impact on the farm social capital and which are mostly related to the low mobility level of farmers and their families.
2. The economic development of farms is connected with the spatial aspect of social capital, and it is divided into four levels: small community, local government, intra-regional and inter-regional level. Farms, which have a small community or local level of social capital, are less developed than those which have the regional or inter-regional level of social capital.
3. Depending on disposable social capital, the investment process is going on in the respective regional spatial area. More significant contribution to the regional development is made by farms having social capital, contact networks and informal activities both at local and regional levels. Therefore, social capital of all four levels is essential for farm and regional development.
4. Wide social capital is a substantial precondition to attract investments for the regional development.

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Kopsavilkums

Vide veido un ietekmē cilvēkus, kas tajā dzīvo un darbojas. Šis process ir atgriezenisks. Latvijas laukos, jo īpaši Zemgales reģionā, nozīmīgu vietu ieņem zemnieku saimniecības. To attīstības rādītājus daļēji ietekmē sociālā kapitāla raksturojošiem indikatori. Sociālā kapitāla pētniecība lielā mērā aizsākās ar tā izpēti reģionālajā aspektā. Ja sociālo kapitālu skata

telpiskā dimensijā, tad zemnieku saimniecību sociālajam kapitālam var izdalīt vairākus līmeņus: šauras kopienas, vietējo, reģionālo un starpreģionālo. Zemnieku saimniecību attīstība ir cieši saistīta ar šo sociālā kapitāla noteikto līmeņu esamību. Izvērtējot zemnieku saimniecību vadītāju sociālo kapitālu, kā indikatori tiek izmantoti, viņu dalība vietējā pašvaldībā notiekošajās aktivitātēs vai dalība sabiedriskajās organizācijās, kas Latvijā darbojas pārsvarā tikai reģionālajā vai starpreģionālajā līmenī. Zemnieku saimniecības, kuras darbojas reģionālajā vai starpreģionālajā līmenī, ir labāk attīstītas un dzīvotspējīgākas, nekā tās saimniecības, kuras vērstas uz vietējo vai pašvaldības līmeņa sociālo kapitālu. Taču pastāv atsevišķi zemnieku saimniecību sociālā kapitāla veidošanās specifiskie nosacījumi, kuru ietekmē zemnieku saimniecību attīstībā būtiski ir visu četru sociālā kapitāla līmeņu esamība. Šis aspekts ir svarīgs elements arī reģionālajā attīstībā, jo plašāks sociālais kapitāls, jo lielākas iespējas investēt reģionālajā attīstībā.

The Impact of Part-time Study Subprogramme "Entrepreneurship and Management" on the Promotion of Business Development

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Abstract

The paper describes the results of the research on the impact of the part-time study subprogramme "Entrepreneurship and Management" offered by Faculty of Economics, Latvia University of Agriculture on the promotion of business development. The object of the research is part-time students of the faculty who were inquired by means of questionnaires and thus expressed their assessment of the acquired knowledge. The structure of students, changes in their structure, interests of students, evaluation and recommendations have been studied during the research. Considering the stiff competition in the programmes of social sciences, strengths, weaknesses, opportunities and threats of the subprogramme "Entrepreneurship and Management" were analysed by means of M. Porter's five strengths model. The study would allow to assess the quality of provided and acquired knowledge, as well as the role of the subprogramme "Entrepreneurship and Management" in national economy.

Key words: study programme; subprogramme; quality of education; knowledge; part-time student.

Introduction

My research is connected with the assessment of the study subprogramme "Entrepreneurship and Management" of the academic Bachelor's programme "Economics" offered by Faculty of Economics, Latvia University of Agriculture to determine its impact on the promotion of business development.

Presently a wide choice of different levels of education in social sciences is being offered in Latvia, though there are no studies done to evaluate the feedback of imparted knowledge. Are highly qualified specialists being produced by educational institutions of Latvia?

Due to the aggravation of competition between higher educational institutions, especially among those offering study programmes in social sciences, I wanted to study the quality and importance of the subprogramme "Entrepreneurship and Management" of the academic Bachelor's programme "Economics" offered by Faculty of Economics, Latvia University of Agriculture. The research is narrow-specified as each higher education institution has different names for study programmes and offers different opportunities to acquire them, as well as study requirements differ.

I consider that the availability of such researches is limited, at least for general public. The majority of such studies are done for internal needs of higher education institutions to apply them for the assessment and improvement of study programmes. Until now a Ph.D. paper on secondary schools of Latvia has been defended. The author of the Ph.D. paper is Jānis Eglītis and the theme of his research is "Regional and Economic Aspects for the Provision of Educational Quality". Currently two Ph.D. papers are being elaborated. One of them is being written by Dace Vīksne, a Ph.D. student of Faculty of Economics, the theme of the research is connected with regional higher education institutions, namely, "Importance of Regional Higher Education Institutions for Sustainable Development of Territories of Latvia", while the other paper "Regional Aspects of Faculty of Economics, Latvia University of Agriculture" is being written by Anda Vītiņa. Here the research is based on the data base of faculty graduates. Several other studies have been done in this field, for instance, "Situation of Rural Economic Education under the Contexts of the Salzburg Conference and Precise Agricultural Strategy" by Anda Vītiņa. As well there has been done a research and written a Ph.D. paper "Perspectives of Higher Education due to the Expan-

sion of the European Union. Case of Estonia". The research is based on the results of the students inquiry performed within a period of four years. A conclusion that there is a need for a new type of education was drawn. The author of the paper is Udo Meriste (2004.)

Hypothesis of the research: Knowledge acquired in the subprogramme "Entrepreneurship and Management" of the study programme "Economics" offered by Faculty of Economics promotes the development of business run by the part-time students.

The aim of the research is to study the assessment and use of acquired knowledge by the part-time students in the subprogramme "Entrepreneurship and Management" of the study programme "Economics" offered by Faculty of Economics.

The following **objectives** were set to achieve the aim:

1) to study the changes and trends in the structure of part-time students;
2) to clarify the motivation to choose the study subprogramme "Entrepreneurship and Management";
3) to evaluate the role of acquired knowledge in the business ran by the graduates.

Research methods: Questionnaires filled in by the part-time students of the subprogramme "Entrepreneurship and Management" of the study programme "Economics" offered by Faculty of Economics, Latvia University of Agriculture were used for the solution of the research objectives, besides the method of grouping, SWOT analysis and M. Porter's five strengths model were used for the assessment of the findings.

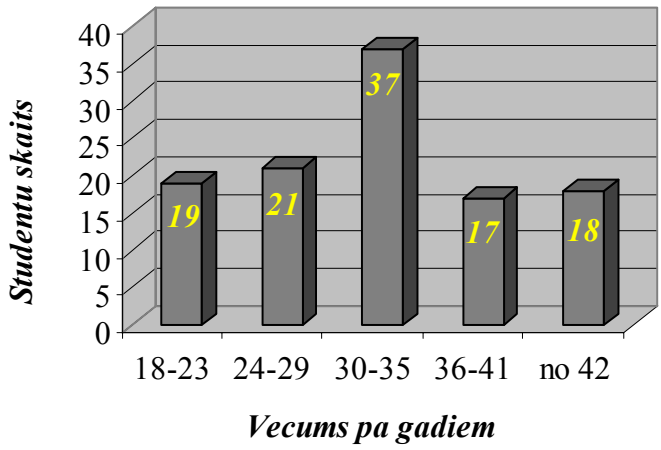
Results and discussion

1. Structure of students

The questionnaire was elaborated to perform the above-mentioned objectives and aim of the research, and the part–time students of the subprogramme "Entrepreneurship and Management" of the study programme "Economics" offered by Faculty of Economics, Latvia University of Agriculture were asked to fill in the questionnaire. The students of Years 3-5 of different specialisations of the mentioned subprogramme participated in the inquiry. The following information was inquired: age of students, sex, field of specialisation, number of higher education, motivation and criteria for choosing the academic study programme and exactly the subprogramme "Entrepreneurship and Management", the evaluation of the mentioned subprogramme, as well as proposals for the improvement of the subprogramme "Entrepreneurship and Management".

The assessment of the students' age leads to the conclusion that the students of age between 30 and 35 form the majority of all the students (see Figure 1).

According to Figure 1, the students of age between 30 and 35 form the majority of all the students. In my opinion the fact that many people have to undergo retraining for a new occupation explains



(Legend: number of students; age)
Source: *Research done by the author according to the questionnaires.*

Fig. 1 **The breakdown of part-time students of the subprogramme "Entrepreneurship and Management" by age in 2004**

the prevalence of this age group among the students. Considering the necessity of fast increase for new and higher education, people try to acquire new professions, knowledge, etc.. I think that this subprogramme provides a full-scale education. It can be studied in addition to any other profession, which is certified by the fact that there are students who have chosen this subprogramme for the acquisition of the second higher education.

Question 2 of the questionnaire refers to the breakdown of students by sex.

The obtained results show that women prefer this subprogramme more than men, as their number exceeds the number of men 9 times (see Fig. 2).

2. Field of employment

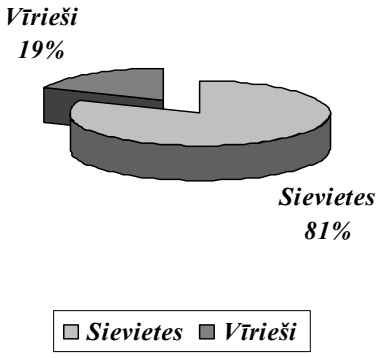
The next question of the questionnaire provided the possibility to ascertain the field of employment of students. Five answers were offered: service sector/trade, education, industry, agriculture, and other sectors, where the students could list the field of employment.

The data of Table 1 show that part-time students try to combine work and studies, since only 4% of the questioned students do not work or are unemployed. There were no unemployed among the men. There was no big difference in the field of employment between men and women.

Service sector and trade were the most represented fields of employment, as 38.1% of men and 47.8% of women have mentioned it. Next follows other sector: 42.9% and 31.5% respectively. Here the respondents have mentioned the following sectors: medicine, transport, aviation and other sectors. 9.5% of men and 5.4% of women are employed in industry, while 6.5% of women are employed in the sector of education.

3. Motivation for the choice

The answers received to the question, *is it your first or second higher education*, show that only three or 2% of female students out of questioned 113 part-time students study to obtain the second higher education.



(Legend: female; male)

Source: *Research done by the author according to the questionnaires.*

Fig. 2 **The breakdown of part-time students of the subprogramme "Entrepreneurship and Management" by sex in 2004**

Table 1

Breakdown of part-time students by fields of employment

Sector	Male		Female	
	Number	% of questioned	Number	% of questioned
Services, trade	8	38,1	44	47,8
Other sectors	9	42,9	29	31,5
Industry	2	9,5	5	5,4
Agriculture	1	4,8	4	4,4
Education	1	4,7	6	6,5
Jobless	-	-	4	4,4
Total	**21**	**100**	**92**	**100**

Source: *Research done by the author according to the questionnaires.*

"Personal development" is the governing reason for studies in the academic study programme (see Table 2).

The breakdown of students by sex (Table2) shows that women are more courageous and predisposed. Only 2 women have chosen the possibility "Other reasons", and explained their motivation to study as *to change the present job* and *all the above mentioned reasons*. Venture and purposefulness are needed to achieve the set target.

Personal development (41.4%) and Job (41.4%) are the most important factors for male respondents. Only 17.2% of them care for career. It is interesting that none of the male respondents has chosen this study programme to continue studies for Master's degree.

The situation between the female respondents is slightly different. Female similar to male respondents explain their motivation to study in the following way: *Job* – 29.1%, *Personal development* – 34.4 %, and *Career* – 27.8% of all the female respondents. It is pleasant that 7.4% of the female respondents have chosen the study programme to continue studies for Master's degree.

After the processing of the information on the reasons for choosing the academic study programme, I wanted to know why exactly Latvia University of Agriculture was chosen for the place of studies. Here the question included free choice to state five criteria. The results of the questionnaire are included into Table 3.

According to Table 3, the reasons for choosing Latvia University of Agriculture are very different. Lower studies fee charged by the university in comparison with other higher education institutions has been the most frequently stated criterion. Obviously it is a very important factor, as 76% of male and almost 95% of female respondents have considered it as Criteria 1. Suitable place of location is the next decisive factor, which has been chosen by 67% of male and 75% of female respondents. Well planned timetable of

Table 2

Arguments for studies in the academic study programme

Reasons	Male		Female	
	Number	% of questioned	Number	% of questioned
Job	12	41.4	44	29.1
Personal development	12	41.4	52	34.4
Career	5	17.2	42	27.8
Studies for Master's degree	-	-	11	7.4
Other reasons	-	-	2	1.3
Total	**29**	**100.0**	**151**	**100.0**

Source: *Research done by the author according to the questionnaires.*

Table 3

Motivation and criteria of the part-time students for choosing Latvia University of Agriculture

Criteria	Male		Female	
	Number	% of questioned	Number	% of questioned
Lower fee of the studies	16	76.2	87	94.6
Suitable location	14	66.7	69	75.0
Well planned timetable of classes	9	42.9	36	39.1
Positive references, recommendations	7	33.3	24	26.1
Accreditation	5	23.8	7	7.6
Education financed from the budget	-	-	3	3.3
Other criteria	15	71.4	54	58.7

Source: *Research done by the author according to the questionnaires.*

classes and positive references, and recommendations are of almost equal importance. 43% of male and 39% of female respondents have noted well planned timetable, specifying the possibility to study in two flows, one of which has a possibility to study two terms by four weeks, and the other one – on Fridays and Saturdays.

It was interesting to see the degree of attention the part-time students have paid to the accreditation of Latvia University of Agriculture. It turned out that men have paid more attention to this fact than women – almost 24% and only 8% respectively.

The students motivation to study exactly in the subprogramme "Entrepreneurship and Management" is summarised in Table 4.

According to Table 4, the majority or 35.3 % of part-time students have chosen the subprogramme "Entrepreneurship and Management", since it is very closely connected with their work and chosen profession. Equal percentage of the respondents answers is divided by reasons that the chosen subprogramme would help achieve the future plans or develop personal career, or due to some other personal reason which the students were not eager to explain. 10% of part-time students have chosen the mentioned subprogramme for personal development, while 8% and 6% have mentioned career perspectives at work and important field.

In general the part-time students have a positive assessment for the subprogramme "Entrepreneurship and Management" (see Figure 3).

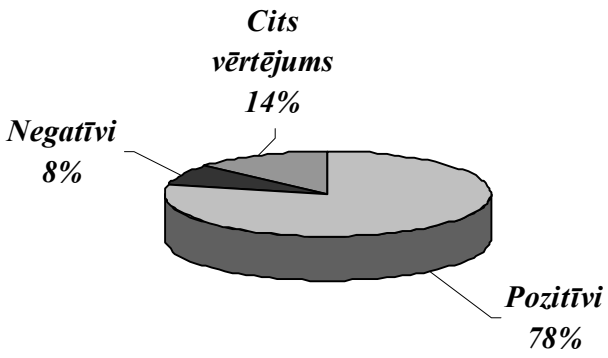
78% of the questioned students have expressed a positive evaluation of the programme, while . 8% have had a negative opinion, which I think is not a bad indicator. The reasons for having a negative assessment are very few: negligent attitude of the teaching staff towards the students, too many agricultural subjects, difficulties to write term papers before hearing the course of lectures and other reasons. Relatively large number of students

Table 4

Motivation of the students to study in the subprogramme "Entrepreneurship and Management"

Motivation of the choice	Number	% of questioned
Relation with a job	35	35.3
Future plans, career	20	20.2
Private reasons	20	20.2
Personal development	10	10.1
Career perspectives at work	8	8.1
Important field	6	6.1
Total	**99**	**100.0**

Source: *Research done by the author according to the questionnaires.*



(Legend: negative; other evaluation; positive)
Source: *Research done by the author according to the questionnaires.*

Fig. 3 **The assessment of the subprogramme "Entrepreneurship and Management" done by part-time students**

have chosen *Other assessment,* i.e., 14% of respondents. At this point I asked the students to explain the variant "Other assessment" and here are some of the reasons mentioned: incompatibility of some subjects with the subprogramme, very difficult subject – *Econometrics*, very few computerised subjects, few practical examples, many terms papers to be written, etc.. Almost half of the respondents of the mentioned 14% had difficulties to express their evaluation.

By means of the question *How do you apply the acquired knowledge in business?* I wanted to clarify whether the subprogramme "Entrepreneurship and Management" provides enough knowledge to apply it in practical and real situations of life. Unfortunately 24.8% of respondents did not answer this question. According to the results of the questionnaire, 38.1% of students practically do not use the acquired knowledge. This category includes also several answers, where the respondents have stated that they are going to use the knowledge when choosing a new job or establishing their own business. 32.7% of respondents have remarked that they apply the acquired knowledge at their work very successfully, while 4.4% of the questioned part-time students answered that they had used knowledge acquired when studying in the subprogramme "Entrepreneurship and Management" at households or private life.

The last question was aimed at recommendations to be expressed by the students for the improvement of the study process. Unfortunately the students were not very responsive here, since almost half or 49.6% of the respondents did not answer this question. One of the recommendations expressed by many respondents, i.e., 8.0% was connected with the introduction of new study subjects related to finances and taxes, as well as subjects that could help better understand the European Union matters and activities. Another suggestion, with the same percentage of respondents, was a need to "refresh" or improve some of the study subjects, besides the questioned part-time students consider that the subject *Econometrics* should be included into the graduate study programmes.

The next important suggestion is the provision of introductory lectures at the end of the examination period, as 3.5% of the respondents consider that the teaching staff insufficiently explain the essence of their subjects. Since many study subjects include the writing of term papers, the students have an opinion that it is difficult to write these papers without a complete understanding of the essence of the subject, as well as they suggest writing term papers after the end of the course of lectures.

Several recommendations were expressed regarding the organisation of practical classes. The students would like to have more practical classes, so the teaching staff would have closer contact with the students, and they in turn could apply theoretical knowledge in practice. 3 students or 2.7% wanted to see the teaching staff more responsive.

Some recommendations expressed by individual students:

- to supply students with more handouts;
- to pay more attention to the qualification of some lecturers;
- to reconsider the correspondence of credit points (CP) to the amount of the study subject;
- to increase the number of classes in some subjects;
- to decrease the number of students both in lectures and practical classes;
- to check the procedure of exams.

4. SWOT analysis

I wanted to evaluate the development of the study subprogramme "Entrepreneurship and Management" of the academic Bachelor's programme "Economics" offered by Faculty of Economics, Latvia University of Agriculture. Therefore I have chosen a corresponding method, i.e., SWOT analysis. Much and unbiased information is needed to carry out the analysis. The gathered information is processed and appropriately grouped. The materials of the Faculty of Economics and the Department of Business and Management, as well as the results of the elaborated questionnaire (assessment done by students) were used for the purpose of the SWOT analysis.

The general evaluation of Table 5 shows that the subprogramme "Entrepreneurship and Management" offered by Faculty of Economics successfully fulfils the study process. The summarisation of the questionnaires filled in by the staff of the Department of Business and Management and part-time students of the corresponding subprogramme leads to the conclusion that the expressed recommendations have much common. Since the salary of the teaching staff is low in comparison with the private

Table 5

SWOT analysis of the subprogramme "Entrepreneurship and Management"

Strengths	Weaknesses
Economic education in relation to agriculture	Insufficient amount of practical assignments for valuable acquisition of study subjects
Highly qualified professors and assistant professors	Lack of communication subjects (for instance, management psychology)
Suitable location (close to Riga)	Offer of new study subjects (taxes, finances, etc.)
Lower study fee	Insufficiently explicit introductory lectures
Satisfactory timetable (examination periods)	Large groups for lectures, thus the contact with students disappears
Accredited study programme	There are some lecturers unable to interest the students into the acquisition of their subject
University degree - prestige	
Good publicity and recommendations	
High quality of education	
Interrelation of the subprogramme with the practice	
Satisfactory breakdown of subjects	
Competitive knowledge	
Marketable sector	
No similar subprogrammes offered by other universities	
Opportunities	**Threats**
Improvement of the subprogramme with new and updated study subjects	Stiff competition in higher economic education
Collaboration with foreign universities, attraction of guest lecturers	Saturated labour market with economists in Latvia
Collaboration with companies and institutions, inviting field specialists	Changes in the government policy
Development of further and distance education, and e-studies	Changes in the motivation of students
Elaboration of new methodological and teaching aids	
Attraction of young teaching staff	

Source: *Research done by the author according to the questionnaires.*

companies, then frequently skilled and highly qualified lecturers do not choose to work in the field of education. Under the new Cabinet regulations on allocation of scholarships the department has more possibilities to attract new scientists for work in the university, as the amendments of these regulations ensure the allocation of a scholarship for Ph.D. students who work in the field of pedagogics.

The subprogramme "Entrepreneurship and Management" has great advantages as it offers economic education which is closely connected with agriculture. More frequently farmers of Latvian countryside is forced to acquire knowledge in economics to be able to receive support payments from the European Union. After the accession of Latvia into the European Union on May 1, 2004 the farmers and entrepreneurs of Latvia have more possibilities to use the European financing. Hence farmers and entrepreneurs need wide knowledge not only in economics, business and management, but also knowledge about the European Union itself and its legislation. Here, I think, the strengths and weaknesses of the Department of Business and Management become apparent.

The collaboration of the Department of Business and Management with other institutions of the Faculty of Economics, like, the Department of Accounting and Finances, the Department of Economics, and the Dean's Office for the implementation of the subprogramme is of great importance. The successful cooperation with the Dean's Office has helped attract more students, as the students have expressed positive attitude towards the planned study timetable. Students are satisfied with the choice of freedom: to study twice a year by four weeks each time or continuously on Fridays and Saturdays.

To assess the impact of competitors, M. Porter's five strengths model was created on the basis of the SWOT analysis.

Porter's five strengths model might be split into the following sections:

- threats of new competitors;
- strength of consumers;
- mutual competition of the companies;
- strength of suppliers;
- threats of replaceable products.

In my research I wanted to study in more details the strength of suppliers or the strength of the study subprogramme "Entrepreneurship and Management" of the academic Bachelor's programme "Economics" offered by Faculty of Economics, Latvia University of Agriculture (from the point of view of part-time students).

Strengths of the subprogramme "Entrepreneurship and Management"

Strengths of the subprogramme "Entrepreneurship and Management" according to the SWOT analysis:

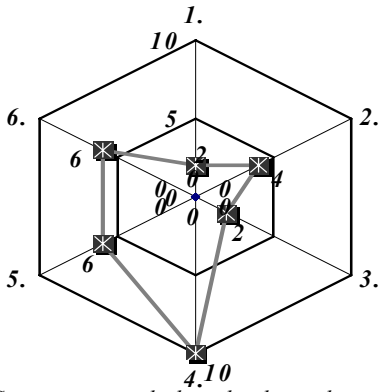
1) other university type higher education institutions do not provide part-time academic studies in business and management;

Table 6

Even –odd method for the strengths of the subprogramme "Entrepreneurship and Management"

	Strengths	1.	2.	3.	4.	5.	6.	Total
1.	No similar programme offered elsewhere	**X**	1	3	4	5	6	**2x**
2.	Possibility to study part-time	1	**X**	2	4	2	6	**4x**
3.	Academic Bachelor's study programme	3	2	**X**	4	5	6	**2x**
4.	Study fee is comparatively lower	4	4	4	**X**	4	4	**10x**
5.	Suitable place of location	5	2	5	4	**X**	5	**6x**
6.	Accredited	6	6	6	4	5	**X**	**6x**

Source: *research done by the author.*



Source: *research done by the author.*

Fig. 4 **Reticulate figure of the strengths of the subprogramme "Entrepreneurship and Management"**

2) possibility to acquire knowledge in business and management in part-time studies;

3) Latvia University of Agriculture offers to acquire this knowledge as an academic Bachelor's study programme;

4) the study fee of the part-time study subprogramme "Entrepreneurship and Management" is comparatively lower;

5) suitable place of location of Latvia University of Agriculture;

6) the study subprogramme "Entrepreneurship and Management" of the academic Bachelor's programme "Economics" is accredited.

The results of even –odd method for the strengths are depicted in Figure 4 to make the picture more clear.

According to Table 6 and summarised Figure 4, the study fee determined by Latvia University of Agriculture under the Senate decision is the largest strength. The suitable place of location of the university and the accredited study programme have to be mentioned as the next two strengths. Many students, also part-time students, pay great attention to the accreditation of the study programme, since this provides the opportunities for studies abroad both during the present studies and after graduation.

Weaknesses of the subprogramme "Entrepreneurship and Management"

Weaknesses for the strength of the subprogramme "Entrepreneurship and Management" according to the SWOT analysis:

1) lack of communication subjects (for instance, management psychology);

2) offer of new study subjects (taxes, finances, etc.);

3) insufficiently explicit introductory lectures;

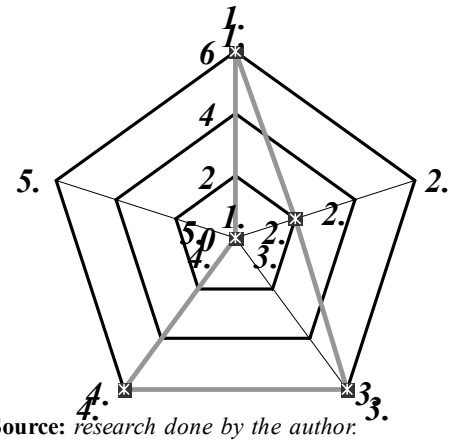
4) large groups for lectures, thus the contact with students disappears;

Table 7

Even –odd method for the weaknesses of the subprogramme "Entrepreneurship and Management"

	Weaknesses	1.	2.	3.	4.	5.	Total
1.	Lack of communication subjects	**X**	1	3	1	1	**6x**
2.	Offer of new study subjects	1	**X**	3	4	2	**2x**
3.	Insufficiently explicit introductory lectures	3	3	**X**	4	3	**6x**
4.	Large groups for lectures, thus the contact with students disappears	1	4	4	**X**	4	**6x**
5.	Some lecturers unable to interest the students into the acquisition of their subject	1	2	3	4	**X**	**0x**

Source: *research done by the author.*



Source: *research done by the author.*

Fig. 5 **Reticulate figure for the weaknesses of the subprogramme "Entrepreneurship and Management"**

5) there are some lecturers unable to interest the students into the acquisition of their subject.

The results of even –odd method for the weaknesses are depicted in Figure 5 to make the picture more clear.

The assessment of the weaknesses stated by the SWOT analysis show that almost all of the possible weaknesses have to be considered as serious. Obviously the weakest points are the lack of communication subjects (for instance, management psychology), insufficiently explicit introductory lectures, large groups for lectures, thus the contact with students disappears, as well as some lecturers unable to interest the students into the acquisition of their subject.

Opportunities of the subprogramme "Entrepreneurship and Management"

Opportunities for the strength of the subprogramme "Entrepreneurship and Management" according to the SWOT analysis:

1) improvement of the subprogramme with new and updated study subjects;

2) collaboration with foreign universities, attraction of guest lecturers;

3) collaboration with companies and institutions, inviting field specialists;

4) development of further and distance education, e-studies;

5) elaboration of new methodological and teaching aids.

The results of even –odd method for the opportunities are depicted in Figure 6 to make the picture more clear.

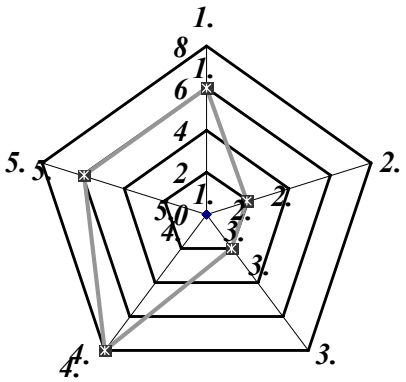
The study of the opportunities of the subprogramme "Entrepreneurship and Management" leads to the conclusion that much attention has to be paid to the improvement of the study subprogramme. The largest number of points,

Table 8

Even –odd method for the opportunities of the subprogramme "Entrepreneurship and Management"

	Opportunities	1.	2.	3.	4.	5.	Total
1.	Improvement of the subprogramme with new and updated study subjects	**X**	1	3	1	1	**6x**
2.	Collaboration with foreign universities, attraction of guest lecturers	1	**X**	2	4	5	**2x**
3.	Collaboration with companies and institutions, inviting field specialists	3	2	**X**	4	5	**2x**
4.	Development of further and distance education, and e-studies	1	4	4	**X**	5	**8x**
5.	Elaboration of new methodological and teaching aids	1	5	5	5	**X**	**6x**

Source: *research done by the author.*



Source: *research done by the author.*

Fig. 6 **Reticulate figure for the opportunities of the subprogramme "Entrepreneurship and Management"**

according to Porter's five strength model, has been granted for the development of distance learning and e-studies. The rapid development of IT technologies may explain the fact. Especially part-time students try to spend their time purposefully, since many of them are forced to combine work and studies. Besides the opportunities, being very vividly explicit by the reticulate figure and thus topical, include the improvement of the subprogramme with new and updated study subjects, as well as the elaboration of new methodological and teaching aids. In my opinion these two opportunities are very closely connected, as new methodological and teaching aids would be needed in case of the improvement of the subprogramme.

Collaboration with foreign universities or attraction of guest lecturers in comparison with other opportunities is not considered to be such important, since this opportunity in the part-time studies is used very rarely. The same regards the collaboration with companies and institutions or attraction of field specialists, as a working part-time student has his/her own experience to compare theoretical knowledge.

Threats of the subprogramme "Entrepreneurship and Management"

Threats for the strength of the subprogramme "Entrepreneurship and Management" according to the SWOT analysis:

1) stiff competition in higher economic education;
2) saturated labour market with economists in Latvia;
3) changes in the government policy;
4) changes in the motivation of students

The results of even –odd method for the threats are depicted in Figure 7 to make the picture more clear.

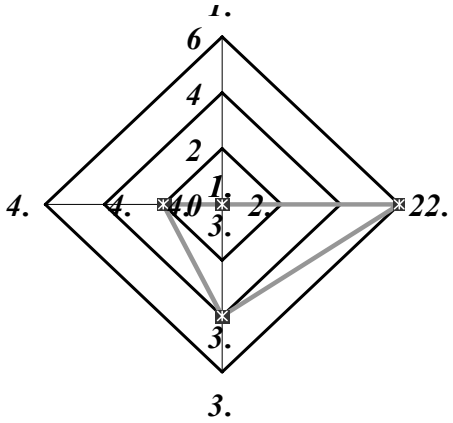
The largest threats are caused by the very saturated labour market with economists in this country. Part-time students consider it to be most urgent threat. It is interesting that the

Table 9

Even –odd method for the threats of the subprogramme "Entrepreneurship and Management"

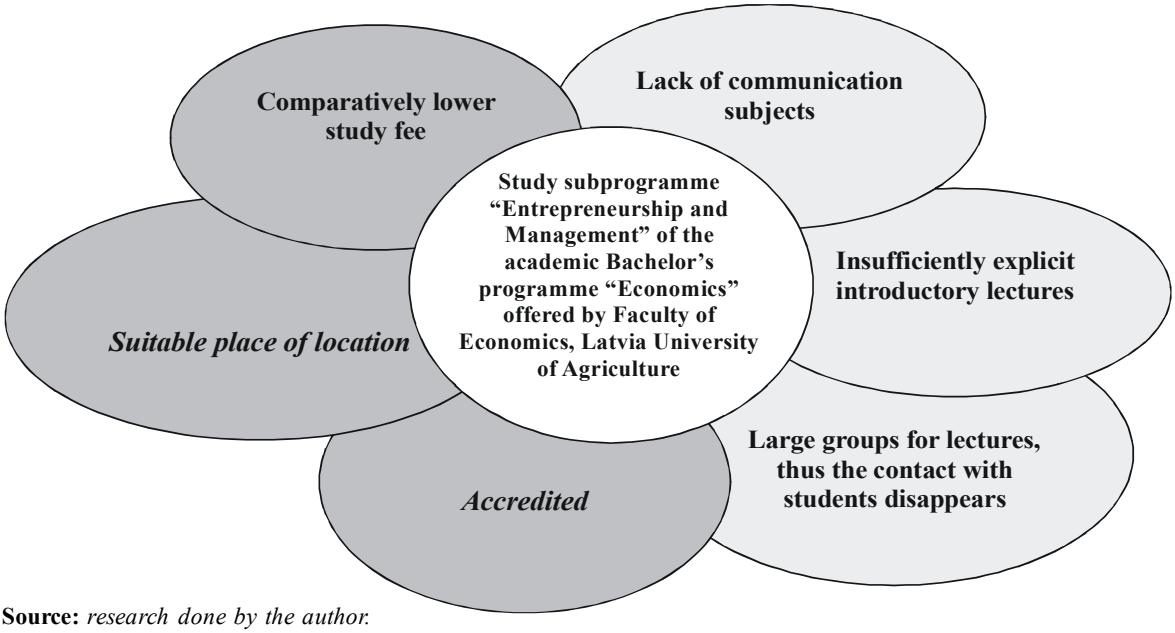
	Threats	1.	2.	3.	4.	Total
1.	Stiff competition in higher economic education	**X**	2	3	4	**0x**
2.	Saturated labour market with economists in Latvia	2	**X**	2	2	**6x**
3.	Changes in the government policy	3	2	**X**	3	**4x**
4.	Changes in the motivation of students	4	2	3	**X**	**2x**

Source: *research done by the author.*



Source: *research done by the author.*

Fig. 7 **Reticulate figure for the threats of the subprogramme "Entrepreneurship and Management"**



Source: *research done by the author.*

Fig. 8 **Vien's diagram**

changes in the government policy is an important threat from the point of view of part-time students.

In general Porter's five strength model may be depicted by means of Vien's diagram, which includes both strengths and weaknesses.

Conclusions, proposals, recommendations

1. The knowledge acquired in the study subprogramme "Entrepreneurship and Management" of the academic Bachelor's programme "Economics" offered by Faculty of Economics, Latvia University of Agriculture promotes business development of the country, since 35.3 % of respondents have chosen the mentioned programme as it is connected with their work.

2. GDP of education has an important share in total GDP of the country – 4.5% on average, but GDP in real prices has a tendency to increase between 2001 and 2004, on average by LVL 20 million per year.

3. According to the results of the questionnaire, 78% of the part-time students have given a positive evaluation, while only 8% have a negative assessment for the study subprogramme "Entrepreneurship and Management" of the academic Bachelor's programme "Economics" offered by Faculty of Economics.

4. Due to the evaluation of competitors by means of M. Porter's five strengths model it was concluded that comparatively low study fee, suitable place of location, etc. are the strengths of the study subprogramme "Entrepreneurship and Management". As weaknesses - lack of communication subjects, insufficiently explicit introductory lectures, as well as large groups for lectures. The opportunities of the subprogramme are the following: to develop distance learning and e-studies, develop new and updated study subjects, etc., while the saturated labour market with economists in Latvia is seen as the largest threat.

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Development and Position of Small and Medium Size Enterprises in National Economy of Latvia

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Abstract

European economy is characterised by high share of small and medium size enterprises of total employment, lower level of unemployment than the average national, and high share of turnover of the SMEs export. Therefore the article focuses on the study of small and medium size enterprises, as the aim of the research is to learn and evaluate the dynamics of small and medium size enterprises and determine their position in national economy of Latvia. The analysis includes a period between 1997 and 2004. Due to the summarised and evaluated statistical information, it was concluded that small and medium size enterprises comprise a major part of national economy, since they represent more than 99% of all enterprises in Latvia and thus contribute to entrepreneurship and innovation. However the number of SMEs per 1000 inhabitants is still insufficient for successful development of Latvian business, as according to this figure, Latvia (indicator equals to 20.71 in 2004) considerably lags behind the average level of the EU member states (51), and other EU candidate countries.

Key words: Small and medium size enterprises (SME), national economy, regions.

Introduction

The European Council closing meeting convened in Lisbon in 2000 brought forward the target for the European Union activities within the next decade to become the most competitive and dynamic economy in the world. Successful development and promotion of small and medium size enterprises (SME) plays an especial role for the achievement of the set target. Latvia's integration into the common market of the European Union holds out hope for a larger flow of investments and development possibilities for local enterprises outside Latvia. However many concerns exist in relation to the possibility of Latvian small business to compete in the European market and degree of national support. Therefore presently a significant consideration is being paid to the role of SMEs in Europe, since SMEs enhance economic growth and competitiveness, provide employment, create social uniformity, as well as turn out to be the most active developing and introducing new products, and ensure more stiff mutual competition. Thus entrepreneurship and elaboration of planned business policy is one of the key factors for the development of national economy.

In compliance with the "Long-term Economic Strategy of Latvia" adopted by the Cabinet of Ministers on July 17, 2001, the priority national strategic goal of economic policy is to achieve living standard of the developed countries as soon as possible. The policy of development of SMEs meets the main national priorities set for the general economic policy:

- creation of favourable conditions for the functioning of the economy;
- promotion of efficient and competitive sectoral structure;
- mitigation of socially-economic disproportion and risks (MVU attīstības politikas pamatnostādnes, 2003).

The development of strong and territorially balanced sector of SMEs would ensure the increase of production activities, eliminate economic and social disproportions, and environmental abasement, as well as the principle of balanced and sustainable growth would be observed.

There are several studies and research done on some aspects of small and medium size enterprises and their role and place in national economy of Latvia and other countries (Kirila K., Rudusa I., 2004; Kozuch A, Kozuch B., 2000; Fisher E., Reuber R., 2000; Liepiņa R., 2003; Ņikitina V., 2003; Saktiņa D., 2005, etc.). These findings reveal other problems requiring solutions, like the place and role of SMEs in particular regions, fi-

nancial support of these enterprises and some other aspects; therefore the current study is based on the following **hypothesis**: small and medium size enterprises constitute a significant part of economically active enterprises and consequently affect regional and national development. **The aim** of the research is to learn and evaluate the dynamics of small and medium size enterprises and determine their position in national economy of Latvia. The research comprises the development of the following items:

- study of the characteristics and legislative basis defining small and medium size enterprises;
- analysis of the dynamics and position of small and medium size enterprises.

The information compiled by the Ministry of Economics, the Central Statistical Bureau of Latvia, the legislation of the Republic of Latvia, materials of the European Commission, scientific publications and other materials have been used for the purpose of the study.

Results and discussion

Characteristics of small and medium size enterprises

There is no general definition of small and medium size enterprises neither in the world nor in Latvia, as various criteria depending on the policy of the country are applied to the identification of SMEs. Sometimes a SME definition is altered due to regional peculiarities or achievement of a certain goal. In general *quantitative* criteria are based on such indicators as number of employees or headcounts, turnover and balance. According to some foreign researchers like Fisher E. and Reuber R. (Fisher E., Reuber R., 2000) the term small and medium companies encompasses a heterogeneous group of businesses, ranging from a single artisan working at home and producing handicrafts to sophisticated software product firms selling in specialised global niches. What is, or is not, a SME is usually defined by the number of employees of the firm, and definitions vary between countries. Definitions used in developed nations will often have higher size thresholds than those in less developed countries. For example, in Mauritius, firms with fewer than 10 employees are considered microenterprises and firms with 10 to 49 employees are considered SMEs, while in Japan, firms with fewer than 300 employees are considered small. In addition, some developed countries, such as Australia and Canada, differentiate between manufacturing firms and other firms; in Canada, for example, a small business is considered to be a manufacturing firm with fewer than 100 paid employees or any other firm with fewer than 50 paid employees, while a medium-sized has between 100 and 500 paid employees (Fisher E., Reuber R., 2000).

Within the general SME category a number of sub-groups can be identified: self-employed persons with no employees, microenterprises with fewer than 10 employees; small firms with 11 to 49 employees, and medium-sized firms with between 50 and 100 employees. In most economies, self-employed persons with no employees will constitute the majority of SMEs, and a very small portion will be medium-sized firms. However, self-employed persons and microenterprises are often underrepresented in official statistics because they may be excluded from registration requirements or able to avoid compliance with such requirements. Failure to recognise their prevalence within the population of SMEs can lead to a distorted characterisation of SMEs (Rudusa I., Kirila K., 2004).

On May 6, 2003 the European Commission adopted a new Recommendation 2003/361/EC regarding the SME definition which replaced Recommendation 96/280/EC as from 1 January 2005. The revision takes account of the economic developments since 1996 and the lessons drawn from the application of the definition. It increases legal certainty, while reducing possibilities of its abuse, particularly with regard to state aid, Structural Funds and the Research and Development Framework Programme. This Recommendation concerns all Community policies applied within the European Economic Area in favour of SMEs and is addressed to the Member States, the European Investment Bank and the European Investment Fund. The definition has been adopted in a number of Community acts and programmes and integrated in the field of state aids where SMEs can benefit from exemption provisions including aid for R&D and vocational training.

European SMEs are a key to deliver stronger growth and more and better jobs – the two main objectives of the new Lisbon partnership for Growth and Jobs. They make up a large part of Europe's economy: there are some 23 million

SMEs in the EU, providing around 75 million jobs and accounting for 99% of all enterprises. They are also a key part of European industry, as they contribute up to 80% of employment in some industrial sectors, such as textiles, construction or furniture (European Commission, 2005).

Micro, small and medium size enterprises are socially and economically important, since they contribute to entrepreneurship and innovation. However, they face particular difficulties, which the EU and national legislation try to redress by granting various advantages to SMEs. A legally secure and user-friendly definition is necessary in order to avoid distortions in the Single Market. The revision ensures that enterprises, which are part of a larger grouping and could therefore benefit from a stronger economic backing than genuine SMEs, do not benefit from SME support schemes. According to the European Commission defition, breakdown of SMEs is characterised in Table 1.

The increase of the financial ceilings is designed to take into account subsequent price and productivity increases since 1996, however the headcount ceilings remain fixed.

Regardless of property and legal forms of commercial activities, international practice applies small number of employees and turnover as the key criteria for the determination of small size enterprise. These criteria have been chosen due to two aspects: the calculation of these indicators is quite simple, besides they are important as indicators for intensity of economic activities and acquisition of scientific and technical progress. In several sectors these parameters are classified by

Table 1

Breakdown of small and medium size enterprises according to the EC definition

Enterprise category	Headcount	Turnover	or	Balance sheet total
large	> 250	> EUR 50 million		> EUR 43 million
medium	< 250	≤ EUR 50 million		≤ EUR 43 million
small	< 50	≤ EUR 10 million		≤ EUR 10 million
micro	< 10	≤ EUR 2 million		≤ EUR 2 million

Source: *European Commission (2005).*

Table 2

Breakdown of enterprise categories according to German practice

Company	Number or headcounts or employees	Sales turnover in DEM per year
Industry		
Small	up to 49	up to 2
Medium	50 - 499	2 – 25
Large	500 and more	25 and more
Transport and service sector		
Small	up to 2	up to 0.1
Medium	3 - 49	0.1 – 2
Large	50 and more	2 and more
Wholesale		
Small	up to 9	up to 1
Medium	10 - 199	1 – 50
Large	200 and more	50 and more
Retail		
Small	up to 2	up to 0.5
Medium	3 - 99	0.5 – 10
Large	100 and more	10 and more

Source: *Schwan K., Seipel K.G., 1994.*

the specification of the company, for example, in Germany the specification of small enterprises is used in several sectors (see Table 2).

The formulation of the notion *small and medium size enterprise* is extremely important to achieve the maximum possible effect of public support. In 2002 a draft "Law on Public Support Control" was prepared and introduced to the Cabinet, where a definition of SME was specified. Later this draft law was altered into the law "On Control of Aid for Commercial Activities", which entered into force on January 1, 2003. Within the meaning of the law "On Control of Aid for Commercial Activities" (Section 1) **small and medium size commercial companies** are commercial companies with the headcounts less than 250 employees, annual turnover not exceeding LVL 23 million or total amount of balance not exceeding LVL 15 million, where one or several commercial companies not complying with the abovementioned criteria have 25 per cent of shares or votes (Komercdarbības atbalsta kontroles likums).

Yet Basic Guidelines of the SME Development Policy in Latvia and especially documents mentioned in Section 8 according to the SME definition determined by the EU state that all small and medium size commercial companies are classified into 3 groups:

a) medium commercial companies – commercial companies with
- number of employees - from 50 to 249 employees;
- annual net turnover - does not exceed LVL 23 million; or
- total balance value - is under LVL 15 million;

b) small commercial companies – commercial companies with
- number of employees - from 10 to 49 employees;
- annual net turnover - does not exceed LVL 4 million; or
- total balance value - is under LVL 3 million.

c) micro commercial companies – commercial companies with
- number of employees – not more than 9 employees;
- annual net turnover - does not exceed Ls 0.5 million; or
- total balance value - is under Ls 0.4 million (MVU attīstības politikas pamatnostādnes).

In compliance with the Section 24 of the law "On the Annual Accounts of Undertakings", medium enterprises are undertakings, which do not exceed two of the following criteria:

1) balance sheet total - LVL 1 million;
2) net turnover – LVL 2.4 million;
3) average number of employees for the accounting year – 250 people (Par uzņēmuma gada pārskatiem).

The definition of small size enterprises is also included into Section 17 of the law of the Republic of Latvia "On Enterprise Income Tax". Within the meaning of the law a small undertaking is an undertaking in which, during the taxation year regarding which a tax is assessed, at least two of the following conditions are not exceeded:

1) balance sheet value of fixed assets - LVL 70 000;
2) net turnover – LVL 200 000;
3) average number of employees - 25 people.

The law envisages that the tax rebate for small undertakings shall be 20 per cent of the enterprise income tax assessed (Par uzņēmuma ienākuma nodokli). Here the notion "small" characterises only the size of any form of commercial activities. It means that almost any form of commercial activities which is subjected to and pays enterprise income tax – an individual merchant, farmers, as well as any other form of commercial activities – may become a small size enterprise and receive the tax rebate (Vedļa A., 2000).

According to Recommendation No 361 of the European Commission dated May 6, 2003, the Central Statistical Bureau of the Republic of Latvia also applies the breakdown of economically active market sector statistical units into the following size groups:

- **large** statistical units: more than 249 employed; the total annual turnover exceeds LVL 33.4 million; the annual balance sheet total exceeds LVL 30.2 million;
- **medium** statistical units: 50 - 249 employed; the total annual turnover equals or is lower than LVL 33.4 million; the annual balance sheet total equals or is lower than LVL 30.2 million;
- **small** statistical units: 10 - 49 employed; the total annual turnover equals or is lower than LVL 6.7 million; the annual balance sheet total equals or is lower than LVL 7.0 million;
- **micro** statistical units: 9 or less than 9 employed; the total annual turnover equals or is lower than LVL 1.4 million (the Central statistical Bureau of the Republic of Latvia, 2005).

Summarising the above-enumerated aspects, it may be assumed that there are no uniform criteria for definition of SMEs in Latvia and available statistical information is provided by the simplest classification of SMEs: small enterprises with the number of employees under 49, medium enterprises with the number of employees ranging between 50 and 250. Thus the display of several *peculiarities of small and medium size enterprises* is possible due to the quantitative indicators of the company:

- they have relatively small market share, depending on limited market and number of clients;
- manager and owner is one and the same person (a small group) who makes decisions;
- they have no possibilities to benefit from long-term specialists, especially in the fields of finances and marketing, administrative functions are being performed by the owner himself in a rather personified way, formal management structures are not used;
- types of financing are not related to the capital market;
- company acts as a subsistence basis for the owner and his family;
- a very close personal link exists between an entrepreneur and the local society, therefore the clarification of clients needs is facilitated, and flexible and fast response to the changes in demand is enhanced (Ņikitina V., 2003).

It might be assumed that "localism" is more characteristic to small and medium size enterprises than large enterprises, i.e, SMEs have regional or local markets and they are dependent upon local resources.

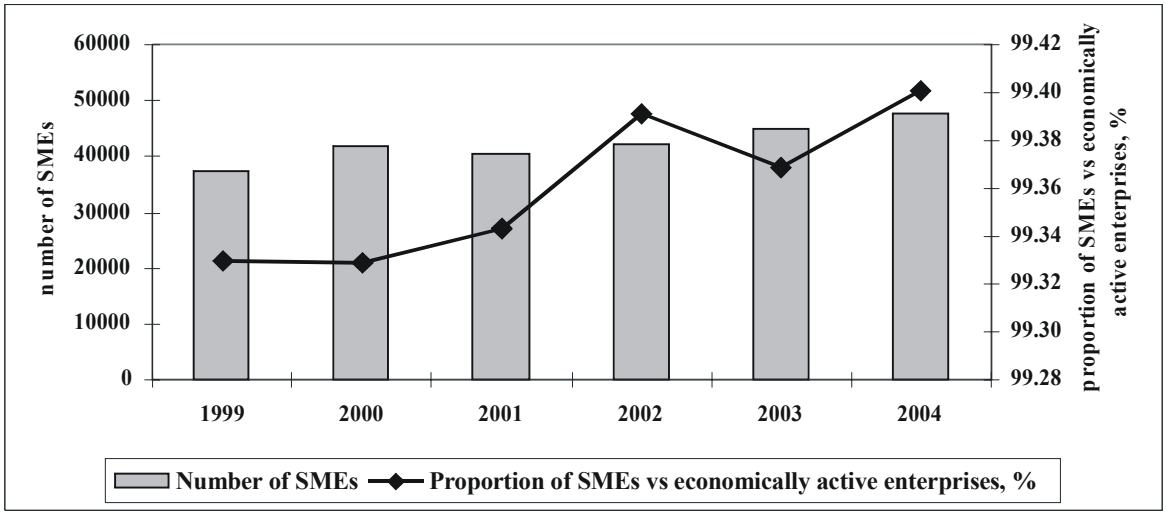
Transition to market economy has meant structural changes in the whole system of economic activities and thus new tendencies in the development of private business and consequently the development of small and medium size enterprises were marked.

Analysis of small and medium size enterprises dynamics

Small and medium-sized enterprises (SME) comprise a major part of national economy and play a significant role in employment and GDP growth in Latvia like elsewhere in Europe.

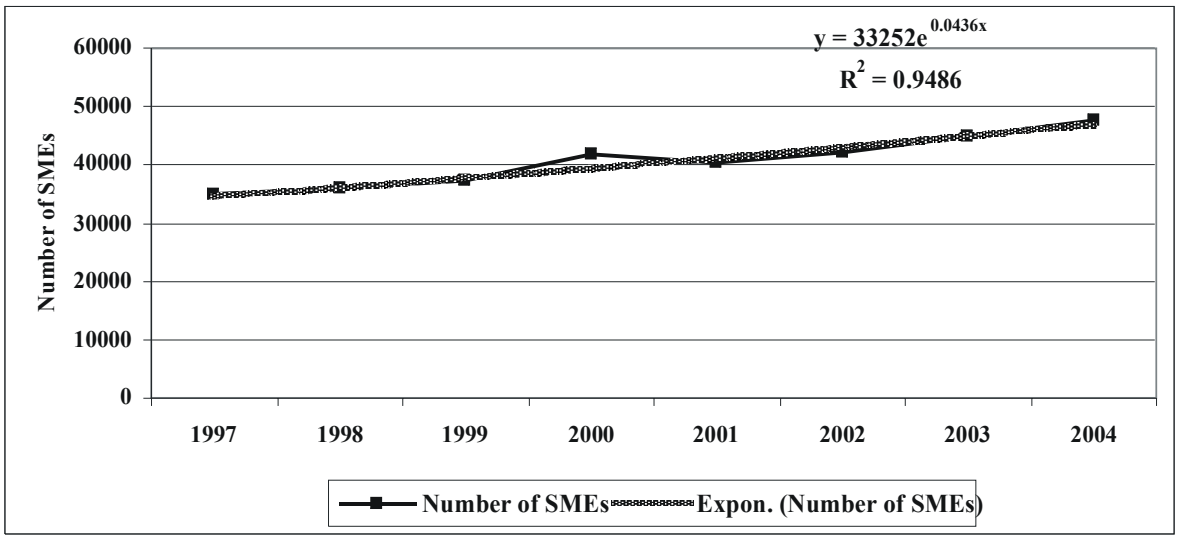
At the beginning of 2005 there were 48 053 economically active enterprises in Latvia, of which 47 765 or 99.4% fell in the category of SME (taking into account only the number of employees). The distribution of economically active SME in Latvia according to their size is similar to the one in the EU member states: micro enterprises – 76%, small enterprises – 20%, medium-size enterprises – 4%. 69.9% of private sector employees are employed in SME and create 63.2% of GDP (Ministry of Economics of the Republic of Latvia, 2005).

As it is shown in Figure 1, the number of SMEs has grown steadily with the exception of 2001, when it decreased by 1309 enterprises or 3.14% in comparison with the previous year. The decline in the number of economically active enterprises



Source: *Ministry of Economics of the Republic of Latvia (1999-2004).*

Fig. 1 **Coherence between the number of SMEs and their proportion vs economically active enterprises between 1999 and 2004**



Source: *Calculations done by the author according to the Central Statistical Bureau (1997-2004).*

Fig. 2 **Exponential regression of the number of small and medium enterprises over the period 1997-2004**

Table 3

SMEs by sectors of national economy between 1999 and 2004

Sector	1999	2000	2001	2002	2003	2004	Average increase of the row, %	Average increase of the base, %
Agriculture, hunting, forestry and fishery	1126	1137	1076	1149	1261	1373	3.50	5.42
Industry	4771	5256	5155	5375	5657	5842	3.50	11.98
Construction	2008	2270	2323	2456	2745	2998	8.42	27.41
Trade, repair services	18250	19527	18251	18057	18653	18518	0.40	1.92
Hotels and restaurants	1642	1936	1873	1973	2186	2326	7.44	25.38
Transport, storage and communications	2257	2601	2692	2744	3106	3356	8.38	28.49
Activities with real estate, rent and other commercial activities	4318	5297	5543	6297	7588	8245	14.02	52.71
Other sectors, including heat supply	2979	3686	3488	4223	3818	5107	12.72	36.44
TOTAL	**37351**	**41710**	**40401**	**42275**	**45014**	**47765**	**5.15**	**16.28**

Source: *Calculations done by the author according to the Central Statistical Bureau (1999-2004).*

explains also the decrease of SMEs in the particular year. The share of SMEs has exceeded 99% during the whole period analysed, if in 1999 it was 99.33% then in 2004 it already constituted 99.4%. This tendency evidences persistent significance of SMEs in national economy.

The equation of exponential regression was used for the evaluation of the growth rates of number of SMEs. The calculated equation of exponential regression is $y = 33252e^{0.0436x}$. It means that the number of small and medium size enterprises has increased with the annual rate of 4.36%. Applying financial formulas related to the calculation of compound interest, the following equation is derived $Y_t = Y_0(1+r)^t$, where r - is the over time rate of growth of Y (Gujarati D.N., 1995). Since the value of the selective coefficient $b_1=0.0436=Ln(1+ r)$ characterizes the rate of growth in a period of time and not for the whole period, then to calculate the percentage rate of

growth or decay within the whole period, it is necessary to calculate $1+ r=e^{0.0436x}$, the power of the base equals to 1.045 and thence r =1.045-1=0.045. It means that over the period 1997-2004, the number of SMEs has increased at the rate of 4.5%, therefore further increase of the number of SMEs is expected in the sector.

Statistical data of the recent years indicate positive trends in growth of the number of newly founded enterprises. Lursoft data show that 7690 newly founded enterprises were registered in 2003, 10 228 newly founded enterprises were registered in 2004, which is by 33% more than in 2003, and this growth has been the biggest during the last eight years (Ministry of Economics, 2005). The sector in which small and medium size enterprises operate is the basis for successful development of SMEs. Therefore the next study is done on the dynamics of SMEs by sectors of national economy (see Table 3).

According to the analysis of the information included into Table 3, the following conclusions may be drawn:

1) the number of small and medium size enterprises has increased in all sectors between 1999 and 2004;

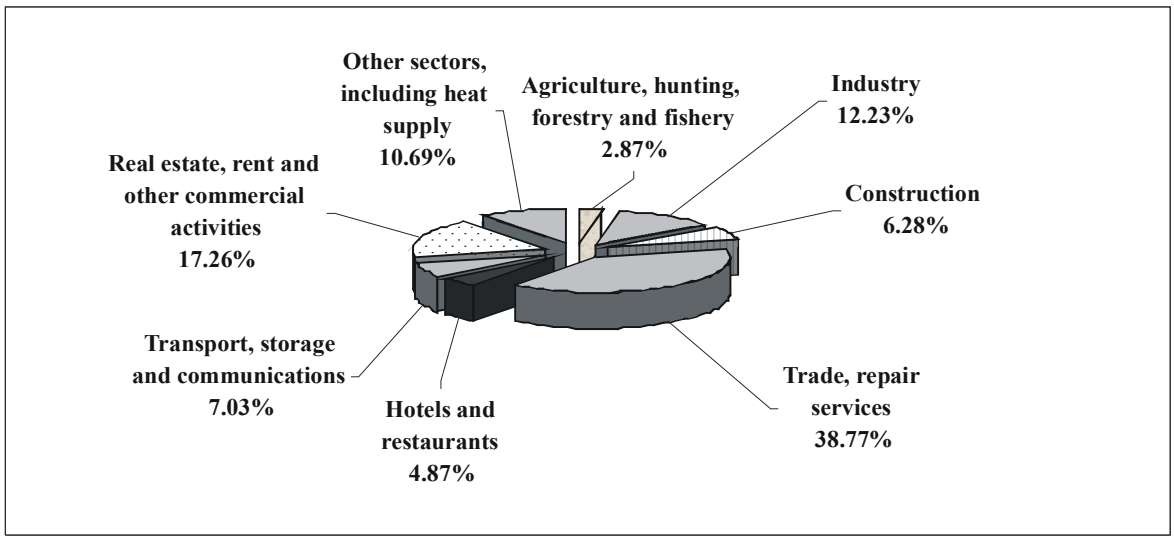
2) the average rate of growth of the row evidences that the most rapid increase of the number of SMEs was observed in the sector of real estate and other commercial activities – by 14.02%, but in trade and repair services only by 0.4% per year;

3) absolute disparity of the number of SMEs in the sector of trade and repair services and agriculture and related sectors has risen from 17124 in 1999 to 17392 in 2003;

4) average increase of the base is extremely different and it fluctuates from 1.92 in trade to 52.71 in the sector of real estate.

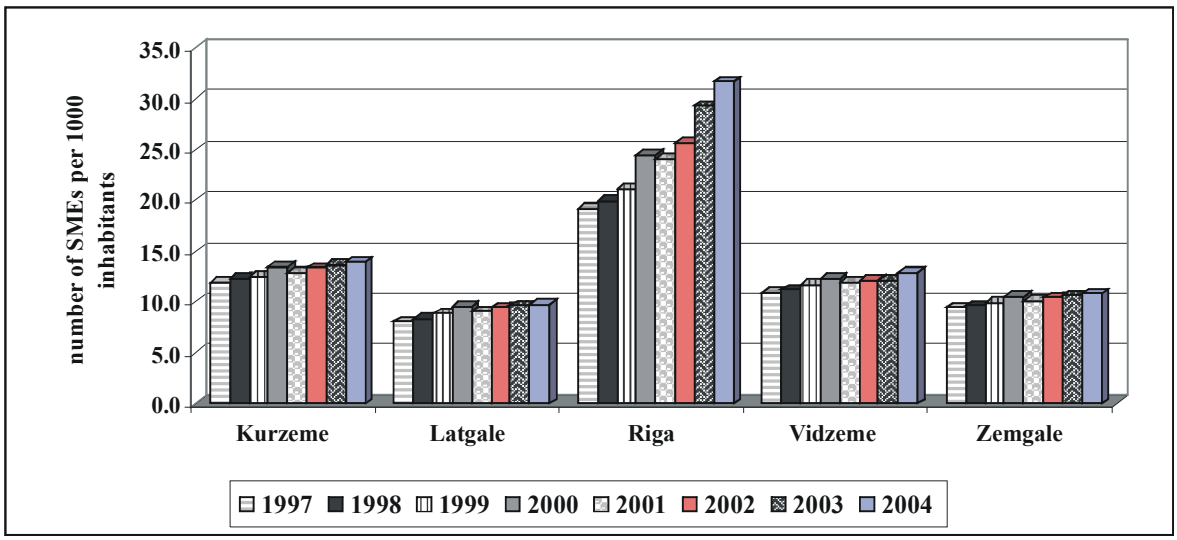
In general the average increases of the row and base over the period analysed is 5.15% and 16.28% respectively. In 2004 the number of SMEs has increased by 27.88% in comparison with the base year 1997. The least number of SMEs is observed in the sectors of agriculture, hunting, forestry and fishery, an increase is experienced in 2004. Since up to 2004 Latvia was not a member state of the EU, the development of agriculture, hunting, forestry and fishery sectors was hindered, as their produce was mainly sold in the local market and sales efficiency rate of SMEs in these sectors was rather low. Small and medium size enterprises broken down by sectors of national economy in 2004 are shown in Figure 3.

In 2004 according to the Central Statistical Bureau of the Republic of Latvia 38.77% of all SMEs were engaged in services related to trade and repair, 17.26% were dealing with real estate, rent and other commercial activities and for 12.23% of small and medium size enterprises the main business was industry. Therefore it may be concluded that there is quite diversified enterprise structure in Latvia.



Source: *the Central Statistical Bureau (2004).*

Fig. 3 **Breakdown of SMEs by sectors of national economy in 2004**



Source: *Calculations done by the author according to the Central Statistical Bureau (1997-2004).*

Fig. 4 **Number of SMEs per 1000 inhabitants between 1997 and 2004**

Table 4

SMEs by the largest cities and districts over the period 1999 – 2004

Cities and districts	1999	2000	2001	2002	2003	2004	Changes vs 1999	Changes vs 2003
Riga	19495	22681	21987	23218	25216	27950	8455	2734
Daugavpils	1457	1546	1434	1534	1600	1596	139	-4
Jelgava	865	912	895	953	1020	1031	166	11
Liepāja	1293	1427	1375	1448	1508	1495	202	-13
Rēzekne	563	590	577	598	599	603	40	4
Ventspils	822	852	783	780	817	822	0	5
TOTAL	**24495**	**28008**	**27051**	**28531**	**30760**	**33497**	**9002**	**2737**
Riga district	1870	2161	2238	2390	2502	2799	929	297
Daugavpils district	167	171	155	164	176	185	18	9
Jelgava district	256	266	264	276	294	309	53	15
Liepāja district	375	392	358	360	359	380	5	21
Rēzekne district	195	216	221	228	234	248	53	14
Ventspils district	96	106	111	119	123	121	25	-2
TOTAL	**2959**	**3312**	**3347**	**3537**	**3688**	**4042**	**1083**	**354**

Source: *Calculations done by the author according to the Central Statistical Bureau (1999-2004).*

The number of SMEs per 1000 inhabitants is used as the most important indicator of SMEs development in any country. According to this figure, Latvia (indicator equals to 20.71 in 2004) considerably lags behind the average level of the EU member states (51), and other EU candidate countries. Besides the indicator greatly varies by the regions of Latvia: in Riga - 31.69, Kurzeme - 13.94, Vidzeme - 12.87, Zemgale - 10.82, while in Latgale - 9.77. The disproportion (only 31.36% of all economically active enterprises operate outside Riga) is deepened by the fact that the share of sales companies is relatively higher in the regions with lower level of entrepreneurial activities (in Latgale - 50.32%, while in Riga only 40.84%).

According to Figure 4, Riga region is the leading region in Latvia by the number of SMEs per 1000 inhabitants, the most extreme indicator has been reached in 2004 constituting 31.7 enterprises

per 1000 inhabitants, while in Latgale the respective figure amounts only to 9.7. The analysed figure has been almost steady in all the rest of the regions fluctuating between 9.4 to 13.9 enterprises per 1000 inhabitants; while in Riga region in 2004 the figure has grown by 12.49 enterprises per 1000 inhabitants in comparison with the base year 1997.

However in general the structure of the number of SMEs broken down by the sectors is quite similar and close to the average national indicator in different regions of Latvia (in sales - 42.5%, industry – 12.9%, transport, storage and communications – 6.51%, construction – 5.81%, hotels and restaurants – 4.64%, agriculture, hunting, forestry and fishery – 2.7%). The only exception is activities with real estate, rent, computer services, scientific and other commercial services, the share of which is twice higher in Riga (18.52%) than in other regions of Latvia. Particularly the share of small enterprises is relatively higher in Riga region than in other regions, besides part of these enterprises are innovative producing goods with high value added.

Between 1999 and 2004 the majority of small and medium size enterprises have operated in Riga and Riga district (see Table 4). In 2004, for instance, 58.5% of all SMEs were concentrated in Riga, the fact could be explained as there is higher level of economic activity and purchasing power of the population as it is in another cities and towns of Latvia. Therefore owners and managers of SMEs do not have to face low demand for their production or services. However the high concentration of enterprises in Riga aggravates competition and leads to the development of new products and services.

The number of SMEs has increased in almost all cities and districts, yet a small decrease in 2004 in comparison with 2003 was observed in the cities of Liepāja and Daugavpils and Ventspils district.

Discussion

During the last decade, negative trends are observed in socio-economic development of Latvia, namely, rapid development of Latvian economic centres and stagnation or even regress in development of the other territory at the same time. This has created increased differences between cities and rural areas as well as between the central part and periphery of the country. Integrated development of rural territories, including development of non-agricultural business activity, is a necessary precondition for balanced development of the country. Therefore there is a need to establish conditions for the elimination of regional disparities and the **Basic Guidelines of the SME Development Policy in Latvia** is a document, which lays down the basic principles of activity of the government, long-term objectives and tasks as well as the main directions of the SME development policy. The goal of the *Basic Guidelines* is to ensure promotion of favourable environment for business activity, to spur initiative of entrepreneurs and lessen the total risk, to prevent obstacles to business activity, to promote stability and efficiency of financial system and capital market in order to improve competitiveness of the enterprises in the market.

Implementation of these measures is planned in close connection with the plans for the use of financial resources from the EU Structural Funds. So the Programme is directly focused on solution of the principal SME development problems – inaccessibility of start-up capital to launch small and medium-size business, lack of financial resources to expand activity of already established enterprises, lack of information for the existing and potential entrepreneurs about the EU legislation in the field of business policy, insufficient knowledge of how to express opinion and efficiently influence EU legislative initiatives in this sphere, and existence of barriers hindering business activities (Ministry of Economics, 2005).

Conclusions

1. There is no general definition of small and medium size enterprises neither in the world nor in Latvia, as various criteria depending on the policy of the country are applied to the identification of SMEs, yet sometimes a SME definition is even altered due to regional peculiarities or achievement of a certain goal.
2. Micro, small and medium size enterprises are socially and economically important, since they represent more than 99% of all enterprises in Latvia and contribute to entrepreneurship and innovation.
3. Small and medium size enterprises comprise a major part of national economy and play a significant role in employment and GDP growth in Latvia like elsewhere in Europe. Thus at the

beginning of 2005 there were 48 053 economically active enterprises in Latvia, of which 47 765 or 99.4% fell in the category of SME (taking into account only the number of employees).

4. Absolute disparity of the number of SMEs in the sector of trade and repair services and agriculture and related sectors has risen from 17124 in 1999 to 17392 in 2003.

5. The average increases of the row and base over the period analysed is 5.15% and 16.28% respectively. The least number of SMEs is observed in the sectors of agriculture, hunting, forestry and fishery, as till 2004 the development of agriculture, hunting, forestry and fishery sectors was hindered due to the sales of their produce mainly in the local market and low sales efficiency rate.

6. In 2004 according to the Central Statistical Bureau of the Republic of Latvia 38.77% of all SMEs were engaged in services related to trade and repair, 17.26% were dealing with real estate, rent and other commercial activities and for 12.23% of small and medium size enterprises the main business was industry. Therefore it may be concluded that there is no qualitative enterprise structure in Latvia.

7. The number of SMEs per 1000 inhabitants is the most important indicator of SMEs development in any country. According to this figure, Latvia (indicator equals to 20.71 in 2004) considerably lags behind the average level of the EU member states (51), and other EU candidate countries. Besides the indicator greatly varies by the regions of Latvia: in Riga - 31.69, Kurzeme - 13.94, Vidzeme - 12.87, Zemgale - 10.82, while in Latgale - 9.77.

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Kopsavilkums

Eiropas Savienības ekonomiku raksturo mazo un vidējo uzņēmumu radīto darba vietu skaits, mazāks bezdarba līmenis un lielāks eksporta īpatsvars. Rakstā apskatīta mazo un vidējo uzņēmumu attīstība, jo pētījuma mērķis ir izpētīt un novērtēt mazo un vidējo uzņēmumu dinamiku un to vietu Latvijas tautsaimniecībā. Analīze aptver laika periodu no 1997. gada līdz 2004. gadam. Pamatojoties uz apkopoto un izanalizēto statistisko informāciju, tika secināts, ka mazie un vidējie uzņēmumi ieņem ievērojamu vietu tautsaimniecībā, jo tie veido vairāk nekā 99% no visiem Latvijas uzņēmumiem, kā arī veicina uzņēmējdarbības un inovāciju attīstību. Tomēr MVU skaits uz 1000 iedzīvotājiem joprojām ir nepietiekams, lai nodrošinātu veiksmīgu Latvijas tautsaimniecības attīstību, jo Latvijas rādītājs (20,71 – 2004. gadā) ievērojami atpaliek no vidējā ES dalībvalstu (51) un kandidātvalstu rādītāja.

Atslēgas vārdi: *Mazie un vidējie uzņēmumi (MVU), tautsaimniecība, reģioni.*

Development of Intelligent Technologies for Consumers Protection

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Abstract

Industry analysts expect that as regulations pertaining to testing of food and agricultural products continue to be adopted, the shift toward rapid-screening methods will continue. The overall product testing industry is growing steadily. The biosensor industry too is growing. Identification, assessment and conformity control of agricultural products, intellectual compatibility of measuring processes and functions of the "compensating stage" can be taken over by the cognition subject with its intellectual apparatus, which adds to the possibilities of applied investigation methods. The object's properties and registering results of the investigation object, which have to be fixed by means of different measuring devices, can be so significantly different that there can be no "essence" at all in the indications of the measuring device because the exploration object is always connected with a definite purpose of measuring process in a definite co-ordinates system. The advantage is, that not a set of the "crude" information, but complex of ready, qualitative knowledge is used, not a "bare", non-processed number information group, which rather misinforms, disorientates than informs or takes away uncertainty about features and peculiarities. Elaboration of metric time image is an attempt to find, understand and evaluate positive, valuable features of the explorable substratum. This image does not comprise neither space nor time, but includes only perceptual sensations - and without logically motivated conclusions (ready, completed esoteric knowledge). The research contains the fundamental scientific problem of elaboration of expert and Artificial Intelligence (AI) system in the field of agriculture is reflected. On the basis of results of experimental researches and modeling of "intellect of consumer" was developed new conformity method, based on principle of geometrical similarity of metrical images, also compact, low- cost electronic device "artificial tongue" for conformity control of agricultural products and legal protection of consumers interests and their rights. In article are discussed and reflected main results of elaborated intelligent technology and expert system for conformity assessment of agricultural products.

Key words: consumers' protection, intelligent technologies, quality conformity assessment.

Introduction

Research on an artificial tongue sensor for consumers protection has been acknowledged by the global scientific community. ETongue, ENose is a systems for automatic analysis and recognition (classification) of liquids or gases, including arrays of non-specific sensors, data collectors and data analysis tools. Electronic tongues are used for liquid samples analysis, whereas electronic noses - for gases. The result of artificial tongue and artificial nose can be the identification of the sample, an estimation of its concentration or its characteristic properties. This new technology has many advantages. Problems associated with human senses, like individual variability, impossibility of on-line monitoring, subjectivity, adaptation, infections, harmful exposure to hazardous compounds, mental state, are no concern of it. Synonyms of an electronic tongue: *artificial tongue*, taste sensor.Synonyms of an electronic nose: *artificial nose*, olfactory system (for example, Odor scanner Headspace HS100). The principle of e-nose or e-tongue systems can easily be compared to the human perception as strong similarities are observed. The electronic e-tongue or nose gives either a simple answer like "recognized", "good", or "bad" or a more sophisticated response such as an odor intensity or a molecule concentration The main difference e-tongue is that the system analyses a liquid matrix. So the sensors are immerged directly into the liquid or into

others mediums. For years, engineers worldwide have been working to develop mechanical systems that can mimic the human senses of smell, sight, and taste. The quest began 30 years ago with the creation of mathematical algorithms that emulated the brain's method of processing information. Since then, *intelligent systems* that can sense, make decisions, "learn," and adapt have been successfully developed. Now, recent advances in technology have allowed these devices to become smaller, "smarter," and less expensive. Sales of artificial Ttngues, electronic noses and vision chip in 1998-2003 and principle of sensing modeling for artificial tongue can see on Fig.1, applied sensing methods - on Fig.2.

The electronic tongue or nose system performance is dependent on the quality of functioning of its pattern recognition block. Various techniques and methods can be used separately or together to perform the recognition of the samples. After measurement procedure the signals are transformed by a preprocessing block.

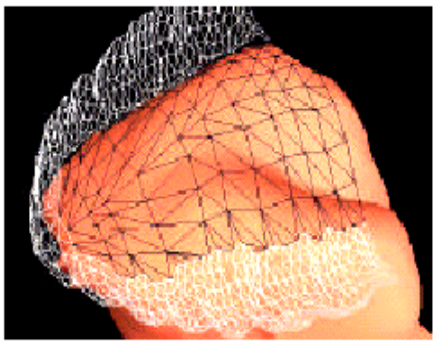
The results obtained are inputs for principal components analysis, cluster analysis or artificial neural network, also "Chernoff faces" pattern recognition method and algorithms (Moskvin, Spakovica 2004).

Estimation of Agricultural Product's Testing Industry

The fundamental purpose of a quality control program is to acquire dependable information on all the attributes of a product, which affect its quality. The methods used to measure quality can be subjective, as in taste tests or they can be objective, such as physical, chemical or microscopic analysis. Subjective methods are based on the opinions of the examiners and because they require the use of our various senses, they are often called sensory analysis. Quality management sys-

millions-$	1998	2003	AAGR %
Electronic nose	14	20	7.4
Vision chip	8	21	21.3
Artificial tongue	0	2	NA
Total	2	43	14

a.



b.

Fig.1 **Sales of Artificial Tongues, Electronic Noses and Vision chip in 1998-2003 (a.) and sensing modeling of artificial tongue , USA (b.)**

E-tongue	**E-nose**
•Potentiometric sensors •Measurements of conductivity •Voltamperom-metry •Optical sensors •Biosensors •**AFM-Resonanse (LUA)**	•**Conductivity sensors** •MOSFET (Metal-oxide-silicon field-effect-transistor) •CP (Conducting Polymer) •**Piezoelectric sensors** •QMB (Quartz Crystal Microbalance) •SAW (Surface Acoustic Wave) •**Optical sensors**

Fig.2 **Applied sensing methods**

tems (QMS) force operators to document what and how processes are done, then prove though records and audit that the process, however described, is consistent. QMS do not require specific or high quality standards, just that desired standards are met. QMS are also a convenient framework under which to introduce safety standards. The first types are legal standards - those which are commonly established by national governments and generally relate to safety. These standards are often mandatory and represent minimum standards of quality. The major purpose of these is to ensure that products are not adulterated or do not carry dangerous contamination. These might involve undesirable microorganisms, insects, pesticides or potentially toxic additives. They may even consider processing conditions to ensure that foods are not contaminated or unduly damaged. Few of us would argue the importance of standards genuinely related to food product safety.

In the most generic sense, quality refers to the combination of characteristics that are critical in establishing a product's consumer acceptability. In the food industry, this is usually an integrated measure of taste, purity, flavor, texture, color, appearance and workmanship. In a highly-competitive market, another criteria of quality can be 'value' or a consumer's perception of the worth of the product based upon the funds available for consumer's on all quality traceability stages of agricultural products– from environment to the home, Fig.3.

The measurement and evaluation of quality is a complicated affair. Most organizations employ professional technicians to carry out his task, but this has not always been the case. In the past, many companies assumed that the quality of their raw materials could be guaranteed simply by paying the highest prices. However, this did not prove to be very reliable and almost all firms now use various analytical methods for quality determinations. Recently in agriculture for quality control of agricultural products are even more often applied biosensors. The biosensors industry is new but growing. The market is comprised of four segments- medical, environmental, food, and military. Ninety percent of sales come from glucose-detecting biosensors for medical applications. The market is generating a need for pathogen detecting biosensors across all segments (Stephen M. Radke, 2002).

Quality control ensures that raw materials meet set standards, processing methods perform as designed, finished products meet company standards, and consumer confidence in the company remains high. Problems arise when there is disagreement on what is actually required to ensure safety. Another important area of standardization relates to the information presented to the consumer. In this case it is not the product itself, but rather its description that must conform to a particular standard. Much effort has been devoted to harmonizing labeling information and very large market segments do have common requirements. There may be some disputes arising out of a culturally-based philosophy regarding the role of food in the diet. Some societies traditionally confer great health benefits to certain foods while others may not. This may lead to health claims that are allowed in one country and not another. Industry standards are sometimes established by an organized industry association in order to establish a reliable identity for a particular product (Charles R. Hurburgh ,2003).

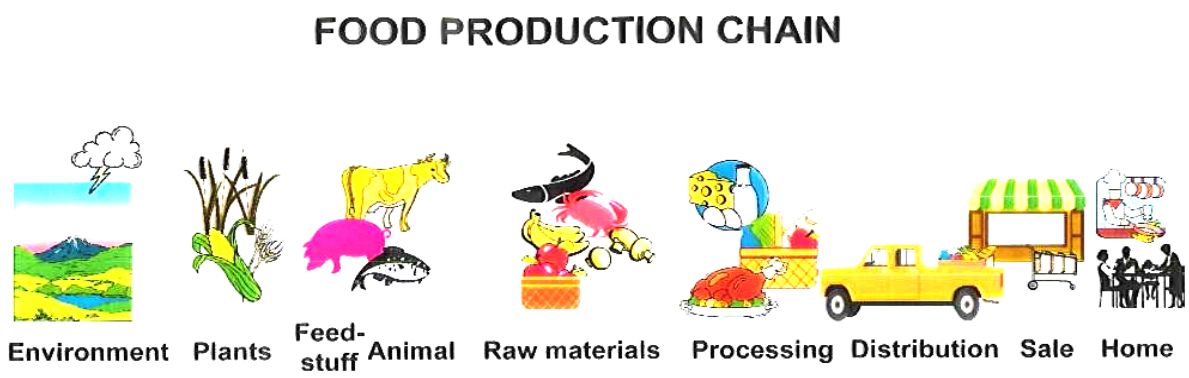


Fig.3 **Chain of agricultural and food production**

The processed food sector accounts for the largest number of tests, with over 52.2 million performed annually. This represents over 36% of total tests performed and is likely driven by the larger number of processing plants, which is 38% of all plants. Industry analysts expect that as regulations pertaining to pathogen testing continue to be adopted, the shift toward rapid-screening methods will continue. The overall food product testing industry is growing steadily. For example, the US food industry performed around 144.3 million microbiological tests. The dairy sector has the highest testing rate per processing plant, averaging over 630 tests per plant per week. The beef and poultry sectors perform the least number of tests per plant averaging 369 tests per plant per week. As a result, the beef and poultry sectors account for only 22.3% of all testing in the industry. The fruit and vegetable sector is currently the smallest of the four sectors accounting for only 9.7% of testing.

There is growing recognition of toxins as health risks, especially in grains and fish/seafood, which are two fast-growing food categories because consumers perceive them as healthful. Sales in the US for pathogen, pesticide and GMO products combined used by food processors are projected to increase from $149.5 million in 2000 to $239.4 million in 2005 at an AAGR (*average annual growth rate*) of 9.9%. The pathogen specific testing market is expected to grow for all segments at a *compounded annual growth rate* (CAGR) of 4.5% with a total market value of $563 million by 2003 (Evangelyn C. Alocilja, 2002).

Development of Intelligent Technologies for Consumers Protection

Intelligent techniques for measuring human sensory response to food texture have been undertaken since 1980s (Boyar and Kilcast, 1986a, 1986b; Moskvin, 1988a, Shmulevich et al., 1996; Sakamoto et al., 1989; Kohyama et al., 2000) to study relations between physiological and sensory testing of perception. Since the half of the eighties the technological mimic of the main functions of human olfaction became possible. Since that, an increasing number of researchers have dedicated their efforts to improve the original idea pursuing the fabrication of electronic tongue.

Practical applications, in a wide number of cases, appeared in the literature, and in the nineties some companies have introduced the electronic tongue technology to the market. Recently in food industry and in agriculture for quality control of agricultural products are even more often applied sensors. Much research was done in order to find new and more diverse sensors, and to date there are several companies offering ready-to-use electronic tongue (Moskvin,1996, 2002 a, b,2002a,b, 2003a,b), Fig.4.

Historically first instrument with artificial intellect in Latvia was built in Agricultural University at Jelgava 15 years ago under supervision of Prof. Gennady A. Moskvin. It was artificial tongue – device based on couple of electrodes and signal generating - signal recognition parts. For ages, the human tongue has been an important tool in assessing the quality of many products, food and agricultural products being good examples. While all others parts of production processes, includ-

Fig. 4 **"Artificial tongue" - Logicor-AT (Prof. G. Moskvin, LUA)**

ing these of the food industry, were getting more and more automated, there was still no "objective" means for using the "subjective" information confined in the taste of products. This changed in 1988, when Gennady A. Moskvin introduced the new concept of an electronic tongue. The "Artificial Tongue" (AT) ES and AI device is an electronic intelligent instrument, which consists of data acquisition and data analysis systems.

Analysts expect that as regulations pertaining to food and agricultural products testing continue to be adopted, the shift toward rapid nonconformity assessment methods will continue. Normally such standards become effective because the majority of producers agree to them. They are seldom related to safety, but more to a characteristic quality which the industry feels is useful to establish credibility for the market. These standards are commonly referred to as commodity standards or standards of identity.

Many measuring devices usually consist of two functional knots: primary sensing element (measuring transducer) and registering device. Sensing element usually have electric exit signal and further processing measuring information is completed by using different electrical schemes, mainly, of an analogous type. As to functional opportunities, preciseness and signal stability, the processing of digital data has significant preferences. The presence of microcomputer in the measuring channel allows by use of special testing programs and errors back propagation algorithms to carry out identification experiment of measurable medium with help of intelligent complex making use of definite physical effects (Moskvin, 1996, 1998, 2002 d).

Automatic identification of the critical control points should be determined in all the stages of food production starting with the obtaining of raw materials or the production of component parts up to their marketing. Therefore, firstly, during the technological process a precise, safe, operative and objective information flow has to be established throughout all the production stages, Fig.3 (Moskvin, Spakovica, 1998a,b, 2000,2002,2003a-c). The solution of this problem is hindered by the lack of such measuring devices and suppliers which during testing, regulation and control of technological process parameters systematically, energetically, constructively, informatively, exploitatively and, what is most important, metrologically could be joined not only to the control systems but also to technical and measuring devices in real conditions. Just in such way can be explained the world tendency towards the "intellectualization" of measuring devices and sensors. In industrial production there are no analogous for such agricultural and food products properties as stochastic and not uniform flow of materials and informative resources, significant changes of their properties and quality in time, presence of inertia in the communications with a bionic system.

The above said does not allow applying the traditional methods and means in the control of technological processes and in the food production processes. The situation is worsened by the low technical level of the existing suppliers and devices used in agriculture and, in the first place, their preciseness and credibility. Theoretic investigations prove that sensors lag behind the development of food and other technologies therefore all over the world intensive financing is observed just in the field of technical progress.

The overall quality of a fruit is not linear combination of all measurable quality parameters. This presents major problem as to how these measurements should be combined into quality indices and grading decisions. The quality of fruit is combination of numerous parameters such as: firmness, acidity, aroma, color, color uniformity, bruises, scars, cuts, presence of soil, size, shape, insects diseases. The main sensible parameters are specific to the individual fruit. Thus, the concept of this work is to develop a system that can classify fruits based upon several of these parameters by using multi-sensors data acquisition (vision, taste, firmness, smell and weight).

Techniques and criteria for choosing training sets for the classifier were developed in such a way that only a middle training set (in total about 155 dates) was needed to achieve good conformity classification; 89% correct conformity classification for objects that were tested at different dates. A classifier that was trained 78% accuracy in the classification.

The main results of preliminary experimental research prove that quality and conformity assessment of agricultural products and raw materials can be determined by new conformity assessment method by use of intelligent sensor "artificial tongue", based on use principle *of geometrical similarity of metrical images* (Moskvin, Spakovica, 2002).

The multi - sensor system that utilizes an imaging system, an impact sensor, sensor of electroconductivity constant and alternating current, electronic chronometer for determination of relaxation time – **T** rel, an ultrasonic sensor, gauge for measuring an electrical resistance **R**a , force gauge, and an "artificial tongue" measurement device, Fig. 5.

Agricultural production peculiarities, conditions and specifics require elaborating simple, safe, inexpensive and precise conformity control electronic devices. Elaboration of such suppliers is the decisive factor in the quality of food and other products conformity control system operation.

Intelligent sensors can essentially perfect the whole control system due to the increase of preciseness and a rational processing of signals received from the sensory element. Such existence problem of a measuring device and a sensor is the problem of a precise control of production processes, the problem of consumer's provision with qualitative food products, efficiency problem of any production. Therefore it is topical to design new generation conformity control measuring devices with the application of new fractal methods, which can effectively work under changing operation regime of equipment's, as well as adopt themselves to definite agricultural and food technology processes with not systemized parameters and not formalized requirements in real exploitation conditions.

One of the development directions can be the elaboration of rapid control law-cost conformity

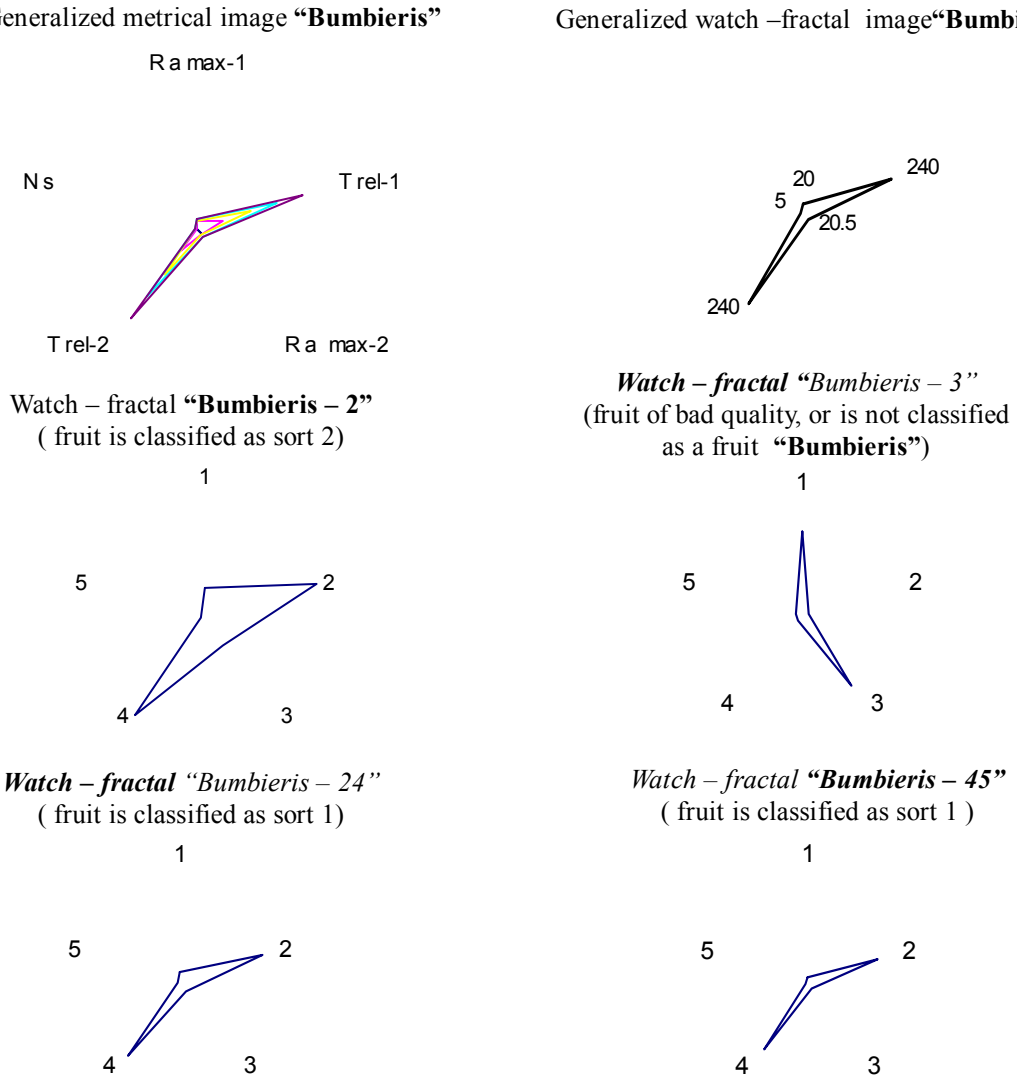


Fig.5 **Conformity assessment of the fruits by means of application of watch - fractal method**

control electronic devices with "Artificial Intelligence" (AI) elements, which continue the development of microprocessor technique technology. Such intellectual suppliers have "artificial tongue" sensible sensory elements in form of measurement transducer with digital or analogous electrical or other exit signal. AI "tongue" intelligent technology was designed as the synthesis of sensory elements with computing micro-devices.

Intelligent compatibility of measuring processes and functions of the "compensating stage" can be taken over by the cognition subject with its intellectual apparatus, which adds to the possibilities of applied investigation methods. In the elaboration of bionic intellectual measuring systems it has to be understood that such a system has to be open to man's (expert's, specialist's) intellect, knowledge, practical experience (also not formalized and not systemized) and even to intuition (Moskvin G., 1998a,b).

These devices are already used in laboratories and in business (Moskvin G., Spakovica E. 2003a-c). Preliminary interrogations of consumers show positive relation of consumers and businessmen's to application an intelligent devices "artificial tongue" for conformity control in area of agricultural production and business.

In general, it considerably allows, on one hand, to improve scientific knowledge's basis of informative service and quality conformity control programs and on other hand, to implement practically Latvian laws "Conformity Control" and "Consumers Protection", which guaranteed legal protection of interests and rights of each consumer.

The research of "consumer intellect" models are carried out by means of synthesis of the non-traditional conformity assessment imagining method *based on principle of geometrical similarity of metrical images* in different areas of identification, classification and conformity assessment of agricultural products by using of rapid control intelligent instruments.

Application of "Chernoff faces" Pattern Recognition Method and Algorithm for the Assessment of Conformity of Agricultural Products

The concept concerns the roles of marketing ethics in transactions between producers, marketers and poor consumers. Therefore we describe our research results looking from point of view some problems and obstacles faced by poor consumers. For protection of their interests and rights we have developed technical decisions by use of new "watch-fractal" method for quality nonconformity assessment of agricultural products, raw materials and goods, which was developed on the basis of "Chernoff faces" images deviation analysis principle, Fig.3.

Subsequently, the real "organisms" of AI systems can be expressed by means of the accepted

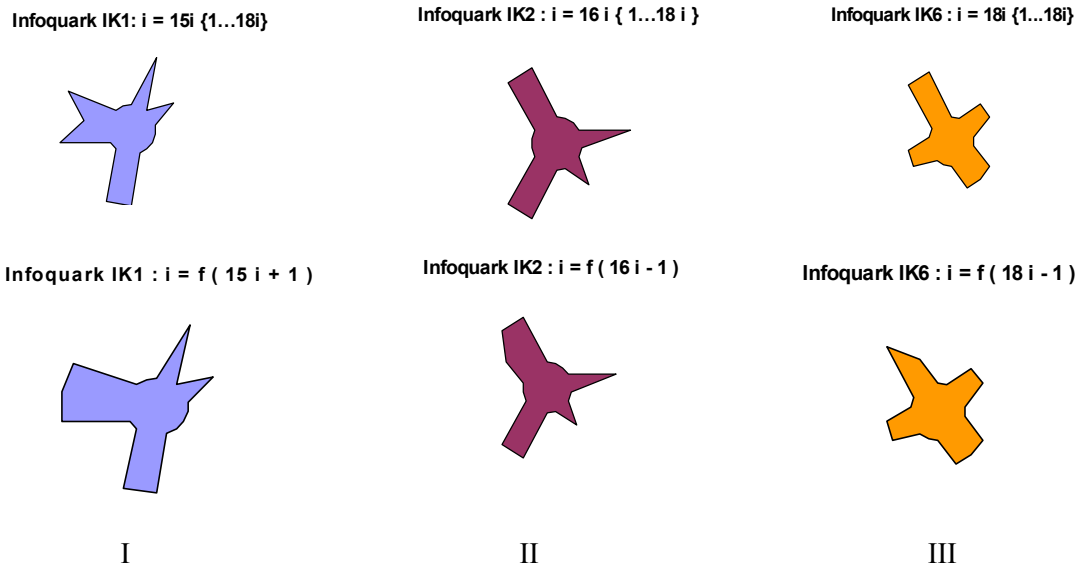


Fig. 6 **Conformity assessment of agricultural products on the principle of geometrical similarity (I – III - images for three trials IK1, IK2, IK6).**

conditioned standard of the perceptual model (experts knowledge). Besides, the most significant AI "biological" features remain. It can be said also in other way: real AI organisms are "the projections of the initial AI organism" designed by experts-theoreticians, models on in reality existing organic reason forms. Internal motivation of biological systems to self-organizing, reasonable by anti - chaos theory, can be used for the control of their quality, that is for definition of conformity of biological system or physical mediums to parameters of an optimality, which is determined to quality of agricultural products.

Internal intention of bionics systems to motivation and to structure it is important internal engine of process of search of an optimality of biological system. Such biological system itself continuously forms individual metric co-ordinates "space - time", selected space - measure and required "speed" of time for the conformity control, obtaining of needed

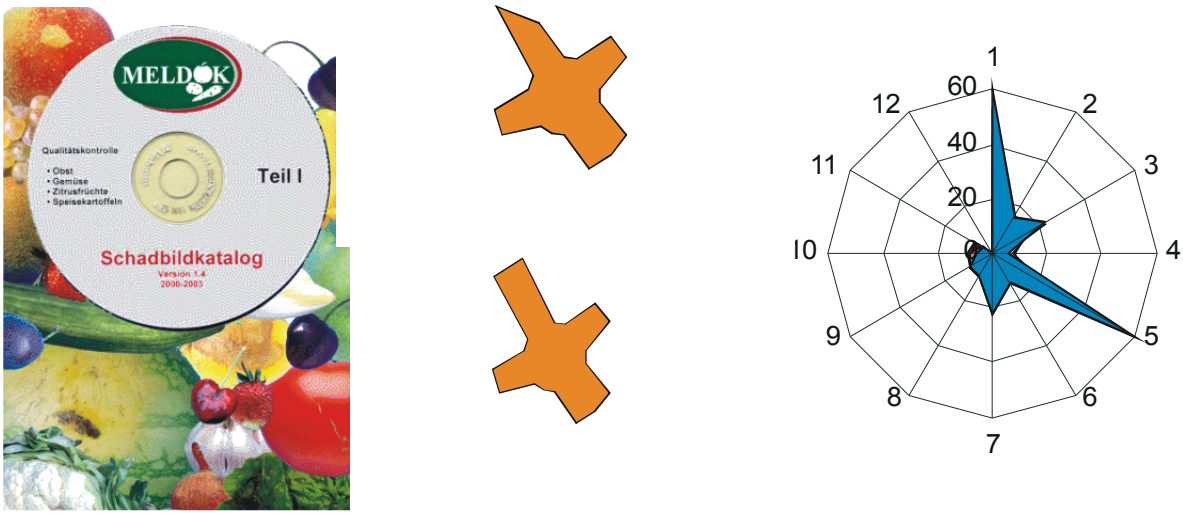


Fig.7 **Electronic CD ("Schadbildkatalog" , BMVEL -Germany) (a) and watch - fractals (b, c) (LUA) methods for the assessment of quality deviations of agricultural products**

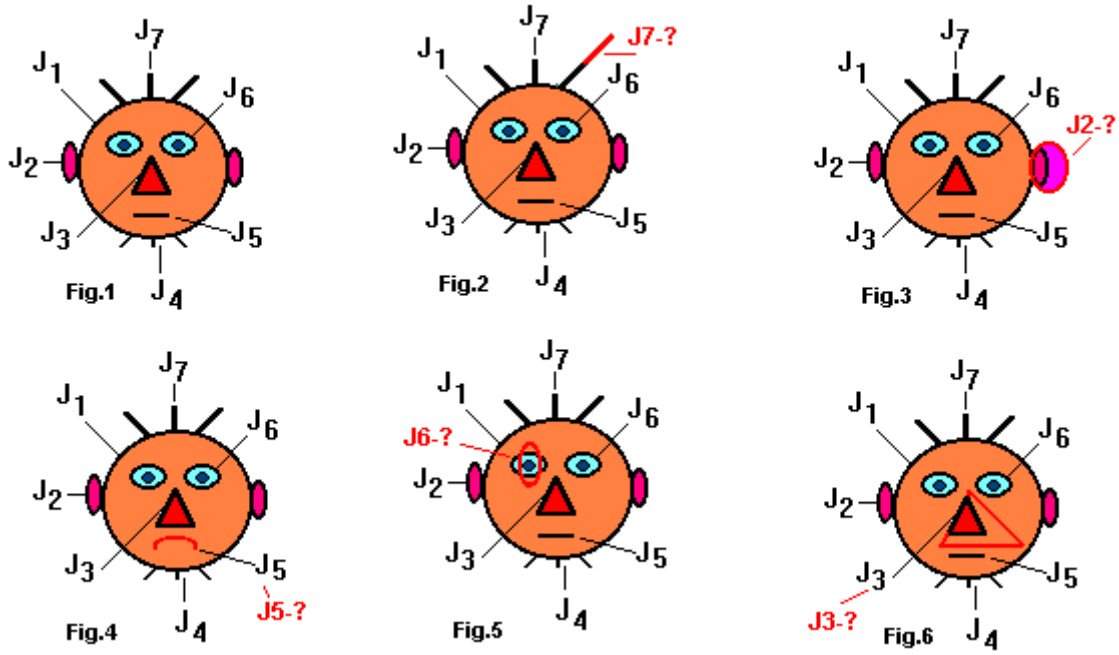


Fig.8 **"Chernoff faces" pattern recognition method for conformity assessment**

useful information, for the modification and its processing by means of application of "artificial" or "natural" intellectual tools. Such motivation makes the identification process all embracing, core-aimed. This process never is local, but is global. Harmony degree of a external test influence on the researched biological medium can be estimated by methods of functional systems according to preservation of afferent principle. In bionic systems such harmonious approach in strategy of measurement and assessment of useful medium's properties allows to allocate such set of key test signals, which does not contradict to preservation of afferent principle (Moskvin, 2002 a, b).

Bionic approach in the modeling of intelligent AT measuring systems allows to examine two types of intelligent control models (Moskvin, 1996). For the elaboration of the first type models it is sufficient to study in isolation only "inner" parameters and processes of the object under exploration without taking into consideration the impact of outer medium factors and, in relation with it, "behaviour" changes of the structure intended for synthesis. The modeling of this type can be useful for a preliminary metric image identification and conformation of the object under exploration. The further use of the model depends only on the success of the acquired model's theoretic and technical continuation (Moskvin, 1996, 1998 a).

"Behaviour" factor analysis of the object of interest has to be considered at the basis of the second type of bionic models. Further on "reference" functions of the influence factors are determined and feedback algorithm is synthesized in the form of ANN "self-learning" programs. The basic contours of models technical realization are formed in complete agreement of the existing notions, data, levels of knowledge about the investigation process or object with the exploration task and aim.

Technological and informative revolution in all production spheres, especially in computing- and research-comprising technology branches determined application of local (divided intellect) systems in functioning structures and further development of local microcomputers. Subsequently, in the automation leading part belongs to intellectualization of measuring devices (Moskvin, 1991,1993,1996).

"Chernoff Faces" recognition algorithm can be divided into four different areas: *Face detection.* The goal of face detection is to identify and locate Chernoff faces in images at different nose, eyes, mouth, hair, ear positions, scales, orientations and other conditions. (Fig.8.)

Main steps to recognition of *Chernoff faces: face localization, face verification* (face verification is concerned with validating a claimed identity of faces and either accepting or rejecting the identity claim), *face recognition* (the goal of face recognition is to identify a "person" based on the real face geometrical deviation from standard face.

This face image has to be compared with all the registered "persons"(standard of agricultural product), respectively with their standard images, *elaborated on principle of geometrical similarity of metrical images*. Therefore, face recognition is computationally expensive regarding the number of registered "persons".

Conclusions

1. The overall product testing industry is growing steadily. In agriculture for quality control of agricultural products are even more often applied biosensors. The biosensors industry is new but growing.

2. Technological and informative revolution in computing technology branches determined the application of divided intellect systems and a further development of local microcomputers for conformity assessment of agricultural products. In a highly-competitive market, another criteria of quality can be 'value' or a consumer's perception of the worth of the product based upon the funds available for it. In the most generic sense, quality refers to the combination of characteristics that are critical in establishing a product's consumer acceptability.

3. Main preferences of watch-fractal *metrical images methods* is very easy possibility to detection of all deviations from standard images and easy possibility operatively to find namely those quality parameters, which have influences on quality deviations of product.

4. On the basis of results of experimental researches and modeling method "of intellect of the consumer " we has developed a new method *based on principle of geometrical similarity of metrical images* and compact, low - cost electronic AI devices "artificial tongue" for conformity assessment of agricultural products, goods and raw materials. Preliminary interrogations of

consumers show positive relation of consumers and businessmen's to new possibility for protection their rights and interests.

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Economic Risks into Environmental Monitoring System

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Abstract

A brief analysis of economic risks under the existing environmental monitoring system based on information from contact sensors and laboratory investigations of samples is given. In case of extreme (in time and extent) environmental deterioration the economic risk is considered under conditions of the satellite-generated information flows equally effective with respect to detection of linear or extreme pollution processes and examined by two methods: *risk projection* and *risk zone determination*. [1]

Key words: environment, monitoring, economic risks, remote sensing.

Introduction

Despite a rapid economic development in the twentieth century, the nature of Latvia is still surprisingly rich and diverse. Many of us do not even realize the rich assets we have compared with the world or European average indicators. Land area per capita in Latvia is 10 times larger than in the Netherlands, and renewable water resources per capita are 10 times larger than the world average. Areas covered with forest per capita are even hundred times larger than in most European countries. Rather balanced geological conditions and a mild climate protects us from severe cataclysms, and the limited resources of useful minerals prevent the intensive pollution of the territory as it often happens in countries intensively extracting coal and non-ferrous metal ores. [7]

With account for the situation mentioned above the existing environmental monitoring system is based on information from contact sensors and results of laboratory investigations of samples. In this case we can say that linear pollution process could be detected satisfactory, because in a linear pollution process amount of pollution increases as a linear function of time and is proportional to time elapsed.

However, there is a rather high risk of oil and chemical pollution due to intensive traffic of oil and chemical tankers to or from the three main ports of Latvia –Riga, Ventspils, and Liepāja. In fact, we do not have at all the monitoring of sea pollution, although in our case a special kind of monitoring – the "early warning" with round-the-clock actual data acquisition from satellites as the best practice would be necessary. [3]

So far data about environmental quality obtained from contact sensors and sample results of laboratory investigations concerning extreme pollution have a rather considerable gap in time and, consequently, we have, in accordance with the risk classification, the *unknown risk* category and, with respect to the risk zone definition – the *catastrophic risk zone with K = 0.1%* [1]

For an extreme pollution process there is a considerable outflow of the polluting substance within a rather short period of time (practically momentarily).

Economic risks – uncertainty of economic feasibility is the primary factor determining feasibility of any activity. Ecological, social, health and other risks are subordinate to the economic risk.

The present study is focused on the analysis of the adequacy of the existing environmental monitoring system to economic purposes with respect to economic risks related to environmental degradation and is compared with the possibilities provided by satellites. The aim of the study is to verify the hypothesis that the use of satellite information would improve the existing environmental monitoring system. For that purpose the following topics are addressed:

- economic risk factors with the existing environmental monitoring system
- typical real annual costs of the environmental monitoring system

- equipment of the Envisat satellite, and
- experience of the Research Centre of the National University of Singapore (CRISP) in data acquisition from LEO satellites.

The methods of economic qualitative analysis, risk projection, and risk zone determination are used to analyse the data of the Latvian Meteorological Agency [Environmental protection policy in Latvia., Riga, August 1998].

Risks analysis in general

Any economic activity is more or less connected with risk. Risks analysis is identification, assessment and prioritisation of the risks determined as risks of high, medium and low levels and simultaneously providing for management measures.

Usually risk analysis begins with determination of the reasons leading to risk. Possible factors of different uncertainty caused by economic activity facilitate arising of a specific variety of risks. It is impossible to avoid and predict all potential risk situations. Nevertheless, within reasonable limits, it is necessary to ascertain the probability of risk occurrence and to estimate the amount of losses as a consequence remarkable could be losses amount as a consequence.

The method of risk projection is based on dividing risks into three groups:

1. Calculable risks;
2. Unsafe or incalculable risks;
3. Unknown risks.

Risk is calculable in cases when the probability and amount of losses are predictable. It could be in cases when risks frequently have character to reduplicate and, therefore, it is possible to determine the definite common interconnections taking into account statistical observations.

There are no special methods to calculate probability and amount of the potential losses of unsafe or incalculable risks. These kinds of risks occur due to the weather conditions (storms, hurricanes, etc) or unpredictable environmental stress.

It is very problematic to predict such unknown risks due to human-made disasters or intentional actions to ensure higher net profit.

Risk zone determination method divides risks into three groups:

1. Allowable risk – K= 0.1 or 10%;
2. Critical risk – K= 0.01 or 1%;
3. Catastrophic risk – K= 0.001 or 0.1%

Determination of the risk zone group basically is used by Business Companies to assess the maximum potential loss.

- Allowable risk category means net profit losses in 10 cases out of 100;
- Critical risk category means income losses in 1 case out of 100;
- Catastrophic risk means 1 case out of 1000 absolute loss of tangible assets. [1]

With respect to the special situation of Latvia it is necessary to evaluate the environmental monitoring system from the point of view of marginal damage.

Economic risks in the environmental monitoring system of Latvia in general can be considered as uncertainty based on insufficient understanding of the roots of seriousness of the matter by top level authorities.

Environmental monitoring system in action

In general the monitoring of environmental quality within the existing monitoring system in Latvia is consequently performed by contact sensors and laboratory investigation of samples, which can ensure more or less adequate environmental data provision concerning linear pollution processes, but not in cases of extreme pollution.

At present specific "Sea monitoring subprogram" has been implemented at 60 observing points which provide information on concentration of heavy metals, suspended particles, oil products, etc. [2]

The coastline of Latvia is about 500 kilometres long. It has to be considered as one of the main environmental resources for tourism and fisheries. Tourist capacity including yachting, angling, swimming, and diving has a high potential capability to grow. Also coastal fisheries could be expanded. Reasonable exploitation of these assets could provide certain income to regional and state budget. [2]

One of the main preconditions for prevention and protection of the coastline against oil and chemical pollution (extreme pollution processes) is obtaining adequate and early information since Kurzeme coastline, due to orientation and prevailing winds and streams, is very sensitive to oil and chemical pollution. Even in cases when pollution occurs in Kaliningrad region it spreads and reaches as far as Ventspils and Kolka.

In case of a massive oil pollution (10 000 - 15 000t) environmental damage is estimated of more than 100 million USD. Because of a lasting recovery period it would compare to a national tragedy. [2]

Analysis of risks of the environmental monitoring system of Latvia

- The necessary annual funding of the "Sea monitoring subprogram" (data of 2002)
- Allowance: LVL 60 000;
- Sampling and infrastructure expenses: LVL 112 000;
- Necessary annual capital investments for development: LVL 41 000.

Total amount : LVL 213 000

Cases of the linear pollution processes such as increase of environmental stress caused by human or natural reasons are referable to:

- Calculable risk group
- Allowable risk zone group

In general it means that the existing monitoring system is adequate from the point of view of financing.

Cases of extreme pollution processes such as low, medium or massive oil and chemical pollution are referable to:

- Unknown risk group;
- Catastrophic risk zone group – K= 0.001 or 0.1%

In general it means that the existing monitoring system is not adequate from the financing point of view: LVL 213 000 + recovery expenses = amount of financial losses.

Real solid ground future vision

One of the most efficient ways to support the environmental monitoring system and to reduce the abnormally high risk probability in cases when extreme environmental deterioration may occur is use of the information from satellites of overall Earth observations obtained continuously and within high credibility limits. [5] Really situation is very optimistic - we can get information from more than 15 different types of the Low Earth Orbits (LEO) satellites, which could operate as whole space-based monitoring system. Similar space-based monitoring systems are really operated.[4] For example, "Centre for Remote Imaging, Sensing and Processing" (CRISP) successfully operates as a ground station supplied with 6m and 13m X-band reception antennae to acquire data from 6 different types of LEO remote sensing satellites.[11]

Not far from Ventspils we have Ventspils International Radio Astronomy Centre (VIRAC) that is supplied with 16 m. and 32 m. steerable antennae.[8] According to the calculations, VIRAC can provide more than 4392 high quality images of different environmental segments (at request) per year.

Satellites and remote sensing equipment

Generally, satellites are not mass-produced. Most satellites are custom built to perform certain functions. There are weather, environment, communication, scientific, and military satellites.

LEO is a circular orbit at a distance of less than 2000 km (usually 700-800 km) above the surface of the Earth. The maximum time during which a satellite on a LEO is above the local horizon for an observer on the Earth is up to 20 minutes. Most often LEO is a polar orbit with inclination close to 90. [4]

For a better idea some aspects concerning orbital parameters, instruments, and costs are given on the basis of European Earth-observation satellite – Envisat. [6,12]

Envisat has the following orbital characteristics – mean altitude: 799.8 km; inclination: 98.55°, repeat cycle: 35 days; time above horizon: up to 20 min.

On board Envisat carries 10 different highly effective active and passive microwave instruments. Active microwave instruments (radars) can penetrate the cloud cover, rain and provide consumers with data regardless visibility.

Hence one of the main instruments of the satellite payload range is ASAR.

ASAR provides images in five modes as follows:

- Global monitoring, image with 1000 m resolution, 405 km swath width;
- Image with 150 m resolution, 405 km swath width;
- Image > 30 m resolution, up to 100 km swath;
- Image with 30 m resolution, up to 100 km swath;
- Image > 10 m resolution, 5 x 5 km to 10 x 5 km Vignettes.

The main services provided by SAR technologies are:

(1) sea surface oil spill detection (amount, source and diffusion of pollution);

Table 1

Envisat instruments on board

No.	Instrument	Product Type
1.	ASAR Advanced Synthetic Aperture radar	See below
2.	MERIS Medium-Resolution Imaging Spectrometer	Aerosol optical thickness and type, cloud reflectance, cloud top height, water vapour column abundance.
3.	AATSR Advanced Along Track Scanning Radiometer	Ocean surface temperature, land surface, vegetation moisture, vegetation health and growth stage.
4.	RA-2 Advanced Radar Altimeter	Ocean surface topography, gravity anomalies, marine geoid characteristics.
5.	MIPAS Michelson Interferometric Passive Sounder	Vertical concentration profiles of around 20 relevant trace gases including primary species: O_3, H_2O, CH_4, N_2O and HNO_3, also temperature, distribution of aerosols, tropospheric cirrus and stratospheric ice clouds (including polar staratospheric clouds).
6.	GOMOS Global Ozone Monitoring by Stars	Vertical concentration profiles of O_3, NO_2, NO_3, O_2, H_2O, (OCIO and BrO during ozone hole conditions), aerosol extinction coefficients, temperature, atmospheric turbulence, polar stratospheric clouds, (noctilucent clouds).
7.	SCIAMACHY Scanning Imaging Absorption Spectrometer	Vertical concentration profiles – in the troposphere: O_3, O_4, H_2O, NO_2, CO, CO_2, N_2O, CH_4, in the stratosphere: O_3, O_2, O_4, NO, NO_2, CO, CO_2, H_2O, CH_4, volcanic eruption: SO_2 and Ozone hole conditions. Aerosol parameters, cloud measurements, pressure and temperature measurements.
8.	MWR Microwave Radiometer	Measurement atmospheric water vapour column, cloud liquid water content, surface emissivity, soil moisture over land.
9.	LLR Laser Retro Reflector	Support to satellite ranging, RA-2 altitude calibration.
10.	DORIS Doppler Orbitography and Radioposit	Rang-rate measurements of ground segment signals. Monitor glaciers, landslides and volcanoes.

Source: *[12]*.

Table 2

Envisat costs

No.	Position	Costs (MEuro)
1.	Development programme, including launch	2000
2.	Industrial contracts for the space segment	1450
3.	"Ariane-5" launch and services	140
4.	Ground segment development (flight operations and payload data segment)	160
5.	Operation (5 years), 60 MEuro/year	300
6.	ESA internal costs (including testing)	250
6.	Three instruments are financed nationally and provided by UK, France and Denmark	AATSR, DORIS SCIAMACHY
7.	Total	4300

Source: *[12]*.

(2) movement of sea currents causing coastline erosion;

(3) monitoring of ice and ships;

(4) monitoring of fires and floods (regular control of situation during flood periods);

(5) monitoring and control of forest cuts and renewals;

(6) monitoring of corn-fields, harvest forecasts, pest movements.

The financial data of the Envisat project (Table 2) indicate that real costs respectively necessary for the development, launch and maintenance of this unique satellite system are commensurable because all 10 instruments of the satellite may operate simultaneously and therefore provide a unique flow of combine data.

Conclusion

The existing environmental monitoring system can assure that economic risk factors in accordance with linear pollution processes are adequate (comparable) with costs. In cases of extreme pollution processes environmental monitoring system works with absolute losses = annual costs + recovery expenses.

The use of space-born information from satellites to detect pollution shall reduce the risk of extreme pollution to the level of a linear pollution risk, accordingly substantial improvement of the existing environmental monitoring system could be implemented.

Successful experience of CRISP with different types of satellites means that in Latvia where we have full ceaseless orbital overlay of satellites, continuous environmental observation (monitoring) could be practically performed.

According to the data of Table 2, considerable assets have been invested in detection of processes of linear and extreme pollution, as well as in measuring of many different environmental parameters and interactions.

Simply, would it be wise and do we have the right to ignore such powerful manmade tools to prevent pollution and to protect our aqueous environment from deterioration?

Kopsavilkums

Darbā ir izvērtēta Latvijas vides monitoringa saistēma un tās ekonomiskā efektivitāte saistībā ar lineāra un eksponenciāla rakstura piesārņojumiem. Tiek dots priekštats par ekonomiskā riska analīzi vispārējā plāksnē, kā arī konkretizēts, izmantojot riska prognozēšanas un riska zonas noteikšanas metodes. . Priekštats par satelītiem, to orbitālo izvietojumu, kā arī to instrumentālo nodrošinājumu tiek dots daļēji izanalizējot konkrēta satelīta (Envisat) datus. Tiek dota izvērtēšanai arī reāla nākotnes vīzija balstīta uz dažādu satelītu informācijas pakāpenisku izmantošanu, tādējādi nodrošinot nepārtrauktu Latvijas vides monitoringu ar augstu ticamības pakāpi. Šinī sakarībā CRISP pozitīvā pieredze var tikt sekmīgi izmantota arī Latvijā.

*Darbā ir pamatota **nepieciešamība** papildus vides monitoringa sistēmā esošajam, izmantot satelītu informatīvo nodrošinājumu, jo pašreizējā situācijā, eksponenciāla piesārņojuma gadījumā, ekonomiskie zaudējumi būs maksimāli iespējamie.*

Atsevišķi tiek sniegti Envisat darbību nodrošinošie ekonomiskie rādītāji, kuri spilgti parāda ievērojamā apjoma investīciju piesaisti, tādējādi izceļot to milzīgo valstu ieinteresētību globālās vides kvalitātes un to trendu noteikšanā un prognozēšanā.

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Latvijas patērētāju aizsardzības tiesiskās bāzes attīstība
Development of legal basis for the protection of Latvian consumers

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Abstract

The basis of the protection system of consumer interests and rights in Latvia is formed by the Law on consumer rights protection. In different countries there are various forms of mechanisms for the protection of consumer interests, which correspond to the „Main principles of consumers interests protection" of the United Nations Organization. These principles provide the necessity of maintenance of physical reliability of the goods in order to guarantee consumer safety, protection of consumers' economic interests, development of the goods and services standards, and indemnification of the consumer losses. Now in the world practice there are accepted seven basic rights of the consumers. The results of researches confirm the hypothesis that in Latvia it is possible to use successfully the new principles and new EU rights basis for the protection of Latvian consumers by means of total quality control of agricultural products and raw materials, estimation of their safety, and full traceability in the process of production and trading.

Key words: consumer, rights, protection, legal basis.

Ievads
Introduction

Valstīs ar attīstītu tirgus ekonomiku patērētāji savas intereses aizstāv pārdomāti un organizēti. Tas nozīmē, ka preču ražotājiem un tirgotājiem jāņem vērā ne tikai individuālās, bet arī kopējās patērētāju intereses un prasības. Šīs prasības demokrātiskās valstīs tiek uzskatītas par absolūtām un neaizskaramām. Krāpšana, zema preču kvalitāte, nevērība pret izteiktajām pretenzijām tiek uzskatītas kā vēršanās pret patērētāju tiesībām. ES ir izstrādātas patērētāju politikas prioritātes. Kā svarīgākās minētas pašreizējās patērētāju aizsardzības likumdošanas pastiprināšana, mazāk aizsargāto patērētāju grupu aizsardzības nodrošināšana, patērētāju izglītības un informētības palielināšana, augstas pārtikas preču kvalitātes uzturēšana Savienībā, patērētāju politikas propaganda Centrāl-, Austrumeiropas un jaunattīstības valstīs.

Katrai precei un tās iegūšanas tehnoloģijai ir jāatbilst noteiktām prasībām, ko regulē iekšzemes un starptautiskie normatīvie akti. Vispirms tie attiecas uz patērētāja interešu aizsardzību.

Darba mērķis ir izpētīt patērētāju interešu aizsardzības tiesisko aspektu attīstību, ievērojot

Latvijas patērētāju interešu aizsardzības kopējos principus Eiropas Savienībā.

Mērķim pakārtoti konkrēti **uzdevumi:**

- izpētīt tiesiskos aspektus patērētāju interešu aizsardzībā Latvijā un Eiropas Savienībā;
- izvērtēt patērētāju interešu aizsardzības tiesiskās bāzes sistēmas attīstību Latvijā ES integrācijas kontekstā.

Pētījumā tika izmantota ekspertu novērtējumu analīzes metode. Pētījumā tika izmantoti likumi, valdības normatīvie dokumenti, speciālā literatūra un citi materiāli.

Rezultāti
Results

1.1. Patērētāju tiesību aizsardzības tiesiskie aspekti Latvijā

1.1. Legal aspects of the protection of consumer rights in Latvia

Patērētāju tiesību aizsardzības likums stājās spēkā 1999. gadā un tajā tika iekļautas normas, kas patērētājiem garantē labāku aizstāvību nekā likums, kas bija pieņemts 1992. gadā. Šis likums labāk saskaņojas ar starptautiskajām tiesību normām un labāk atbilst Eiropas Savienības direktīvu prasībām. Jaunajā likuma redakcijā ņemtas vērā arī Civillikumā ietvertās normas

patērētāju tiesību jomā. Tas saistīts ar līgumu slēgšanu, atbildības jautājumiem, zaudējuma atlīdzību. Vairākas jaunā likuma normas, kuras paredz patērētāju aizsardzību, slēdzot līgumus, ņemot preces uz kredīta, kā arī slēdzot līgumus par nekustamā īpašuma lietošanas tiesību iegādi uz laiku, ir sagatavotas atbilstoši Eiropas Savienības prasībām.

2001., 2004. un 2005. gadā pieņemti **Grozījumi Patērētāju tiesību aizsardzības likumā.** Ar šiem likumiem ir būtiski papildinātas un precizētas 1999. gada Patērētāju tiesību aizsardzības likuma normas. Piemēram, 3. pantā ir atrunāts, ka patērētāja tiesības ir pārkāptas, ja nav nodrošināta iespēja saņemt vispusīgu un pilnīgu informāciju ne tikai par preci vai pakalpojumu, bet arī par preces vai pakalpojuma cenu, kā arī gadījumā, ja nav izsniegts darījumu apliecinošs dokuments. Likums papildināts arī ar jaunu 31.' pantu, kurā ir atrunātas patērētāja tiesības, ja pret-tiesiski izmantota viņa maksājumu karte.

Jaunajā likumā prece vai pakalpojums uzskatāms par neatbilstošu līguma noteikumiem, ja tas neatbilst paredzētajiem mērķiem, ja prece nav iesaiņota, ja par preci tiek sniegta neskaidra informācija vai tā ir maldinoša, kā arī, ja prece izrādījusies viltota. Ja preces vai pakalpojuma neatbilstība līguma noteikumiem ir maznozīmīga un nevar būtiski ietekmēt patērētāja iespējas izmantot preci vai pakalpojumu, patērētājs nevar prasīt, lai ražotājs, pārdevējs vai pakalpojuma sniedzējs atceļ līgumu un atmaksā par preci vai pakalpojumu samaksāto naudas summu. Jaunā likuma grozījumos ir atrunāts, kāda preces vai pakalpojuma neatbilstība līguma noteikumiem uzskatāma par maznozīmīgu, kas, manuprāt, ir ļoti svarīgi, jo uz šā jautājuma neskaidrības pamata var rasties pārpratumi starp patērētāju un pārdevēju, ražotāju vai pakalpojumu sniedzēju. Preces vai pakalpojuma neatbilstība līguma noteikumiem uzskatāma par maznozīmīgu, ja organizētā ekspertīzē konstatēts, ka preces vai pakalpojuma neatbilstība nepazemina preces vai pakalpojuma pamatfunkciju izpildes kvalitāti vai lietošanas īpašības un to var novērst, neradot vizuāli konstatējamas izmaiņas preces vai pakalpojuma ārējā izskatā (28., 29. pants).

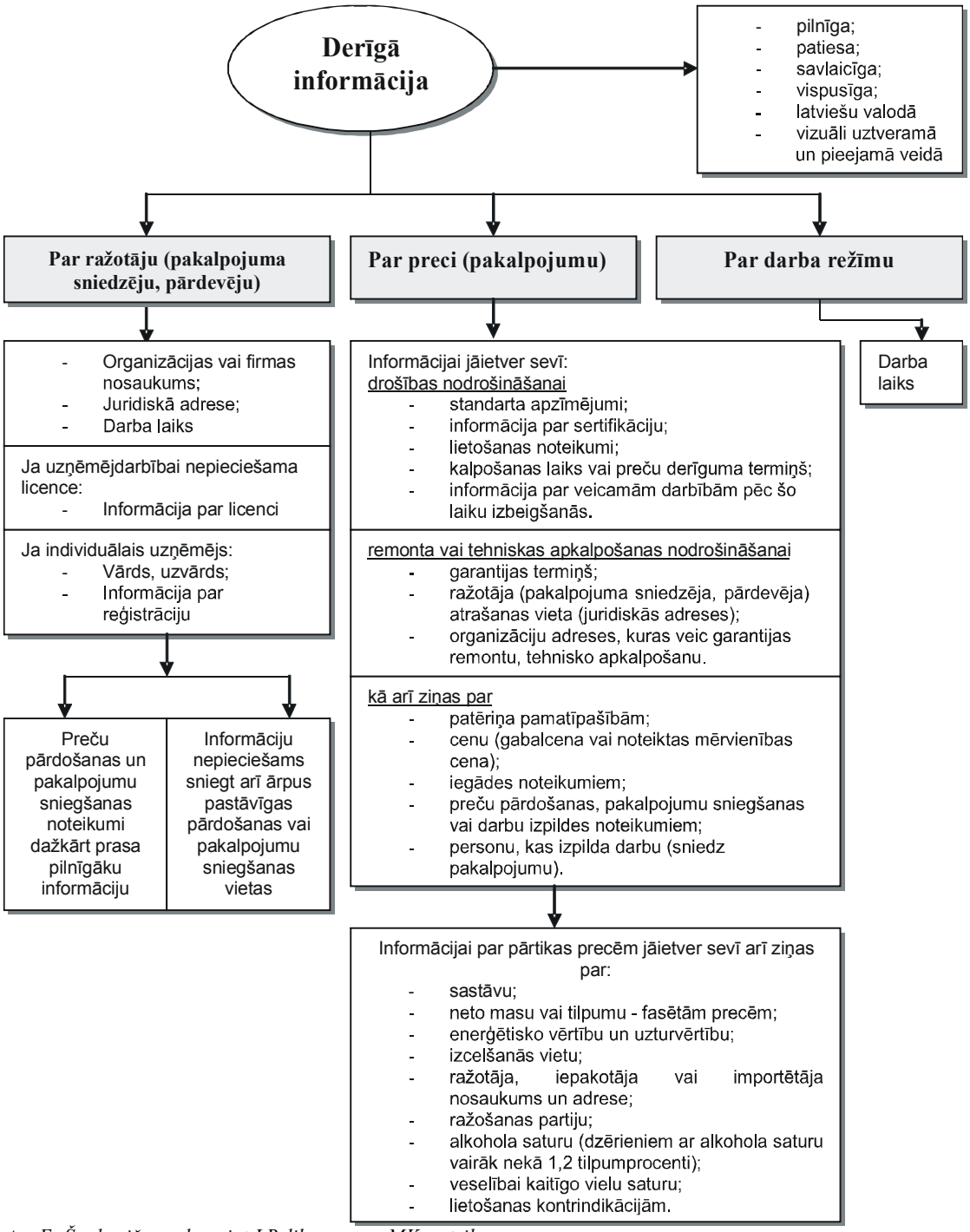
Daži autori (Žogota, 1999) ievērojuši, ka izmaiņas ir arī patērētājam labvēlīgākā pretenziju pieteikšanas termiņā ražotājam, pārdevējam vai pakalpojuma sniedzējam attiecībā uz preces vai pakalpojuma neatbilstību līguma noteikumiem. Proti, pretenzijas jāpiesaka viena kalendārā gada laikā no preces iegādes vai pakalpojuma saņemšanas dienas, uzrādot līgumu (pirkumu) apliecinošu dokumentu (kases čeku). Bet saskaņā ar grozījumiem likuma "Patērētāju aizsardzības likums" 27. pantā, sākot ar 2003. gada 1. janvāri, patērētājs ir tiesīgs pieteikt prasījumu ražotājam, pārdevējam vai pakalpojuma sniedzējam par preces vai pakalpojuma neatbilstību līguma noteikumiem divu gadu laikā no preces iegādes vai pakalpojuma saņemšanas dienas.

Aktīvā diskusijā par likuma jaunās redakcijas priekšrocībām vairāki autori (Rībele, 1998; Žogota, 1999 u.c.) ievērojuši, ka būtiski mainīta arī garantijas sniegšanas koncepcija: likumā iestrādātā koncepcija, ko lieto vairumā Eiropas valstu, it īpaši Skandināvijā, paredz lielāku saistību uzņemšanos, nekā noteikts normatīvajos aktos. Agrāk ražotāji, dodot patērētājiem daudz īsāku garantijas termiņu nekā likumā noteiktais termiņš prasības celšanai par preces vai pakalpojuma neatbilstību līguma noteikumiem, maldināja patērētājus, kuri pat neiedomājās par tiesībām celt prasību arī pēc pārdevēja vai ražotāja noteiktā termiņa beigām.

Ar 2005. gada grozījumiem Patērētāju tiesību aizsardzības likumā 1999. gada likums papildināts ar informatīvām atsaucēm uz Eiropas Savienības direktīvām, piemēram, direktīva 85/577/EEK par patērētāja aizsardzību attiecībā uz līgumiem, kas noslēgti ārpus uzņēmuma telpām, direktīva 93/13/EEK par negodīgiem noteikumiem patērētāju līgumos, direktīva 97/7/EK par patērētāju aizsardzību saistībā ar distances līgumiem, direktīva 99/44/EK par dažiem patēriņa preču tirdzniecības aspektiem un saistītajām garantijām un citas.

Ražotāja, pārdevēja vai pakalpojuma sniedzēja pienākums ir iepazīstināt patērētāju ar patiesu un pilnīgu informāciju par piedāvātās preces vai pakalpojuma kvalitāti, drošumu, cenu, garantiju un garantijas remonta iespējām, lietošanas noteikumiem, ražotāja, pārdevēja vai pakalpojuma sniedzēja nosaukumu, vārdu, uzvārdu un adresi, norādot to marķējumā,

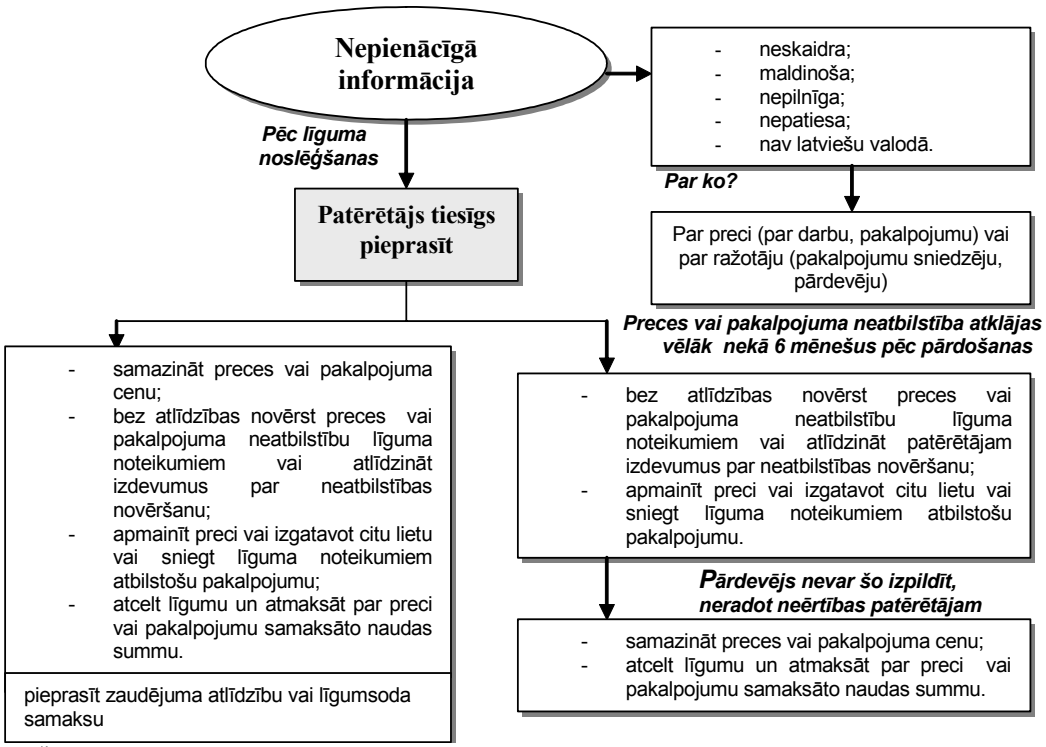
pievienotajā lietošanas pamācībā vai citādā rakstveida informācijā (1. att.). Pārdevējam aizliegts piedāvāt vai pārdot viltotu preci vai preci, kuras ražotāju nav iespējams identificēt. Ja viss iepriekš teiktais nav ticis ievērots no pārdevēja vai pakalpojuma sniedzēja puses, tad patērētājam pienākas atlīdzība par zaudējumiem vai par veselībai (arī dzīvībai) nodarītajiem kaitējumiem (2. att.). Ja konflikta gadījumā starp preču pārdevēju vai pakalpojumu sniedzēju un patērētāju nav iespējams panākt kompromisu, patērētājam ir tiesības savas intereses aizstāvēt valsts institūcijās vai tiesā (Patērētāju tiesību…likums, 1999).



Avots: *E. Špakoviča, apkopojot LR likumus un MK noteikumus.*

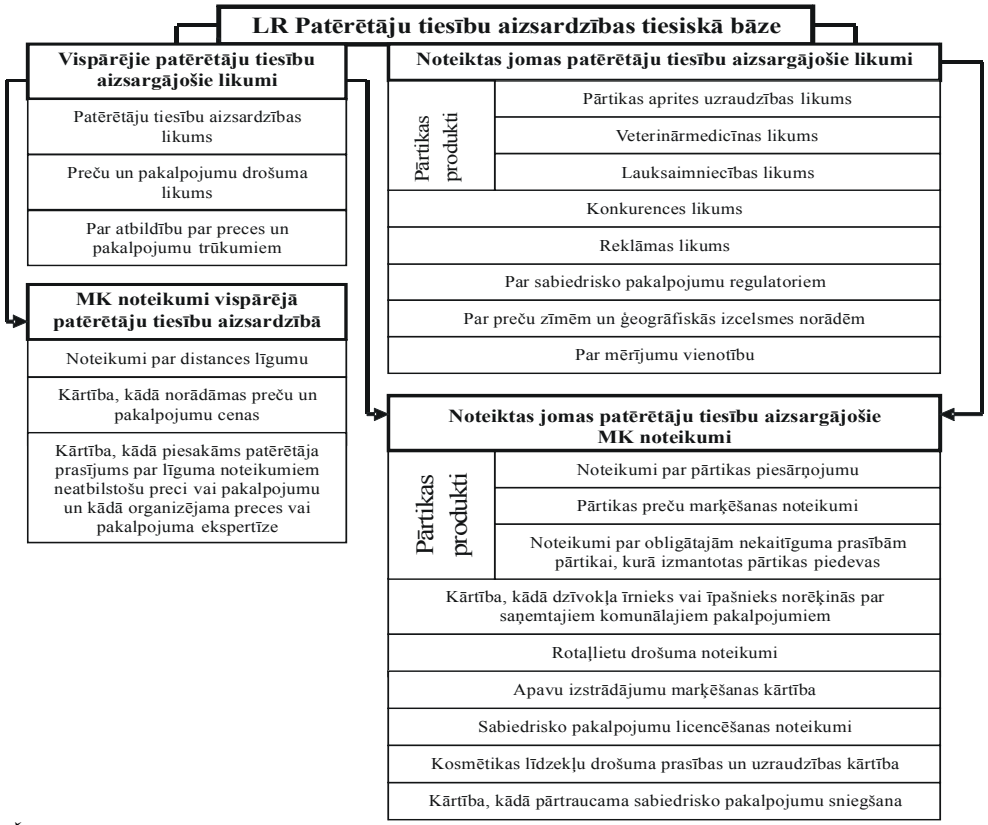
1. att. **Patērētājiem derīgā informācija**

Fig. 1 ***The information necessary for consumers***



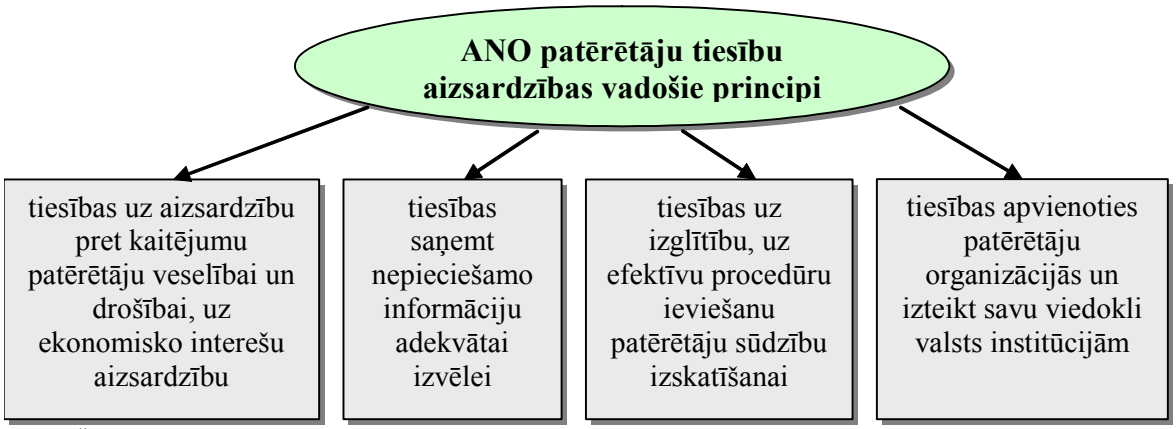
Avots: *E. Špakoviča, apkopojot LR likumus un MK noteikumus.*

2. att. **Nepienācīga informācija. Patērētāja tiesības**
Fig. 2 ***The inadequate information. Consumer rights***



Avots: *E. Špakoviča, apkopojot LR likumus un MK noteikumus.*

3. att. **Patērētāju tiesību aizsardzības tiesiskās bāzes sistēma**
Fig. 3 ***The system of legal basis of the protection of consumer rights***



Avots: *Špakoviča, 2000.*

4. att. **Patērētāju tiesību aizsardzības vadošie principi**
Fig. 4 ***The main principles of the protection of consumer rights***

Saskaņā ar Patērētāju tiesību aizsardzības likumu tika izstrādāti un Ministru kabinetā pieņemti vairāki noteikumi, kas regulē patērētāju aizsardzību konkrētās sfērās (3. att.).

1.2. Patērētāju tiesību aizsardzības starptautiskās tiesiskās bāzes aspekti

1.2. The international legal aspects of the protection of consumer rights

Dažādās pasaules valstīs pastāv dažādas patērētāju interešu aizsardzības mehānismu formas, kas atbilst ANO "Patērētāju interešu aizsardzības vadošiem principiem"(4. att.). Tie paredz patērētāju fiziskās drošības nodrošināšanas nepieciešamību, patērētāju ekonomisko interešu aizsardzību, preču un pakalpojumu standartu izstrādi, zaudējumu kompensāciju patērētājiem.

Šie principi izstrādāti ar šādiem mērķiem:

- palīdzēt valstīm cīņā pret kaitīgo tehnoloģiju uzņēmumu darbību nacionālā un starptautiskā līmenī, kas negatīvi iedarbojas uz patērētājiem;
- veicināt tirgus apstākļus, kas nodrošinātu patērētājiem plašu preču izvēli par ļoti zemām cenām;
- veicināt augstu ētisko normu līmeni tiem, kuri saistīti ar ražošanu un preču un pakalpojumu sadali patērētājiem.

Atbilstoši minētajiem principiem valdībām:

- jāstimulē godprātīga un efektīva konkurence, kas nodrošinātu patērētājiem plašu preču un pakalpojumu izvēli par minimālām cenām un dotu iespēju maksimāli izdevīgi izmantot savus līdzekļus;
- jāveic patēriņa preču un pakalpojumu drošuma un kvalitātes normu izstrādāšana un ieviešana, precīzi nosakot ražotāju atbildību par preču atbilstību paredzētajam mērķim un izturības, noderīguma un drošības prasībām;
- jāpilnveido svarīgāko patēriņa preču un pakalpojumu sadales sistēma, pietuvinot preces patērētājiem, īpaši vietās, kur šāda sadale ir apgrūtināta;
- jāizstrādā, jāorganizē un jārealizē patērētāju informācijas un izglītības programmas, iekļaujot tās izglītības sistēmas pamatprogrammā;
- jāatbalsta patērētāju organizācijas un citas patērētāju grupas;
- jāizstrādā tiesiski un administratīvi pasākumi zaudējumu kompensācijai par nekvalitatīvām precēm un pakalpojumiem;
- pastiprināta uzmanība jāpievērš tādām patērētāju veselībai svarīgām jomām kā pārtika, ūdensapgāde un medikamenti.

Otro programmu Ministru Padome pieņēma 1981. gada 19. maijā.

Minētās programmas patērētājam garantēja piecas pamattiesības:

1) tiesības uz drošību un veselības aizsardzību;
2) tiesības uz zaudējumu atlīdzināšanu;
3) tiesības uz ekonomisko interešu aizstāvību;
4) tiesības uz informāciju un izglītību;
5) tiesības būt pārstāvētam jeb tikt uzklausītam.

Programmas noteica Kopienas patērētāju politikas uzdevumus, galvenos pasākumus minēto mērķu sasniegšanai un Kopienas darbības

prioritāšu sarakstu. Tādējādi Eiropas Savienība ir atzinusi, ka patērētāju politika ir jāuzskata par politiku ar savām tiesībām, mērķiem, prioritātēm un līdzekļiem. 1991. gada decembrī Māstriktā Eiropas Padomes galotņu sanāksmē parakstīja līgumu par Eiropas Savienības izveidi, kurā 129.A pants noteica autonomu patērētāju politiku Savienības līmenī.

Eiropas Savienības prasības patērētāju aizsardzības jomā ir šādas:

1) to pamatbrīvību nodrošināšana patērētājiem, kas kopš 1975. gada ir atzītas Kopienas patērētāju aizsardzības programmās;

2) atbilstošas institucionālas struktūras izveidošana, kuras pārziņā būtu ar patērētājiem saistītie jautājumi;

3) vispārēju vai speciālu konsultatīvo struktūru izveide patērētāju interešu pārstāvniecībai;

4) apmācības un izglītības programmu attīstība;

5) iedarbīgu kompensācijas mehānismu izveide;

6) patērētāju nevalstisko organizāciju attīstības sekmēšana.

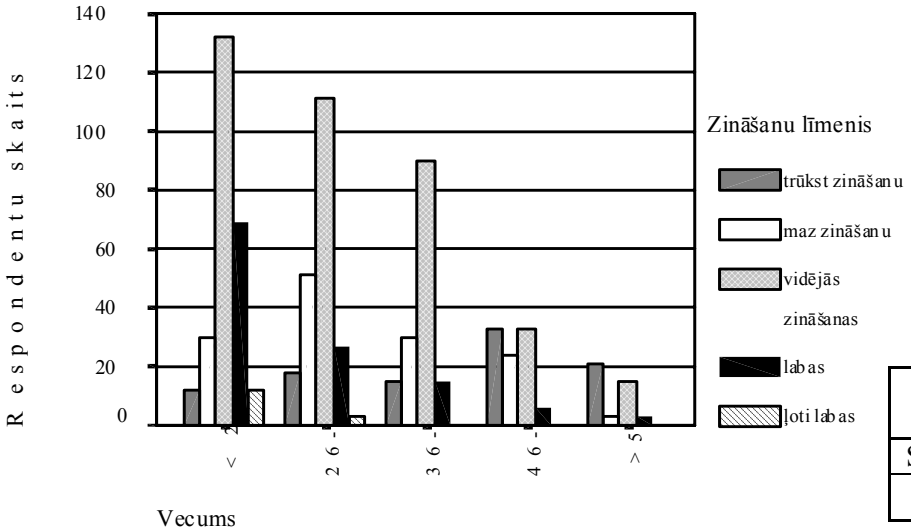
No speciālās literatūras un periodikas informācijas (Praude u.c. 1999; Žogota, 1999 u.c.) veidojas priekšstats, ka valstīs ar attīstītu tirgus ekonomiku patērētāji savas intereses aizstāv pārdomāti un organizēti. Tas nozīmē, ka preču ražotājiem un tirgotājiem jāņem vērā ne tikai individuālās, bet arī kopējās patērētāju intereses un prasības. Šīs prasības demokrātiskās valstīs tiek uzskatītas par absolūtām un neaizskaramām. Krāpšana, zema preču kvalitāte, nevērība pret izteiktajām pretenzijām tiek uzskatītas kā vēršanās pret patērētāju tiesībām.

Eiropas Komisijā ir izveidots Patērētāju politikas civilā dienesta ģenerāldirektorāts – DG XXIV, kas ir izstrādājis patērētāju politikas prioritātes. Kā svarīgākās minētas pašreizējās patērētāju aizsardzības likumdošanas pastiprināšana, mazāk aizsargāto patērētāju grupu aizsardzības nodrošināšana, patērētāju izglītības un informētības palielināšana, augstas pārtikas preču kvalitātes uzturēšana Savienībā, patērētāju politikas propaganda Centrāl-, Austrumeiropas un jaunattīstības valstīs.

Līdz 1999. gada 31. decembrim Latvijai bija jāveic patērētāju aizsardzības sistēmas saskaņošana ar Eiropas Kopienu. Lai to paveiktu, Latvijai atbilstoši Eiropas Līguma 95. pantam bija jānodrošina aktīva patērētāju aizsardzības politika, saskaņojot to ar Kopienas likumiem un ANO vadlīnijām, patērētāju aizsardzības likumdošanas tuvināšana Kopienas likumdošanai, efektīva patērētāju juridiskā aizsardzība. Pašlaik šīs prasības vēl nav pilnīgi realizētas.

Teorētiski šīs patērētāju tiesības un to aizsardzības principus var uzskatīt kā pāreju no ražotāju ekonomikas uz patērētāju ekonomiku, no pārdevēja tirgus uz pircēja tirgu.

Patērētāji cīnās par savām tiesībām, par šo tiesību aizstāvību, izmantojot dažādus veidus un



Korelācijas koeficienti	
Spirmena	Kendala
–0,357	–0,307

Avots: *E. Špakovičas pētījuma dati.*

5. att. **Respondentu zināšanu pašnovērtējums par PTA atkarībā no vecuma**

Fig. 5 ***The self-estimation of consumers' knowledge***

metodes, organizētas konsultācijas, neatkarīgas preču ekspertīzes un pretenziju pārbaudes par stingru prasību izvirzīšanu preču un pakalpojumu kvalitātei. Aktīvi noris arī darbs ar patērētāju audzināšanu, informēšanu un izglītošanu (Žogota, 1999). Tomēr, kā parādīja autores veiktie pētījuma rezultāti 2004. gadā (skat. 5. att.), patērētāji savu zināšanu līmeni par patērētāju tiesību aizsardzību pārsvarā novērtē kā vidēju, un vecuma faktors būtiski ietekmē respondentu pašnovērtējumu attiecībā uz zināšanām par patērētāju tiesību aizsardzības jautājumiem. Gados jaunākie respondenti savas zināšanas šajā jautājumā novērtē augstāk. Kritiskāk savas zināšanas novērtējuši gados vecākie respondenti. Viņi biežāk atzīst, kā viņiem trūkst zināšanu. Sakarības līmenis ir vidējs abos gadījumos. Korelācijas koeficienti šajā gadījumā ir negatīvi, kas nozīmē, ka, palielinoties vecumam, zināšanu līmenis ir salīdzinoši zemāks.

Daudzās valstīs tiek pieņemti īpaši likumi patērētāju tiesību aizsardzībai. Piemēram, Japānā patērētāju tiesiskās aizsardzības jomā darbojas vairāk nekā 50 nacionālo likumu, desmitiem pavēļu un vietējo pašvaldību rīkojumu. Par pamatdokumentu pieņemts 1968. gada Pamatlikums par patērētāju interešu aizsardzību. Lielbritānijā 1984. gadā publicēta "Baltā grāmata", kas ir veltīta preču drošības nodrošināšanai, un uz tā pamata 1987. gadā bija pieņemts arī atbilstošs likums, kurā paredzēta atbildība par patērētāju zaudējumiem, kas ir radušies brāķētas preces iegādes rezultātā. Austrijā darbojas ap 200 patērētāju interešu aizsargājošo likumu, sākot ar 1988. gadu – Likums par atbildību par produkcijas kvalitāti. Francijā jau 1905. gadā bija pieņemts Likums par falsificēšanu un viltojumiem preču un pakalpojumu jomā. 1978. gadā akceptēts Likums par tiesību aizsardzību un informāciju patērētājiem.

Aizstāvot patērētāju intereses, darbojas Starptautiskā standartizācijas organizācija (ISO), kas ietver sevī nacionālās un valsts standartizācijas sistēmas. Pazīstamākais ir Amerikas nacionālais standartu institūts (ANSI), Francijas standartizācijas asociācija (AFNOR), Vācijas standartizācijas institūts (DIN), Britānijas standartizācijas organizācija (BSI). Starptautiskā standartizācija rada priekšnoteikumus ekonomiskajai un tehniskajai sadarbībai starp dažādām valstīm. Tādējādi standartizācija veicina valsts ekonomikas un starptautiskās sadarbības attīstību. Izšķir starptautiskās (ISO, IEC, ITU), reģionālās (CEN, CENELEC, ETSI, COPANT u.c.) un nacionālās standartizācijas organizācijas, kas izstrādā kopējus standartus. Starptautiskās standartizācijas organizācijas mērķis ir sekmēt sadarbību standartizācijā, lai tādējādi veicinātu starptautisko tirdzniecību, darba dalīšanu un kooperāciju, bet, plašāk runājot, progresu zinātnē, tehnikā, ekoloģiskajā darbībā. ISO faktiski ir nacionālo standartizācijas organizāciju federācija. ISO apstiprina starptautiskus standartus attiecībā uz vides aizsardzību, darba drošību, dabas resursu un enerģijas racionālu izmantošanu, produkcijas kvalitātes un zinātniski tehniskā līmeņa paaugstināšanu u.c. (Torgāns, Jemeļjanova, 1997). ISO standartus plaši pielieto visā pasaulē.

Eiropas Savienība (ES) kopā ar Eiropas Brīvās tirdzniecības asociāciju (EFTA) ir izveidojusi standartizācijas organizācijas CEN un CENELEC, kas izstrādā visām dalībvalstīm kopējus Eiropas standartus. Šie standarti dalībvalstīm jāpieņem kā nacionālie un vienlaikus jāanulē tie standarti, kuru prasības ir pretrunā ar Eiropas standartu prasībām. Eiropas standartu adaptācijas un piemērošanas līmenis ir viens no pamatrādītājiem un kritērijiem uzņemšanai ES.

Kopumā visa Eiropas Savienības likumdošanas sistēma patērētāju interešu aizsardzības jomā kalpo triju mērķu sasniegšanai (6. att.)

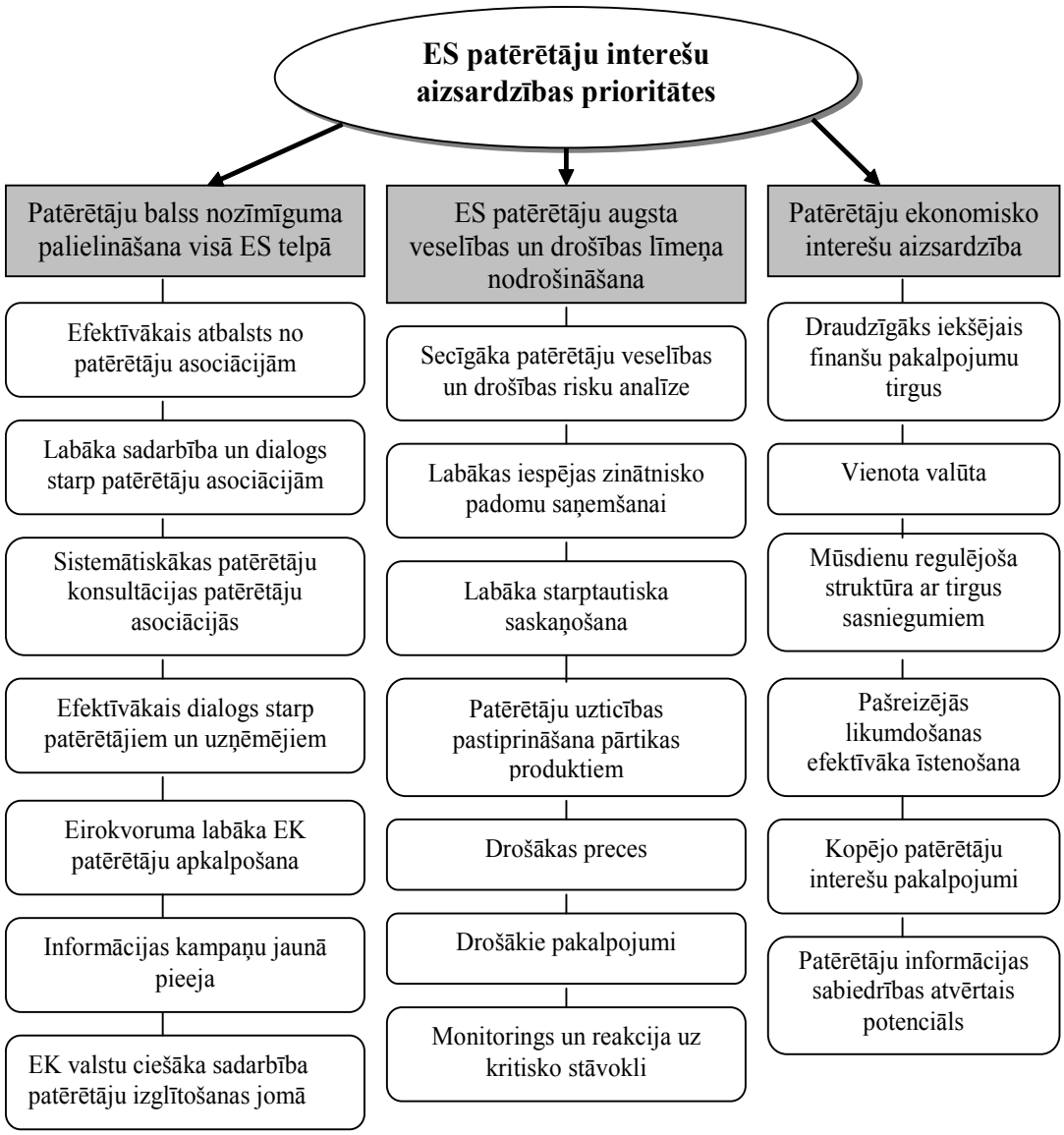
Amsterdamas vienošanās 153.1. pantā teikts, ka, lai virzītu patērētāju intereses un garantētu augstu patērētāju aizsardzības līmeni, Eiropas Kopienai jāpievērš uzmanība patērētāju veselības, drošības un ekonomisko interešu aizsardzībai, kā arī tiesību pilnveidei informācijas, izglītības un pašorganizēšanās iespēju jomā. Līdz ar to patērētāju veselība, drošība un viņu ekonomisko interešu aizsardzība kopā ar tiesībām uz informāciju, izglītību un pašorganizēšanos pašlaik ir fundamentālie mērķi Eiropas Kopienas patērētāju tiesību aizsardzības politikā.

Savukārt tiesībām uz informāciju, izglītību un pašorganizēšanos ir vissvarīgākā nozīme patērētāju balss nozīmīguma palielināšanā visā ES telpā.

ES patērētāju interešu aizsardzības tiesiskā bāze veidojas no vispārīgiem patērētāju tiesību aizsardzības dokumentiem, likumdošanas aktiem, kas saistīti ar produkcijas kvalitāti un drošību, darījumu drošumu, patērētāju izglītību un citiem likumdošanas dokumentiem, kas saistīti ar patērētāju interesēm, bet atrodas ārpus Patērētāju ģenerāldirektorāta – DG XXIV – atbildības (7. att.). Katrai likumdošanas aktu kategorijai ir saistošs vai rekomendējošs raksturs, vai arī tikai rekomendējošs raksturs, piemēram, likumdošanas aktu grupai, kas skar patērētāju izglītības jautājumus, ir tikai rekomendējošs raksturs.

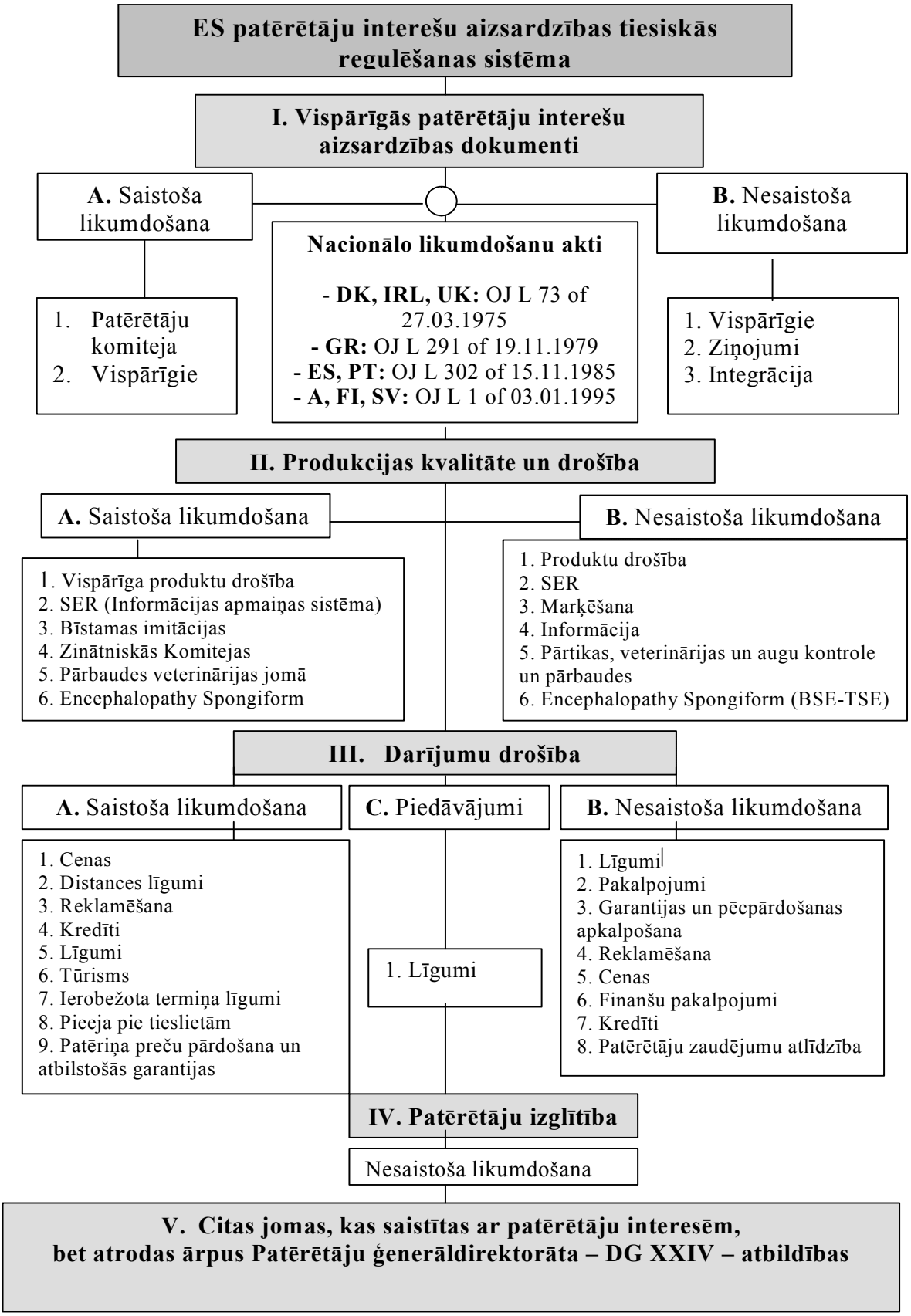
Secinājumi
Conclusions

1. Starptautiskās likumdošanas patērētāju tiesību aizsardzības jomā un attiecīgi arī LR tiesiskās bāzes pamatā pieņemti ANO patērētāju tiesību aizsardzības vadošie principi. Līdz ar to patērētāju veselība, drošība un viņu ekonomisko interešu aizsardzība kopā ar tiesībām uz informāciju, izglītību un pašorganizēšanos pašlaik ir fundamentālie mērķi Eiropas Savienības patērētāju tiesību aizsardzības politikā.



Avots: *E. Špakoviča, izmantojot Consumer Policy ...,1999.*

6. att. **ES patērētāju tiesību aizsardzības mērķi**
Fig. 6 ***Purposes of consumer protection of EU***



Avots: *Izstrādāja E. Špakoviča, izmantojot Inventory of ..., 1999.*

7. att. **ES patērētāju interešu aizsardzības tiesiskā bāze**

Fig. 7 ***EU legal basis of the protection of consumer interests***

2. ES patērētāju interešu aizsardzības tiesiskā bāze ir veidota no vispārīgiem patērētāju tiesību aizsardzības dokumentiem, likumdošanas un normatīviem aktiem attiecībā uz produkcijas kvalitāti un drošību, darījumu drošumu, patērētāju izglītību un citiem likumdošanas dokumentiem, kas saistīti ar patērētāju interesēm, bet atrodas ārpus Patērētāju ģenerāldirektorāta – DG XXIV – atbildības.

3. Latvijā jau ir izveidota patērētāju tiesību aizsardzības, pārtikas aprites uzraudzības un tās atbilstības novērtēšanas tiesiskā bāze, kura ietver likumus un MK noteikumus. Šī bāze tiek pilnveidota, pieskaņojot to ES tiesiskajai bāzei patērētāju tiesību aizsardzības jomā.

4. LR patērētāju interešu aizsardzības tiesisko bāzi veido divas tiesisko un normatīvo aktu grupas: vispārējie patērētāju tiesību aizsargājošie likumi un MK noteikumi un noteiktas jomas speciālie patērētāju tiesību aizsargājošie likumi un MK noteikumi.

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Инфраструктура сельского хозяйства польши при интеграции с Европейским Союзом: состаяние и задачи

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Abstract

The paper presents equipment of Polish agriculture in production means during and after the process of integration with the European Union. The level of infrastructure in rural areas is rather low in Poland. Author points the following factors that influence on whole economy in negative way: low profitable of agriculture production, lack of possibilities of farmers' investing in own farms, lack of farmers' finance sources and unemployment of big part of rural areas population. In the paper there is presented opinion that higher quality of technical and social infrastructure and better equipment of agriculture in production means are the basic ways to reach fast economic development of Polish rural areas.

Key words: production means, infrastructure, rural areas, agriculture.

Введение
Introduction

Процесс интеграции польского сельского хозяйства требует приспособления во многих отраслях. Можно легко заметить низкую эффективность польского сельскохозяйственного производства, неудовлетворительную аграрную структуру и несовершенные регулирующие системы, отсутствие институтов, которые бы могли удовлетворительно обслужить процессы развития, чрезмерный централизм и недостаточные возможности местных общественных структур, усиливающие аппатию нашей сельской общественности. Отсутствие быстрых перемен в сельском хозяйстве будет способствовать сохранению доходной недостаточности польского сельского хозяйства, в том числе нынешних структур (Wiatrak A., 1997).

Состояние инфраструктуры является одним из важнейших критериев уровня социально-экономического развития и существенным показателем, влияющим на темпы роста национального дохода. Развитие и высокий стандарт инфраструктуры в сельском хозяйстве и на сельских территориях непосредственно влияют на качество жизни живущих там людей. Сельское хозяйсь одновременно – это одна из ключевых областей народного хозяйства, развитие которой способствует созданию трудовых мест и стимулирует рост в других секторах народного хозяйства (МСХ, 2005).

Инфраструктура на сельских территориях, к сожалению, - это одна из тех сфер, где недостатки особенно видны. Низкая оплачиваемость сельскохозяйственной продукции, отсутствие у сельскохозяйственных работников возможности инвестиций в их хозяйства, отсутствие собственных финансовых средств, а также безработица и маразм, охватившие сельское население, отрицательно сказываются на всей экономике. Отказ от существующих традиций и динамичное развитие инфраструктуры являются сегодня одной из первостепенных задач.

Качество технической и социальной инфраструктур на сельских территориях Польши становится все более серьезным барьером на пути развития страны, особенно в контексте наших европейских притязаний. В этой области необходимо радикальное «новое начало», преодоление доминирующей до сих пор неспособности и указание способов достижения значительного прогресса (Wieruszewska M., 2002).

Цель работы определена представлением обеспечения польского сельского хозяйства средствами производства в процессе интерации Польши с Европейском союзем.

Техническая и социальная инфраструктура

Technical and social infrastructure

Слабо развитая техническая инфраструктура на селе является одним из наиболее важных барьеров на пути развития сельских территорий. Недостаточная степень развития сельской инфраструктуры не только снижает стандарт жизни и хозяйствования, но и свидетельствует о слабой привлекательности сельских территорий для инвесторов (Секторная оперативная программа, 2003).

В среднем на сельских территориях на 100 км^2 приходится 47,4 км воеводских дорог с твердым покрытием. В части плотности сельских подъездных дорог в 2001г. наиболее высокий показатель имело Нижнешленское воеводство – более 160км/100км^2 поверхности, а самый низкий – Куявскопоморское воеводство – только около 33км/100 км^2. Зато в категории сельских гминных дорог наиболее высоким показателем располагало Малопольское воеводство – 89км/100км^2 поверхности, а самым низким Западнопоморское воеводство – 20км/100км^2 (Wiatrak A., 1997).

В 1990-2002г.г. наступило ускоренное развитие сельской инфраструктуры, особенно в части сельского водоснабжения, телефонизации и газификации. Однако по-прежнему имеют место большие диспропорции между инвестициями, реализованными в водоснабжении, и инвенстициями в очистные сооружения. В 2002г. 3397,3 тыс. хозяйств могло пользаваться централизованной холодной водой и только 2690,4 тыс. хозяйств – горячей водой. Принципиальной проблемой на селе в Польше является также недостаточное развитие канализационной сети, потому что средняя степень обеспечения сельского населения канализационнойсетью составляет только около 4,5%. На сельских территориях 10% домашних сельских хозяйств вообще не имеют никакого канализационного обрудования.

Что касается использования современных телекоммуникационных услуг, то сельские территории в Польше отделяет огромная дистанция от сельских территорий стран – «старых» членов ЕС. В 2002г. на сельских территориях приходилось 173,2 телефонных абонентов на 1000 человек, в то время как в среднем по Польше 277,9, а в странах ЕС-15 этот показатель составлял 470.

Согласно данным по 2002г., 1/3 населения страны размещалась на сельских территориях. Средняя полезная жилая площадь населения на селе составляла 85 м^2 и была в среднем на 15 м^2 больше, чем в городах. Однако, на селе в условиях перенаселения (на одну комнату приходится два и более человек) живет 14% населения, в то время как в городе 9%. Кроме того, одна четвертая всех живущих на селе построилась перед 1945г.

В 2003г. на сельских территориях действовало 1704 очистных сооружений. В 2004г. внедрено 229 новых очистных сооружений, в том числе 51 Подкарпатском воеводстве. Подобные инвестиции будут продолжаться с целью обеспечения стандартов ЕС в этой сфере. На селе существуют около 1118 организованных мусорных свалок общей поверхностью около 2183,3 га, в том числе 842 свалки с изоляционными экранами и возможностью сбора сточных вод собщей

Таблица 1

Обеспечение домашних хозяйств техническим оборудованием (% общего числа домашних хозяйств, состояние в 2002г.)

Элементы инфраструктуры	Сельские территории, в %
Водопровод	89,2
Канализация	74,3
Ванные	76,0
Газовая сеть	17,4
Центральное отопление	64,3

Источник: *Отчет о результатах всеобщей сельскохозяйственной переписи 2002. ГУС, Варшава, 2004.*

поверхностью 1008 га. Свалками пользуются только 34,5% сельских домашних хозяйств.

Количественное состояние технической производственной инфраструктуры, использованной в польском сельском хозяйстве, систематически повышается. В 2002 г. в домашних хозяйствах было 1364,3 тыс. тракторов, 123 тыс. зерновых комбайнов, 81,2 тыс. картофелеуборочных комбайнов и 32,2 тыс. свеклоуборочных комбайнов. Однако в пересчете на единицу поверхности сельскохозяйственных угодий или поверхности пашни показатели обеспечения значительно отличаются от показателей в странах ЕС. Число тракторов в пересчете на 100 хозяйств в Германии, Англии и Франции в 2-3 раза выше, чем в Польше. Польша значительно уступает большинству стран ЕС по количеству зерноуборочных комбайнов на единицу сельскохозяйственных угодий. Также показатели обеспечения сельского хозяйства другой техникой на 100га пашни в Польше в большинстве ниже, чем в развитых странах ЕС (Lamarche H., 2002).

Оценивается, что обеспечение сельскохозяйственных предприятий тракторами и основной техникой, выраженное в абсолютных единицах, теоретически в Польше достаточное для механизации основных сельскохозяйственных работ. Однако это оборудование требует скорейшей модернизации и замены. В большинстве это старые и низкопроизводительные машины, а их амортизация составляет около 70%. Экономические трудности большинства сельскохозяйственных предприятий ведут к удлинению срока службы технических средств снижают возможности замены на более современное оборудование. Средний срок службы трактора в 2000г. составлял 20 лет, а его мощность 31 кВт. Средняя мощность двигателя во Франции составляет более 40кВт, а в Дании 45кВт. Также и парк зерноуборочных комбайнов в Польше быстро стареет. Уже более 60% - это комбайны старше 10 лет. Небольшие покупки новых комбайнов и значительный импорт использованных комбайнов вызывают дальнейшее ухудшение возрастной структуры используемых комбайнов. Высокая аварийность старой техники и раздробленность хозяйств затрудняют их использование.

В Польше имеет место большая разница в показателях обеспечения техническим оборудованием хозяйств в зависимости от региона и их величины территории. Наиболее хорошие показатели механизации работ и больше всего машин находится у сельскохозяйственных работников в воеводствах Велькопольском, Любельском и Мазовецком. Самая плохая ситуация в воеводствах Западнопоморском, Варминско-мазурском и Свентокрыжском. Около 50% сельских предприятий (в основном малотерриториальных) не имеют трактора, а совместное использование сельскохозяйственного оборудования не распространено (www.tiger.edu.pl., 2005).

Таким образом, нынешнее состояние обеспечения польского сельского хозяйства средствами механизации неудовлетворительное. Обеспечение конкурентности польского сельского хозяйства после вхождения в Европейский Союз требует значительного улучшения количественного и ассортиментного состояния оборудования, использованного сельскохозяйственными производителями, а также развития сети технического обслуживания.

Результаты всеобщей сельскохозяйственной переписи, проведенной в 2002г., показывают, что 2199,7 тыс. индивидуальных хозяйств в Польше располагало инвентарными и хозяйственными строениями в количестве 5373,6 тыс., в том числе 1659,1 тыс. строений инвентарных и 3714,5 тыс. хозяйственных. Многофункциональные строения находились в 32,4% хозяйствах – наибольшая их доля (45-60%) зарегистрирована в хозяйствах с площадью 300 га и выше (табл.2).

Техническое состояние этих строений в целом низкое. Почти половина из них построена перед 1960г, в том числе 46% коровников, 50% свинарников, 44% сараев. До 1996г. модернизировано не более 15% инвентарных и хозяйственных строений. Средняя кубатура нового здания составляет около 1200 м3, в том числе в индивидуальном строительстве - 1000 м3. Однако уже несколько лет имеет место тенденция роста числа используемых производственных зданий в

Таблица 2

Отдельные здания и строения в индивидуальных хозяйствах площадью выше 1га сельскохозяйственных угодий относительно территориальных групп сельхозугодий

Территориальные группы по сельхозугодьям	Коровники	Свинарники	Птичники	Сараи	Многофункциональные строения
Число хозяйств в тыс.					
Вместе	774,8	275,4	318,2	1016,7	711,0
1-5	320,9	73,0	111,0	449,4	413,8
5-7	108,0	28,4	40,0	141,3	82,4
7-10	116,2	42,0	49,7	147,6	78,2
10-15	108,5	52,5	52,5	134,3	67,0
15-30	93,2	57,2	49,4	111,2	52,7
30-50	19,3	14,7	10,8	22,6	1 0,7
50 га и выше	8,8	7,7	4,6	10,4	6,3
Число строений в тыс.					
Вместе	814,2	302,6	326,5	1052,0	764,7
1-5	326,5	75,6	113,4	455,7	433,0
5-7	111,2	29,7	40,6	144,8	88,4
7-10	121,3	44,7	50,6	153,0	85,4
10-15	115,8	56,9	53,6	141,1	74,8
15-30	103,8	64,6	50,9	119,7	60,2
30-50	22,7	18,2	11,4	24,9	12,9
50 га и выше	12,8	12,8	5,9	12,7	10,1
Площадь строений в тыс. м2					
Вместе	76644,7	32634,5	16102,7	138497,3	87810,3
1 -5	18252,9	3854,4	5642,2	41268,2	36004,4
5-7	8686,1	2067,9	1379,6	18052,1	10258,0
7-10	11446,8	3615,3	1655,8	22202,9	11696,0
10-15	13516,7	5886,1	2034,0	23883,5	12025,0
15-30	15333,4	8738,0	2488,1	23357,2	11526,4
30-50	4218,1	3372,9	1018,1	5498,6	2742,7
50 га и выше	5190,8	5100,0	1884,8	4234,8	3557,7

Источник: *Отчет о результатах всеобщей сельскохозяйственной переписи 2002, ГУС, Варшава 2004.*

сельском хозяйстве, главным образом инвентарных объектов (Секторная оперативная программа, 2003).

Социальная инфраструктура на сельских территориях характерна недоинвестированием и неприспособленностью к существующим потребностям. Недостаточное развитие касается, в частности, культурных, туристических, оздоровительных центров и школ.

Что касается доступа к службам здоровья, то сельские территории также значительно отстают от городов. В 1999г. количество амбулаторных и стоматологических услуг на одного жителя было в три раза выше в городах, чем на селе. Количество населения, приходящегося на одну поликлиннику и оздоровительный центр на сельских территориях, была наибольшая в Велькопольском воеводстве (9433 человек), а

низшая в воеводствах Подляском (3960) и Опольском (3756) (www.tiger.edu.pl., 2005).

Условия для учебы на селе также значительно хуже, чем в городе. Средний уровень обучения на селе тоже, как правило, ниже. Менее эффективное обучение сельских детей имеет место из-за ряда барьеров, связанных с функционированием образовательной сети на селе (например, ограниченный доступ к детским садам, более низкая квалификация учителей, худшие образовательные предложения после основной школы), а также материальным положением сельских семей.

Выбор дальнейшего после основной школы обучения зависит от сети школ в ближайшем окружении, возможности и стоимости доезда или размещения в общежитии. На сельских территориях имеют место значительные региональные различия в части социальной инфраструктуры, причем самый низкий уровень развития отмечается в северо-восточных воеводствах (Wieruszewska M., 2002).

Выводы и предложения
Conclusions

Анализ статистических данных показывает, что программа действий в направлении улучшения и развития инфраструктуры на селе должна опираться на выводах, вытекающих из анализа существующего положения дел и ошибок, совершенных в прошлом. Она детерминирована к выполнению перемен и опирается на убеждении, что развитие инфраструктуры может и должно рассматриваться как один из самых важных двигателей экономического развития. Одновременно эта программа не является замкнутым набором рассуждений. Каждая новая инициатива, которая может способствовать лучшей реализации целей страны в сфере технической и социальной инфраструктуры на сельских территориях, должна быть подвергнута детальному анализу и в случае положительной оценки применена на практике.

1. При реализации плана многофункционального развития сельских территорий необходимо сконцентрироваться на улучшении технической и социальной инфраструктуры этих территорий, что будет приводить к стимулированию инвестиций в частном секторе, созданию новых рабочих мест вне сельского хозяйства, улучшению природных и оздоровительных условий и сокращению разницы в уровне экономического развития между сельскими и городскими территориями.

2. Необходимо особенно усилить внимание к проектам, предусматривающим инвестиции в строительство и модернизацию дорог, водопроводных систем, канализации и сбора и утилизации отходов. К приоритетным целям в сфере инфраструктуры относится также развитие связи и строительство информационного общества.

Современная экономика не может функционировать без современных решений в информационной области. Поэтому обязательно достижение роста эффективности функционирования рынка телеинформационных услуг и доступа к информации.

Выше указанные действия необходимы, чтобы жители сельских территорий перестали, наконец, чувствовать себя гражданами другой, худшей Польши и воспользовались возможностью повышения качества жизни на селе, а также лучших, более выгодных условий для развития предпринимательства.

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Sustainable development in fisheries in the European Union

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Abstract

Sustainable development is the only way to solve the problems of modern world. End of the industrial era and beginning of the informational era have been conducive to transferring the development's balance from quantity to quality. Pollution and excessive utilisation of natural resources have induced the necessity to take measures that would lead to social and economic changes. Efforts towards sustainable development have been aimed at sectors strongly dependent on natural environment and undergoing problems that create urgent necessity for functional changes. The fish sector is one of them. Other factor that mobilizes well balanced development of the fish sector in Poland is its reorganisation related to Poland's accession to the European Union.

Key words: sustainable development, fisheries, European Union, conventions.

Introduction

A sustainable development is, at present, only one alternative for solving the problems of the modern world. The end of the Industrial epoch and the beginning of the Information epoch is conductive to transmitting the development weight from quantity to quality. The overexploitation of natural resources and pollution of the environment have led to the neccesity of taking up radical changes in the development of the modern world. At the same time actions were undertaken in aid of social-economical changes. The action originally existed in the declarative domain, e.g:

The Declaration of the United Nations Conference on Human Development.

- The Rio Declaration.
- The UN Convention on the Laws of the Sea.
- The Code of Conduct for Responsible Fisheries and others.

The increasing country support has resulted in the UN members beginning the next stage – The domain of realization. There has been a rise in the institutional framework for a sustainable development, action programs and others on a worldwide and regional scale and, over the last few years, national levels. The actions currently have sectoral limits, in the future they will be involved with all the country's economy. The attempted actions in aid of a sustainable development have led to the first sequence in sectors strongly dependant on the natural environment and have gone through specific problems which provoke necessary changes in the functional sector. The fish sector is such a sector. An additional mobilising factor for a sustainable development of the fish sector in Poland is it's restructuring together with Poland's accession to the European Union.

1. Sustainable development

Sustainable developments have to secure justly satisfying requirements of the modern world without violating the possible satisfying requirements of future generations. The concept was formulated in the Brundland report in 1987 (Our 1987). It is also included in the European Union Treaty.

A permanent and sustainable development on a worldwide scale as well as on a national, regional and local scale were debated in the world summit in Rio de Janeiro in 1992. During this summit, three documents were presented comprising the foundations for further actions in aid of sustainable development:

- The Rio Declaration.
- Agenda 21.
- The Statement of Forest Principles (Dokumenty 1998).

The Declaration contains 27 principles which should lead the world community as well as individual countries with the aim of achieving sustainable development. They empathise that the central interest in the permanent process and sus-

tainable development are human beings who have the right to a healthy and creative life in harmony with nature [principle 1]. Agenda 21 comprises a collection of recommendations and action guidelines in aid of a permanent and sustainable development.

In 1992, two conventions were held:

- The UN Framework Convention on Climate Change, a supplement to the Kioto protocol in 1997.
- Convention on Biological Diversity.

The convention on Climate Change empathised the anthropogenesis effect on the climate, which in effect increase emissions of greenhouse gas as well as an influencing effect on the changing environment on earth.

The convention on Biological Diversity points towards the need to reduce or eliminate the rate of decreasing biological diversity on earth.

The economic development influences the intense development rate and negative phenomene present in both conventions.

The world summit in Rio, as well as the two conventions, presented a summary of actions started through studying the Declaration of the UN on Human Development accepted in Stockholm in 1972. The year 1992, was critical for beginning a new epoch - an epoch of intense activities in aid of sustainable developments. The periodical summing up of those activities has a place in the World Summit Treaty of Rio +10 in Johannesburg in 2003. Actions in aid of sustainable developments have a long term character in connection with the successive periods, their evaluation as well as modification objectives [Johannesburg 2002 and the Millennium Goals 2000]. In parallel with the Millennium Development Goals and the World Summit in Johannesburg, documents were formulated that deal with the changes in trade in aid of sustainable developments [Doha Development Agenda] and financing the sustainable developments [Monterrey Consensus].

The overriding goals of sustainable developments, determined in the World summit in Johannesburg are as follow:

- The elimination of poverty.
- Assurance of sustainable production and consumption
- The protection of natural resources, which in the future, will be based on social and economical developments [COM 2003].

Sustainable developments have a multidimensional character: social, economical and environmental.

2. Sustainable development in the European Union

In December 1999 in Helsinki, the European Council invited the European Commission to prepare proposals for long term strategies including economical politics and social as well as environmental sustainable developments. [COM 2001].

In the year 2000 in Lisbon, the European Council laid down new strategic goals for the European Union: to become the most competitive and dynamic, based on economical knowledge of the world, capable of sustainable economical developments with more work places and more social coherence. [Lisbon Strategey]. In a session in Stockholm, the European council completed the above goals including the problems of protecting the environment. They empathise that: economical development, social coherence and protection of the environment are inseparable. Sustainable developments offered to EU members have to constitute a positive long term vision of a prosperous society, a clean, safe and healthy environment and a better future for our children and grandchildren.

In 2001, in Gothenburg, the European Council accepted a EU strategy for sustainable development [COM 2002]. In 2002, in Barcelona, the European Council approved documents introduced by the European Commission, which are obliged outside[outside the union] - dimensions sustainable development [COM 2005]. Those documents constituted the European Union's contribution to the World Summit in Johannesburg in 2002.

Internal union aspects of bringing in sustainable developments include:

1. Unanimity of a EU strategy for sustainable development and external conditions:

- Changes in the Common Agricultural Policy in 2003.
- Changes in the Common Fisheries Policy in 2003.
- Changes in the transport and power industry policy.
- Assurances for resources within the framework of regional policy and the coherence policy as well as its influence on earth and natural resources.
- An influence on Common Social Responsibility [CSR] for the European Union's goals, in

particular, sustainable developments through expanding existing instruments such as trade and sustainable agreements as well as intergrating CSR with strategies for sustainable developments within the framework of Union policy.

2. Sustainable management with a natural resource base.

3. Sustainable production and consumption.

4. Widened contributions of the European Union in aid of sustainable development.

The outside aspects of sustainable developments include:

1. A reduction in poverty.

2. Actions connected with water, energy and forest.

3. Sustainable globalisation and trade.

4. Management in aid of sustainable developments.[COM 2003].

3. Sustainable developments on fishing

Completed in 1982, the 3rd Conference on the Laws of the Sea changed the old ways of sea and ocean exploitation. The established UN Convention on the Laws of the Sea represents a fundamental document in the field of management of the seas and oceans. The introduction of fishing exclusion zones has decreased the growing rate of exploitation of fish resources. The national jurisdiction on fishing exclusion zones have commited individual countries to the national disposal of fish resources included in their zone. Meanwhile, the side effects, it turns out, have created an oversupply in the worldwide fishing fleet. There began a very intense period of exploiting our own zones, foreign [on the basis of arguments] economical zones as well as open ocean.

There have started to appear, problems of overfishing, first in relation to individual species or a body of water, which gains a global character.The overexploitation of resources, illegal hauling practice, polluted environment of water, global warming, decreasing biological diversity as well as fishing subsidies creates the need to take appropriate measures.

Noticeable evidence of the danger to the environment and also the marine environment can be found in Agenda 21. Chapter 17 of Agenda 21 is involved with "Ocean Protection" of all kinds of in-land and open seas, areas of coastal zones and protection, the rational utilization and development of living sea resources.

This is included in the following action areas:

- Intergrated management for permanent and sustainable development of territorial coastal zones and sea areas, with consideration to solely economical zones.
- Protecting the sea environment.
- Sustainable useage and protection of the living open seas resources.
- Permanent and sustainable utilization and protection of the seas resources, which come under the jurisdiction of individual countries.
- Critical phenomena for managing the seas environment and changing climate.
- Strengthening co-operation and co-ordination internationally and regionally.
- Permanent and sustainable development of small islands [Dokumenty 1998].

The document was established in 1992 at a conference in Rio, in part invovled seas and oceans were the fruits of an International Conference on Responsible Fishing, which was held in Cancun in 1991. In 1993, two conferences were held, devoted to sea fishing. As a result, two agreements were made:

- An agreement to promote compliance with International Conservation and Management Measures by fishing vessels on the high seas [Compliance Agreement] - It is not binding but it does determine the minimum requirements for each country's fleet hauling on the open seas.
- An agreement for the Implementation of the Provisions of the UNCLOS Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks[The Fish Stocks Agreement]. The main idea of the agreement is to eliminate conflict between coastal and high sea fishing in the presence of active fishing organisations, based on binding law regulations.[Joyner 2000].

Concerning the living sea resources from the 90's, more and more have attached significance to the Convention of International Trade in Endangered Species of Wild Flora and Fauna from 1973 [CITES].

The introduction of protected areas on sea and land adjacent to the sea are becoming more common. Those areas function on the basis of:

- The World Heritage Convention [1972].
- The Ramsar Convention on Wetlands [1971].
- The Bonn Convention on Migratory Species of Wild Animals [1979].

■ The Convention on Biological Diversity [1992] [Joyner 2000].

Those conventions are concerned with both animate and inanimate resources found in the environment in which they function, that is to say, the ecosystem. The Convention on Biological Diversity deals with the problems of introducing unfamiliar species. The scope is assisted by the Marpol Convention 73/78, which regulates the ballasting management of water.

The UN Framework Convention on Climate Change attend to the effects of global warming on the sea environment. In article 4, it reports on promoting co-operation and protection of coasts as well as the ecosystem as a reservoir of greenhouse gas and management development of coastal zones.

The fundamentals of the law regulations are based on voluntary useage of the Code of Conduct for Responsible Fisheries formulated by the FAO, in Rome 1995. Included were: The general role of fishing management, hauling operations, aquacultural development, fishing integration with management of coastal zones, development of hauling and trade as well as research into fishing. It's contents are a set of guidelines which determine the functions of responsible fishing, as a broader element of the comprehensive sustainable development [Code 1995].

A separate issue is the prevention of polluting marine environments. The introduction of a framework regarding actions are emphasised in the Declaration of the UN Conference on Human Development in 1972. That problem is discussed in article 235 of the UN Convention on the Laws of the Sea from 1982, which indicates the International Marine Organisation [IMO], established in 1959, as holding supervision over countries with a range of preventions of marine environment pollution.

The restrictions on polluting the sea waters by ships is a result of the International Convention on the Prevention of Pollution of the Sea by Oils from 1959. In Geneva 1958, agreement was reached in the Convention of the Continental shelf, which are committed to national riversides, e.g. to prevent pollution to the water shelf

In 1954, they signed the International Convention on the Prevention of Pollution of the Sea by Oils, complemented in 1973 by a protocol concerning substances different than oils.From 1978, the convention became known by the name Marpol 73/78.

In 1972, the Convention for the Prevention of pollutions from ships and others, called the Convention of London was accepted. The principles of shipment over seas and oceans of dangerous waste are regulated by the Convention of Bazeel. The safety working standards at sea are included in the Solas Convention from 1974, which were modified by protocols issued in 1978 and 1988. The performances of the above number of Conventions,Agreements and other law acts originated before the appearance of the concept of sustainable development. However, they are subject to a constant evolution and will conform to the requirements of a sustainable development.

Parts of the law regulations concerning fishing, have a voluntary character and are obeyed only because of the goodwill of individual countries, however, most countries have an obligatory character and they guard the standards of the rigours of international law. Moreover, the existing conventions have been replaced with more regional and local character. The major international fishing organisations play an essential role in controlling and obeying the law regulations.

Conclusions

1. Sustainable development is at present, one possibility for assuring economical and social progress in accordance with the possibilties and requirements of protecting the environment.

2. Sustainable development in the European Union became accepted in 2000 with the Strategy of Lisbon.

3. The necessity of assuring the sustainable development, in particular, concerning fishing as an activity strongly dependant on the natural environment.

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