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POTENTIALITIES FOR DECOUPLED PAYMENTS TO AFFECT STRUCTURAL CHANGES IN CONTEMPORARY PRODUCTION AGRICULTURE

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Abstract. The paper is focused on the direct payments employment in agricultural policy and potentialities for this shape of financial transfers to the recipient's income to affect farmer's production decision making.

Key words: agribusiness, agricultural enterprise, agricultural policy, competitiveness, decoupled payments, structural change

INTRODUCTION

The problem faced by the whole Europe and thus also the new member states of the European Union, as the Poland and the Czech Republic are, is how to compete successfully on an increasingly globalised food markets. It follows that one of the key issues accompanying decision-making process of conception of contemporary agricultural policies is to find better suited supportive and regulative system for the next development of agricultural enterprises respecting basic ideas of the new model of the European agriculture. That means the support of competitive agricultural sector able to participate on world markets without being oversubsidised and continuing commitment to ensure a fair standard of living to the agricultural community. This matter of fact influences agricultural policy, which – if it is to be effective in a long-term strategy – should gradually eliminate all quasi-market and (maybe) later also only income-supporting instruments, turning to new instruments motivating individual agricultural companies to restructure their activities effectively instead.

NEW ENTREPRENEURIAL ENVIRONMENT AND AGRICULTURAL POLICY

As today's agriculture has become part of considerably wide-ranging complex that determines not only the conditions of its success in selling products on the future food

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(and non food) markets but also the nature and dimension of agriculture production firms in specific areas. The position of agricultural enterprise is changing from a relatively independent farm to one of components more tightly aligned to agribusiness chains or nets [Bečvářová 2005b, 2006].

Forementioned process has become the decisive factor of a maintenance and development of whole rural areas as well. The "demand driven agriculture" implying both quantitative and qualitative criteria such as food safety and precaution, favourable method of production, environmental impact etc., presented by agricultural policies in last decade and for future, are largely influenced by final stages of agri-food commodity chains. They significantly decide about the dimension, structure and market share of agricultural production and its producers in concrete locality. This could lead to one of contemporary reasons why the agricultural policy is, and should still be reformed.

Those imply entirely new requirements for strategies and agricultural policies economic instruments.

Merits the problem i.e. how to compete successfully on an increasingly globalised food market, can be resolved essentially in two ways*:*

- preserve the historic production structure based above all on different qualities of natural conditions, especially agricultural land, using this fact to justify the uneven outcome of agricultural production in various regions and also the entitlement of various regions to additional financial means in the form of subsidies, thus enabling traditional agricultural production to continue for as long as possible and "protecting" traditional European producers against increasing competition of cheaper products and food from other parts of the world,
- look for a positive solution, often requiring significant structural changes in production orientation and other economic activities of individual companies in accordance with the principles of a knowledge-based economy capable not only of showing the deeper connections and behavioural principles of the current food markets, but also motivating individual subjects to adopt the necessary restructuring measures reacting actively to the development and conditions of demand on the relevant markets.

The latter method may be used as a key to enhance the competitiveness and economic efficiency of european agricultural companies in the prospective model of agriculture and requires that the reform of the Common Agricultural Policy of the EU (CAP) it's more than that "cosmetic change" objectively. The transition from the system based upon the market prices support to the system preferring to support partially or fully separated from contemporary production structure (decoupled) supplemented by project-orientated structural support is undoubtedly a positive element, in the short run allowing individual countries to decide on the resolution of their specific agricultural problems and to use a larger proportion of budget resources for this purpose.

On the other hand, it may increase the risk of consequences of non-conceptual regulation interventions in the long term.

In general, it concerns two fundamental problems:

- the selection of allocation criteria, i.e. the suitability of subsidies, in this case mainly in terms of conceptual promotion of restructuring, as a necessary condition for further growth of competitiveness on European and global markets, which is the key strategic problem of modern productive agriculture, and

– the efficiency of subsidies related to the determination of transfer forms/instruments and their economic cost. As far as the development of the Union's agricultural policy is concerned, it is impossible to rule out scenarios reacting to requests for a further reduction of subsidies also in the area of production restructuring. That is why it is necessary to try to obtain the highest possible amount from the specified sum of financial means provided by the Union and at the same time, look for other alternatives of their most effective and maximum utilisation.

DECOUPLED PAYMENT AS A SHAPE OF SUPPORT FOR AGRICULTURE

Decoupling has become one of the key issues in agricultural policies both at the national and international levels The need to minimise international trade distortions associated with support to the agricultural sector was a substantive element of that solution. The idea of policies not affecting marginal prices faced by producers has led to the proposal to establish Production Entitlement Guarantees [Harvey 1989]. The proposal was to limit the volume of production eligible for support issuing these tradable, government financed guarantees. The maximum supported quantity should be less than what would be produced at the world price. However changing world and domestic market conditions could result in the payments becoming relevant at the margin, thus making the proposal at above difficult to manage [Lopez, OECD 2001].

In the early 1990s policy instruments, which redistributed income to farmers without affecting the allocation of resources, has been defined as a lump sum transfers.

Since adoption of the Uruguay Round Agreement on Agriculture of GATT in 1994, policy makers have studied to adopt the instruments of policy having no or minimal effects on production and trade. As a result, policies have been providing a growing and total support to agriculture which is evident from the following outline of the development of support forms in agriculture during last twenty years in a world [OECD 2006].

Decoupled payments can be defined as the lump-sum income transfers to farm operators independent of their current production and commodity prices OECD [OECD 1994] generally characterises the direct income payments that they should be:

– directly financed by taxpayers;
– the size of direct income payment should either be fixed or, related to an agricultural production variable, be outside the farmers control;
– the size of direct income payment should not be determined by the volume of current or future production of specific agricultural commodities or the level of specific inputs used.

From the economic cost of subsidy evaluation [Bečvářová 2001, 2006] the lump-sum income transfers should be no a distorting effect on the gathering and transmission of market signals generally. However, their additional expenses are very high[1].

Moreover, if other types of subsidies are used, a certain part of agricultural producers will be forced to leave the sector after some time, thus having a positive effect on the

[1] Transaction costs are high because the realisation of their objective (increase of the recipients' income) requires detailed individual information. Budgetary costs may also become extraordinarily high in the long term.

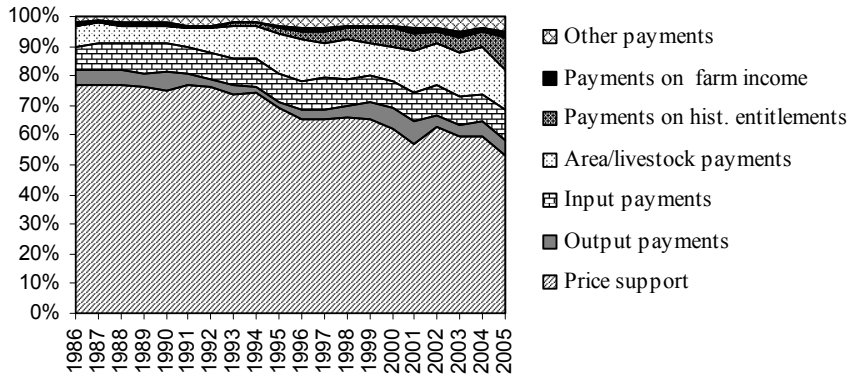

Fig. 1. Development of the agricultural support structure according to the main types of subsidy in 1996–2005 period
Rys. 1. Rozwój struktury wspierania rolnictwa według głównych typów wsparcia w latach 1996–2005
Source: Own elaboration.
Źródło: Opracowanie własne.

overall budget. However, structured transfers may not generate this kind of pressure as they are usually granted even to subjects that would be otherwise forced to leave the sector, losing their entitlement to compensations as a result.

POTENTIALITIES FOR DECOUPLED PAYMENTS TO AFFECT AGRARIAN MARKETS

Generally speaking, decoupled payments increase the income and thus the wealth of recipient households. Compared to coupled, crop-specific subsidies (e.g. price support), decoupled payments in theory have less effect on the mix of crops planted. That is, an aggregate decoupled subsidy may increase aggregate resource use and production, but the allocation of the resulting increase in acreage to different crops will reflect expected market returns across competing uses rather than the decoupled subsidy. Additionally, lower prices that result from any production increases can moderate the initial production effects and other market impacts.

Decoupled payments may create incentives to increase aggregate production, although the mix of crops planted should be based on market signals (because decoupled payments benefits do not depend on market conditions or the farmer's production).

This type of transfers then redistributes income from urban to rural households, and may result in sector changes in resource allocation within the economy. The problem for decision-making should be share of the value of direct payments and if actual income the farmer gets from farming activity.

This could be a sensible question relating to the future of the European agriculture products efficiency and competitiveness.

1. The first fundamental question is whether decoupled payments may alter producers' resource allocation over time and may lead to effects on production.

The main link between decoupled payments and agricultural production in this framework is through recipient households' decisions to invest in agricultural assets. The dynamic dimension is necessary because a stream of annual payments can be expected to influence recipients' decisions about how much to consume versus save over a long-term time horizon. In response, over time, these households are likely to consume more goods and to increase savings. However, whether these individual enterprises decisions affect resource allocation, aggregate levels of agricultural production depend on the behaviour of recipients utilising the possible consumption and investment effects of the payments.

In general, because decoupled payments typically are not crop specific, influences tend to be more at the aggregate level, such as on total land use or on overall productivity gains

In general, because decoupled payments typically are not crop specific, influences tend to be more at the aggregate level, such as on total land use or on overall productivity gains.

Three potentialities for decoupled payments to affect production based upon recipients' wealth increasing was indicated [cp. Wescott and Young 2005]:

- a direct wealth effect,
- a wealth-facilitated increased investment effect,
- a wealth effect resulting from the increase in investment.

Such instrument can increase the overall level of agricultural production through its direct influence on the wealth of landowners and/or producers/tenants. It reflects gains in agricultural sector equity that result from the capitalization of expected future benefits into the value of agricultural land and decrease in their risk aversion. Greater wealth does not affect the relative returns between alternative crops.

In general, the allocation of any increase in acreage among competing uses (without any production constrains) would be determined by market signals. Furthermore, if lump-sum payment raises producers' wealth and lowers their risk aversion it may entail a producer's choice to increase overall production and may also change the mix of production, perhaps switching to demanded riskier crops with higher expected returns.

Unexceptionable effect could be identified from the investment possibility and its acceleration result in agricultural production point of view. Increased cash flow provided by decoupled payments and higher wealth through capitalization of future benefits into land values may also facilitate additional production through increases in agricultural investment funding by the (banking) loans because of higher guaranteed incomes and lower risk of default. Greater loan availability facilitates additional agricultural production by allowing farmers to more easily invest in their farm operation. In this context, it might be interesting to look at one of somewhat another solution related to the utilisation of subsidies on agrarian loans provided by the Support and Guarantee Fund for Czech agricultural producers [Bečvářová 2006].

2. The second fundamental question from the productivity and consequently the rate of production point of view is how decoupled payments may affect competitiveness of agricultural enterprises through their influences on consolidation in the sector.

Even if consolidation in the European agricultural sector has been a long-term trend, reflecting not only increased productivity movement to the non-farm economy in the sector, but also a very different size and production structures of agricultural enterprises

within the EU member states, two diverse trends regarding the potential effects of decoupled payments on consolidation could be identified in general:

– influence on deceleration of sector consolidation if the payments keep marginally viable, no efficient often smaller enterprises in business longer than otherwise. Such farms may be able to cover short-term variable expenses associated with the yearly decision to produce, but these farms may not be able to cover longer-run total economic costs, remaining in the sector only because of equity gains related to capitalization of benefits into rising land values. In general, these farms tend to be less efficient production operations, so at the margin, keeping them in the sector would be expected to lower aggregate production if the land alternatively would be used by more-efficient, larger producers with higher yields;
– influence on acceleration of sector consolidation if larger operations use the payments to purchase smaller units or to rent more acreage. This would be expected to raise aggregate production because larger producers typically are more efficient due to better management and other economies of size. Larger operations tend to more readily adopt new technology and use production practices precision farming include that raise yields in the course of sustainable development of agriculture and rural areas.

Additional impacts may reflect increased production incentives and competitiveness due to reductions in unit production costs resulting from the higher efficiency and the appropriate utilisation of inputs. If our agricultural producers are to compete successfully in a business environment whose conditions are increasingly affected by the customers, they will have to reduce their production cost, while focusing only on products that can be sold on the relevant markets at adequate prices.

3. The basis for the distribution of decoupled payments may also affect producers' expectations of how future benefits will be disbursed.

Payments that are linked to past production may lead to expectations that benefits in the future will be linked to then past, but now-current, production. Such expectations could affect current production decisions as well.

For either case, updating acreage bases or updating payment yields, economic efficiency in production is reduced because producers would not be fully responding to signals from the marketplace, but instead would be responding to market signals augmented by expected benefits of future payments base and condition changes. Those refer to decisions as to keep the land in agriculture and not to convert it to a permanent non-agricultural use, to produce on that land if expected revenues exceed production costs. Even if the land is permitted to be idled, it is more readily available to return to agricultural production if economic conditions warrant. Some specific speculation are identified for instance in context of the single farm payments scheme.

CONCLUSIONS

The existence of market power in upstream or downstream agricultural and food markets and/or in the world market could change the production effects of different policy measures open yet another very fundamental question that should be taken into account for an appropriate estimation of the trade and wealth effects of policy changes.

The integration of global food production chains and nets is becoming stronger and stronger.

The analyses of economic environment of agricultural companies engaged in agribusiness uncover new connections, which determine and will continue to determine the rate of market success of particular subjects in whole verticals. Agricultural companies as a part of a complex system requiring that the final product, its structure, quality and supply in time (and thus also the extent and method of utilisation of production factors) be formed in accordance with demand information (and competition conditions) from the very beginning of the production process.

The efficiency of protection of internal food markets has been decreasing objectively. This process increases the pressure on changes in the concept, level and shape of support within the sector. That is why it is possible to expect quick implementation of subsequent liberalisation measures, above all in the areas of agrarian policy focusing on market intervention, whether in the form of price subsidies or national production and structural limits. These changes will have to be incorporated into agricultural policy, which – if it is to be effective – must gradually eliminate all quasi-market and later also income-supporting instruments, turning to new instruments motivating individual agricultural companies to restructure their activities effectively instead.

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PERSPEKTYWY WPŁYWU PŁATNOŚCI ODDZIELONYCH OD PRODUKCJI NA ZMIANY STRUKTURALNE WE WSPÓŁCZESNEJ PRODUKCJI ROLNEJ

Streszczenie. Treść artykułu koncentruje się na zastosowaniu płatności bezpośrednich w polityce rolnej oraz potencjalnego wpływu tego rodzaju transferu na proces podejmowania decyzji przez rolnika.

Słowa kluczowe: agrobiznes, przedsiębiorstwo rolnicze, polityka rolna, konkurencyjność, płatności oddzielone, zmiany strukturalne

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PERSONAL SALES, ADDITIONAL PROMOTION, PUBLIC RELATIONS AND PUBLICITY AS ELEMENTS OF HORTICULTURAL SEED COMPANIES' PROMOTION ON THE POLISH MARKET

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Abstract. This research was conducted in the years 2001–2005 with the main goal to estimate the importance of personal sales, additional promotion and public relations as elements of seed companies' promotion in the Polish market. The personal sales used in marketing activities in seed companies had two forms: passive and active. It was used only in contact with professional gardeners. The additional sale promotion included many tools, often used at the same time. In the case of the amateur gardeners, the most common sale promotion tool was an increase in seed weight in small seed bags while keeping the same price. For the professional gardeners, the most important sale promotion tool was a field day meeting organized by seed companies, especially the foreign ones, as well as participation in fairs and branch exhibitions. The sale promotion tools for seed wholesalers included mainly discounts based on the selling results of the former year. The seed companies also paid attention to public relations by using various activities.

Key words: personal sales, additional promotion, public relations and publicity, seed marketing, seed market, seed company

INTRODUCTION

In the Polish seed sector, under existing competition, marketing has become more and more important. It is so because in highly developed markets it is much easier to produce seeds than to sell them [24]. The competition has definitely become even tougher since Poland joined the European Union [21]. Under these circumstances, marketing will play a more and more important role in the operational activities of seed companies.

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Despite the very important role of marketing in the seed sector in Poland, complex research in this area did not start before 2000 [2]. One area of research was promotional activities of seed companies. Its classical elements include: advertising, commercials, personal sales, additional promotion, as well as public relations and publicity (PRP) [16, 17, 25]. The results of our research concerning advertising and commercials have already been published [3, 4, 5, 6]. This paper shows the results of research concerning the remaining elements of promotion, i.e. personal sales, additional promotion, as well as PRP.

MATERIALS AND METHODS

In order to describe the promotion activities of the horticultural seed companies operating on the Polish market, at first, the most important enterprises were selected. The companies were selected based on both their breeding achievements (based on the number of the newly registered vegetable cultivars in the years 1998–2001) and share of the amateur seed market in the years 1998–2001 (dominated in 80% by the domestic enterprises). These were 7 national and 3 foreign companies. The domestic firms included: **PlantiCo – Gołębiew** – the most active Polish vegetable breeding and seed production company located in the middle of the country. They have breeding programmes of all the most important vegetable species. They are the only Polish breeder of leek, Roman lettuce and yardlong bean (*Vigna unguiculata* Walp. ssp. *sesquipedalis* (L.) Verdc). They also have the most advanced seed processing line in the country. **Spójnia – Nochowo** – a leading plant breeding and seed production company located in Western Poland. They have the biggest breeding team (over 50 employees) in the country and a few real market cultivar hits such as e.g. filed cucumber "Śremski F_1". They were also first to develop overwintering onion in Poland. The company was one of the first enterprises to start multiplying seeds abroad. It runs modern and highly profitable agricultural and dairy farms. **Poland – Cracow** is the biggest and the oldest national plant breeding and seed production company in Horticulture located in southern Poland. It has registered altogether over 250 cultivars of vegetable and flowers. They have the best domestic common bean cultivars and were the first in Poland to develop hybrid cultivars in red beet and carrot. They export their seeds to former Eastern Block countries such as Ukraine, White Russia and Lithuania. It runs highly profitable agricultural and dairy farms. **PlantiCo – Zielonki** – a leading breeding and seed production company located in middle Poland (near Warsaw). They are famous of many very good cultivars, e.g. of stem and root celery. They have the most advanced in the country facilities for storing seeds. They have developed their own national seed distributors' network. They were the first to start multiplying their seeds in Chile. The company is a country leader in seed company management and use of advanced biotechnology in plant breeding. **PNOS – Ożarów** – another state-owned company located near Warsaw. Although itself it is not so strong in developing new cultivars (they get them from others), still it is the most important (23% of the market) Polish company in terms of selling vegetable and flowers seeds on the amateur market. They have very experienced sale and marketing crew. The company has also developed an effective network of their own seed distributors. **Torseed S.A.** – a completely private seed production company located in Toruń in the northern middle

of Poland. It also runs three garden centres. It has been known as a country leader in putting on the market new product lines such as e.g. organic seeds or interesting pictorial packets. They are more orientated for trade than plant breeding. **W. Legutko** is a family business located in the middle Poland. They specialise in breeding flowers, produce and trade horticultural seeds. They employ 160 people and have the largest foreign production of flower seeds in China (ver 700 plantations), Tanzania (over 300 plantations), India (over 100 plantations) and Chile. They export 30% of their seeds, mainly to former Eastern European countries (including Russia). They have the biggest flower seeds offer in the EU (over 400 species and cultivars).

The investigations included also Polish representatives of three dominating foreign companies operating on the Polish market: **Bejo Zaden** Poland, **Syngenta** and **Seminis**. Their choice was based on the number of registered cultivars on the Polish National List and market activity in the years 1998–2001.

The analysed in the paper data was received from various sources. The most important were: interviews (at least 3 on each company), visits (3–5 on each company including plant breeding and seed production fields), the internet pages (checked every half a year), annual reports about official registration trials (issued by the Polish governmental unit called Centre of Plant Cultivars Testing – COBORU – every year), field trials and open days meetings, printed materials studies and direct talks with company employees (from few to several times). All information came from the years 2001–2005.

PERSONAL SALES

Personal sales used in the seed companies had two different forms: passive and active. Passive personal sales concerned preparing, selling, and buying contracts during fairs, exhibitions and other major events when visitors meet with employees at their company's exposition stands. In this case, the customers were professional gardeners as well as mediators (wholesalers) and representatives of food processing plants. Reaching a purchase-sale agreement with them was also achieved during events organised by the seed companies, e.g. field days, company open house days, extension training workshops, trainings, lectures, etc. In the case of active personal sales, the above mentioned potential clients were visited by the seed company's representatives to present them the company's trade offer and to encourage them to buy seeds[1]. Such personal sales techniques have never been used in relation to amateur gardeners.

ADDITIONAL PROMOTION

Additional promotion was carried out by the seed companies to activate final seed buyers (it was then orientated for customers) and to increase the products' sale by individual wholesalers and retailers of the existing distribution system. It was then orientated

[1] Full time employees of the seed companies looking for clients usually get a salary consisting of two parts: basic, which is permanent, and usually low and changing, which is based on commissions calculated on the total value of the sold seeds.

for either final customer or a wholesaler, because the latter was then reselling the product to a retailer.

Promotion activities in various forms were used by all the seed companies operating on the Polish market. Its applied forms depended upon the market orientation of a given company. These forms were different for the enterprise oriented for amateurs than for professional and amateur gardeners.

ADDITIONAL PROMOTION ORIENTED FOR CONSUMERS

Additional promotion forms depended upon the final target group, on which they, when used, were supposed to affect. The seed companies undertook the following activities in order to increase seed sale amongst amateur gardeners:

- putting into the seed bag a label to specify the sowing rate,
- organising a contest with rewards for clients[2],
- increasing the weight of seeds in a seed bag without increasing the price, which was a common practice and a permanent element of competition amongst the Polish seed companies[3],
- giving free seed samples for amateur gardeners as a newspaper's insert,
- participating in branch fairs and exhibitions.

In reference to professional gardeners, seed enterprises used the following forms of additional promotions:

- organising Field Days (for individual vegetable species, e.g. Carrot Days, Onion Days, Pepper Days, etc.),
- organising research conferences, seminars and workshops connected with presentation of the company's plant cultivars[4],
- arranging for seed growers and production department employees of the company trips abroad to horticultural farms growing plant varieties coming from or developed by a given company,
- free delivery of seed samples of plant cultivars trials carried out by other enterprises (e.g. groups of growers, extension services farms),
- free delivery of seed samples of the new cultivars not yet registered or in the official registration trials for testing amongst the professional gardeners[5],
- taking part in branch fairs and exhibitions.

The most important forms of sale promotion for professional gardeners were field days and taking part in branch fairs and exhibitions. All of the big seed companies put them into their promotion.

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[2] For example, the seed company "CNOS-Vilmorin, Ltd." In 2002 organised a contest for an advertising copy of the company, and in 2003 sponsored a drawing contest for children under the title "the Magic Garden".

[3] For example, the seed company "CNOS – Ożarów Mazowiecki's" seed offer for trade season 2004/2005 included 91 varieties of 29 species of vegetables with increased seeds weights.

[4] The topic area of the organised events varied significantly. Except for growing problems, it also covered marketing of vegetables, or gardeners' tax calculation problems. For example, the seed company SVS in 2003 organised 37 meetings with growers in the territory of Poland.

[5] These activities were connected with the strategy of introducing new cultivars in the Polish market.

The main purpose of Field Days was to allow participants to get acquainted with the company's latest plant cultivars offerings in production conditions. Some of the companies also offered cultivars which were still under official registration trials. Sometimes Field Day also included plant cultivars from other competitors[6]. This would enable the visitors to compare the firm's product line with the competitor's one. Quite often such days were also accompanied by lectures concerning growing instructions of the displayed plant cultivars. Field Days enabled the company's employees to collect precious opinions and remarks from the participants about the product line, as well as provide an opportunity to distribute advertising materials.

The Field Days were organised at the company's own research farms or at the farms of its leading growers. This was sometimes connected with testing new, not yet introduced on the market plant cultivars in day-to-day production conditions. The show also was used to promote other companies, whose products had been used to carry out seed production, e.g., fertilisers, pesticides, irrigation systems, cultivation machines and facilities. Utilizing promotion activities of several companies reduced costs and increased the attractiveness of the event itself[7].

A big advantage of Field Days over other forms of mass meetings organised by the seed companies was the fact that their participants were either growers truly interested in buying seeds, or research centre employees. These participants were actively solicited. Written invitations were sent[8], and similar announcements about the show were published in professional journals. Field Days were advertised by the seed companies as the most effective form of a company's promotional activities[9]. In terms of current marketing policy, a given seed company organised either one main show once a year, at the headquarters of the company, then followed by a few smaller shows, or had more complex programmes. In the latter, especially popular amongst large foreign companies, there were several large shows in a year. Field days as a main element of additional promotion were underestimated by a majority of the investigated Polish seed companies.

Other types of additional promotion for seed companies were branch fairs and exhibitions. The investigated companies were participating in them to get new clients, carry on the existing contracts with purchasers, sustain a company presence on the market, present their own updated offerings and collect information about competitors' offerings. Amongst the branch fairs, special attention was paid to the biggest horticultural fair in Poland called "Polagra". The comments made by employees of the seed companies taking part in the exhibition referring. e.g. to clients' enquiries were also collected. The number of potential seed clients truly interested in buying seeds amongst the fair's visitors has been systematically decreasing. For this reason, some of the companies

[6] As a principal, such confrontation should end by showing an advantage to the company organising Field Days. Sometimes, however, the organiser dishonestly "helped" his own cultivars a little by planting the competitors' plants too shallowly, so their roots looked much worse than their own.

[7] For example, in 2001 during Open Days of the seed company Bejo Zaden, in addition to their cultivars of vegetables, the visitors could see the production means of 14 other producers.

[8] Most clients and potential buyers invited had already taken part in such events before.

[9] The growing popularity of such events can also be measured by the number of guests participating in such events. The Bejo Zaden Open Days in Konotopa in 2001 was attended by about 3000 people. In 2005, there were over 5000 visitors.

discontinued it and built up other forms of promotion instead (primarily Field Days)[10]. The main reason for staying with the Fair was a possibility to be rewarded with the Golden Medal of "Polagra" and other rewards in different categories which then could be used for various marketing purposes. After some time, the importance of other regional agricultural and horticultural shows increased. Their number in Poland has been increasing. Such shows, exhibitions, and meetings were organised by groups of growers, branch organisations, societies, local governments and companies selling production means.

ADDITIONAL PROMOTION ORIENTED FOR RESELLERS

These activities concerned mostly wholesalers, seldom retailers. They came from the vertically organised system of distribution channels in the market, especially when a final seed buyer was an amateur gardener. In this case, the following forms of promotion were used:

- a basic discount calculated based on the last season's selling results,
- an additional discount for selected products,
- contests with rewards for the best wholesalers[11],
- gifts and money rewards for the best wholesalers,
- taking part in branch fairs and exhibitions.

Out of the abovementioned activities, only contests concerned the retailers[12]; all others were aimed at wholesalers.

PUBLIC RELATIONS AND PUBLICITY

Seed companies operating in the market undertook activities to build a positive picture of their companies, mostly among clients, wholesalers and the mass media. This goal was achieved thanks to special operational steps and activities carried out, together with advertising, direct selling or additional promotion. They included:

- sending information and inviting representatives of the press and other mass media to events connected with the activity of the company. such as opening a new research station, gardening centre, Field Days, workshops, lectures, conferences and other meetings with gardeners,
- sponsoring different institutions and social organisations,
- sponsoring different events, e.g., research conferences,
- enabling students, professionals and technical gardening school pupils to get acquainted with a company during their lessons and field trips,

[10] Such decisions were taken by Bejo Zaden from the foreign companies and by Torseed (since 2004) from the domestic ones.

[11] The condition, under which there was a possibility to take part in the contest, was to exceed a certain level in the value of the sold seeds within a season. The loss prizes were, for example, foreign trips.

[12] Such practices were begun by "CNOS-Vilmorin, Ltd.", which in 2001 announced a contest for the owners of horticultural shops for the most interesting display of their products on the stand. The main prize for the winner was the car "Seicento Van".

- sponsoring students' domestic and foreign trips to get acquainted with plant breeding and seed production,
- enabling students to carry out foreign and domestic professional placement,
- free plant sowing materials to start collections for teaching purposes as well as research projects,
- free extension publication concerning vegetable production sent to professional growers[13],
- business correspondence with clients and go-betweens (sending thanks for visiting stands during exhibition and fairs, Christmas and New Year's greetings),
- free distribution of seeds which have lost their sowing value, for consumption purposes by penitentiary, social care and charity units,
- free distribution of seeds which have lost their sowing value, to foresters to feed animals.

DISCUSSION

One of the ways used by seed companies to promote their products is personal sales. This form of selling seeds allows the company to gain information about the purchasers' needs [11, 12]. Direct selling makes possible "getting a product closer to a client", unlike advertising through public relations and publicity when they are actually "getting a client closer to a product" [34].

Seed companies in the Polish seed market have undertaken various activities in additional promotion towards go-betweens and consumers. As mentioned by Zrobek [37], proper promotions have become the most important means of increasing competitiveness in the market. Kall [14] claimed that additional promotion has the strongest effect on a client. Such activities undertaken by seed enterprises showed that they had been using various marketing strategies oriented for purchasers or go-betweens [26]. The tools of additional promotion used by the seed companies included, amongst others, taking part in branch fairs and exhibitions, organising Field Days and other meetings, price reductions, free seed samples, contests, and discounts, which in terms of direct marketing were mentioned by other authors [7, 9, 11, 12]. Some of these elements Sowa [29] considered as classical elements of additional promotion.

Field Days were one of the most important tools of the additional promotion. They were organised by all of the main seed companies. Another important tool was taking part in branch fairs and exhibitions. The role of Field Days and its effect on public relations and publicity of a company was also underlined by Braun [7]. The other authors pointed out the role of Field Days in the marketing activities of seed companies [7, 11, 12].

Another important element of the additional promotion was the fair. This was a crucial event in the marketing life of a seed company [23, 33]. Others considered it as an element in building a positive picture of a company [8]. The important role of additional promotion in taking part in fairs and branch exhibitions was also pointed out

[13] Such advice is usually given by company people and experts. Some companies run internet services enabling gardeners to ask questions concerning growing problems.

by Hołubowicz [11] and Hołubowicz and Braun [12]. Goals included getting new clients, carrying on trade contacts, presenting new offers and collecting information about one's own and competitors' offers remain classical marketing goals of such kinds of events [23, 33, 35]. Participation in fairs depends on the strategic goals of a company [30, 31, 32], as pointed out by the authors when referring to some companies which had withdrawn from "Polagra", also mentioned by Babula-Grzmil and Werner in 2001 [1]. A big advantage of participating in "Polagara" is the possibility of getting various prizes and using them later on in all kinds of marketing activities [12]. The authors identified the growing role in promotion at regional meetings and shows. As mentioned by Lisowski [20], in the years 1989–1995 the number of such events increased over 10 times: from less than 50 to 528.

The companies also carried out various activities with the purpose of building up their own public relations and publicity. They included, amongst others, contacts with mass media organising all kinds of events, e.g. Field Days, contact with selected institutions and sponsoring of prestigious events. Such activities as presented by Languer [19], Cenker [8], Zrałek [36] as well as Laermer and Prichnello [18] belong to the classical elements of public relations and publicity forms of activity. Moreover, they also affect the competitiveness of a company in the market [8, 10, 13, 18, 28]. The need of such long-term activities carried out by seed companies and their role in building a position of a company in a market was also shown by Hołubowicz [11] and Hołubowicz and Braun [12]. Sponsoring prestigious events as a part of building a positive picture of a company in society has also been reported by others [8, 15] as an important part of its strategy. Its popularity amongst seed companies has been increasing [12]. As presented by Mruk [22], such elements of strategies such as product quality and client service should be connected with public relations and publicity activities. Recently, they have become more important than advertising and commercials [27].

CONCLUSIONS

Based on the conducted research the following conclusions can be made:

1. Personal sales used in seed companies had two different forms: a passive one and an active one. It was used solely with professional gardeners.
2. The sale promotion carried out by seed companies included many tools. They often interacted with each other.
3. In promotion activities orientated towards amateur gardeners, the most popular was increasing the weight of seeds in a seed bag while keeping the same price. In reference to professional gardeners, the most popular tool was Field Days organised by seed companies, especially foreign ones, as well as taking part in branch fairs and exhibitions.
4. Seed companies undertook numerous activities oriented for go-betweens, in which the most important were basic discounts calculated on last season's selling results.
5. The seed companies took care to build their own public relations and publicity by using numerous and various activities.

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SPRZEDAŻ OSOBISTA, PROMOCJA DODATKOWA ORAZ BUDOWANIE POZYTYWNEGO OBRAZU PRZEDSIĘBIORSTWA JAKO ELEMENT PROMOCJI OGRODNICZYCH FIRM NASIENNYCH NA RYNKU POLSKIM

Streszczenie. Badania przeprowadzono w latach 2001–2005 w celu określenia ważności sprzedaży osobistej, promocji dodatkowej oraz budowania pozytywnego obrazu przedsiębiorstwa jako elementów promocji ogrodniczych firm nasiennych na rynku polskim. Sprzedaż osobista w czynnościach marketingowych w firmach nasiennych miała 2 formy: pasywna i aktywną. Stosowano ja wyłącznie w kontaktach z ogrodnikami profesjonalistami. Promocja dodatkowa obejmowała wiele działań, często stosowanych równocześnie. W przypadku ogrodników amatorów najczęściej stosowanym zabiegiem było zwiększenie masy nasion w torebce przy zachowaniu tej samej ceny. Dla ogrodników profesjonalistów, najczęściej organizowaną formą promocji dodatkowej było organizowanie „Dni Pola". Szczególnie dotyczyło to przedstawicielstw firm zagranicznych działających na polskim rynku.. Kolejnymi formami były targi i wystawy branżowe. Podstawową formą promocji dla hurtowników były upusty ceny nasion ustalane na podstawie wyników sprzedaży w poprzednim roku. Badane firmy zawracały też uwagę na budowanie swojego pozytywnego wizerunku przez stosowanie rozmaitych działań.

Słowa kluczowe: sprzedaż osobista, promocja dodatkowa, budowanie pozytywnego wizerunku firmy, rynek nasion, firma nasienna

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THE OPERATION OF THE PRODUCER ORGANIZATIONS IN THE FRUIT AND VEGETABLE SECTOR IN THE EUROPEAN UNION

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Abstract. In The European Union the viable Producer Organizations (POs) are the key instruments of the regulation of the fruit and vegetable sector. In spite of the same EU standards the operation of the POs shows diversity in the Member States. These concern mainly the number of membership, turnover and company form. In the EU-15 the progress of the POs has started more decades ago therefore the new Member States included Hungary has handicap. At present the regulation of the sector is under revision and the new standards will be in force from 2008. As a result of the amending the European Union expects the increase of the number of the POs in order to boost the bargain position of the farmers against retailers as well as the use of environmental friendly cultivation technologies. In this paper I present the main goals of the regulation and its reform, furthermore I examine the features of the POs in the European Union and in Hungary. Besides I examine how we could strengthen the role and the bargain position of the POs. One of the solutions could be the forming of the secondary collaborations.

Key words: Fruit and vegetable sector, Producer Organizations (POs), European Union, Hungary, secondary collaboration

INTRODUCTION

The European Union's average fruit and vegetable production exceeds 8% of the world production. It consists of 70 million tonnes vegetable and 40 million tonnes fruit production. 1.4 million agricultural holdings produce fruit and vegetables of the 9.7 million agricultural holdings in the European Union's 25 Members States. The sector farms 3% of the cultivated area and produces 17% of the value of the European Union's

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agricultural production. The Union's Fruit & Vegetable (F&V) sector is heterogeneous and diverse in its produce, modes of production, type and size of holdings, and marketing channels. Fruit and vegetables are highly perishable products and production is very labour intensive. Fluctuation in climate and temperature, as well as disease or pest infections can cause hardships in production and selling, too. At the same time the sector faces pressure from highly concentrated retail and discount chains playing and increasing role in setting market prices. Currently around 80% of fresh produces are sold by 20–25 retailers in Europe. Growers also face increased competition from third country products.

The CMO for fruit and vegetables was established in 1962 to govern the sector's production and trade in the EU and to achieve the CAP's objectives. Starting with the 1996 CMO reform, Producer Organizations (POs) became the pillar of support for F&V sector. POs are the key instrument for grouping supply of farmers in order to offset retailers' increasing concentration. In 2004, less than 40% of total production was marketed via POs. These days the regulation of the sector is being revised. Prospectively the new regulation will be introduced from 2008. The new CMO's aim is to increase significantly percentage of total production via POs and boost producer's bargaining power and economies of scale [European Commission 2007a].

During the preparation of this paper I have used Hungarian and international literatures; nevertheless I have taken into account my own practical experiences as chairman of a Hungarian PO (ZÖLD-TERMÉK Co-operative). I have received information from Hungarian Ministry of Agriculture and Rural Department as well as from Fruitveb (board of fruit and vegetable participants in Hungary).

THE FEATURES OF THE PRODUCER ORGANIZATIONS

According to the regulation (Council Regulation (EC) No 2200/96) of the European Union the fresh vegetables and fruits, the processing stocks belong to the group of less regulated products. The main reason lies in the unique structure of production. The market regulation policy does not put up barriers, only demands strict qualitative requirements. The market regulation is directing towards the fact that the goods turnover should be increased by better selling quality. As a result of this, only those products can be placed on the market, which are classified and suit the obligatory standards. The market regulation and supporting system of the EU is based on the POs, therefore these organizations within this branch are highly important.

The European Union grants financial support to POs that conduct an operational programme. These programmes are financed, on a 50/50 basis, by the PO and the Union. EU support to a PO is limited to 4.1% of the value of the PO's marketed production. Measures financed within operational programmes include improving quality, marketing promotional campaigns, developing organic or integrated production, and other environmentally friendly measures [European Commission 2007a].

In Western Europe the common activity is not mainly directed to the agricultural production. Instead the focus is on the common organization of technical background, procurement and marketing. The ambition of the members is to decrease the expenses

with the help of common activity, and to produce profit as high as possible in their own farm. In the Western European model the activities of the farmers (owners of the PO) and the management of the PO is sharply separated. The farmer's duty is the production of the fruits and vegetables, while the PO is responsible for the processing and marketing. The PO intends to work up long term marketing relations in order to increase the security of production, as well as to realise the highest possible return from sales [Patyi, Takácsné 1999].

The aims of the POs:

- Concentrating the supply of different kinds of fruits and vegetables.
- Directing the production according to the quality and quantity demands.
- Stabilizing the product prices.
- Decreasing the expenses of input materials (controlled seed and seedlings, fertilisers, plant protection materials etc.) by common procurement.
- Providing the infrastructure of storing, cooling, cleaning, processing and transport.
- Using environment friendly cultivation technologies and waste handling procedures.

THE OPERATION OF THE PRODUCER ORGANIZATIONS IN THE EUROPEAN UNION

In the European Union the operation of the POs shows great variety. The basic aims and tasks are being realized variously in the different member countries. The first PO was established by Dutch farmers more than 100 years ago. The sizes and turnovers of the POs are very different. The annual goods turnover could extend from 5–10 thousand tonnes to several 100 thousand tonnes as well as the number of the members from 5–10 persons to several thousands. The most frequent company form is the co-operative, but it could be limited-liability company or joint-stock company, too. Generally these organizations are established according to geographical areas and product type. In the latter years the merger of the small organizations is becoming more and more frequent. After the EU expansion in the EU-25 the number of POs increased (more than 1400), but the average production via POs decreased to 34%.

In Belgium the farmers are found in 17 POs, nevertheless these companies dispose more than 80% of all the fruits and vegetables. 90% of the tomato, cucumber, paprika and cauliflower, 60% of pear and 50% of apple are sold by the POs. The sorting, processing, packing of the yield are made by own facilities of the farmers. The task of the PO is to organize the common selling. The mode of sale is the auction that method derives from the Netherlands.

In Germany the POs' aim is to co-ordinate the farming of their members and to organize the best possibilities of the sale. The market research is the part of their tasks, too. The setting-up and operation of the quality insurance systems play significant importance from the farming through the product processing to the selling. The demand of the consumers for the ecological production and the controlled, safe commodities play more and more important role in the German market. In Germany the third part of the fruit and vegetable production are sold by the Producer Organizations.

In France the farmers co-operate unwillingly, despite they had to create their POs in order to step into the regulated market. In France more than 310 POs are operating

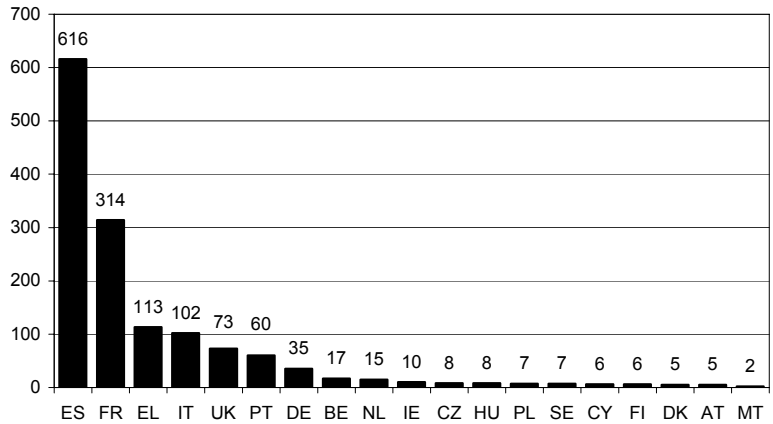

Fig. 1. Number of the POs in the EU-25 (2004)
Rys. 1. Liczba organizacji producenckich w UE-25 (2004)
Source: European Commission 2007b.
Źródło: European Commission 2007b.

recently and almost the half of the fruit and vegetable production are sold by them. Third of these are classical organizations according to the EU decree, and the remaining part created only very loose co-operations in order to gain administrative benefits. Major part of the farmers possess the required facilities of storing, processing, packaging therefore they can sell their products independently. They can solve on their own the tasks of a PO. This is the reason why the major of French farmers do not like to co-operate.

In Spain the first fruit and vegetable selling organization was established in 1974. In 1986 at the period of EU joining more than 180 POs had already operated. The majority of these organizations suited the requirements of the EU rules. Currently approximately 600 POs are operating and selling 33% of fruit and vegetables. The POs provide for their members safety and long-term prices, nevertheless the members feel themselves independent.

In Portugal the increase of the POs was stimulated by the department stores. In 1990 only 1 PO operated and the level of selling and marketing was in initial phase. In spite of the EU subsidies the number of the POs had started to grow significantly only from 1993. Recently 60 POs are operating and only the 6% of the fruit and vegetable yield are sold by them. The average annually goods turnover of 1 PO hardly exceeds 5 thousand tonnes, contrary in the other member states where this average quantity changes between 10 and 30 thousand tonnes.

In Italy the POs try to decrease the expenses of farming in order to become competitive against the Spanish, South-African and South-American products. The members of the POs get the input materials (seed and seedling, fertilisers, plant protection materials, etc.) of the farming at lower prices against the farmers outside the PO, because the mutual procuring in huge quantity provides advantages. The number of the POs is over 100 and these POs are co-ordinating the 31% of the production. These POs can receive considerable subsidies from the EU for the tasks of the operation and investments. The proportion of retailer chains is continuously increasing in the area of marketing and selling.

In Austria only 5 POs are operating. The members of the organizations sell their yields through the POs to the traders. The traders dispose over the required background facilities (cold-storage), in addition they can use EU sources for the development and enlargement of these background. In Austria instead of the farmers the traders finance the large volume and expensive investments [Erdészné, Padisák 2003].

In the Netherlands there are only 15 POs nevertheless these organizations cover 79% of goods turnover of the branch. The biggest PO of the EU is operating in this country, its name is The Greenery. The Greenery provides balanced supply in all year in order to become the reliable supplier of the retailer chains. The greenhouse technology expands the production period of the Dutch farmers, furthermore in the winter period import means the solution. The Greenery delivers products in domestic and world markets too.

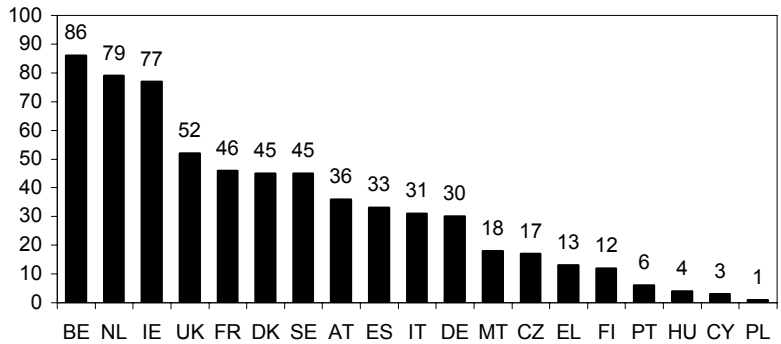

Fig. 2. Production (%) via POs in the EU-25 (2004)
Rys. 2. Udział produkcji organizacji producenckich w UE-25 (2004)
Source: European Commission 2007b.
Źródło: European Commission 2007b.

PRODUCER ORGANIZATIONS IN HUNGARY

In Hungary the foundation of POs has started after 1999. The process was very slow because only 11 POs were operating at the end of 2001. In the next year the number of POs increased to 24. In this period the farmers were afraid of the co-operation and the common activity because of the wrong memory of the socialism, nevertheless the encouragement of the state was also weak. After the initial hardships the Hungarian Agricultural Ministry by the help of significant subsidies encouraged the farmers to establish their POs. As a result of this in 2003 with 44 increased the number of POs and reached 68. This direction till the end of 2004 continued and the number of POs approximated 100.

It is important to emphasise in Hungary similarly the joining Member States exist preliminary recognized POs by the national authorities. This solution means that the PO takes on in 3–5 years program to accomplish the conditions of the ultimate recognition. First of all these conditions are the required background infrastructure (warehouse, cold-storage, processing and packaging machineries) and the long term market relationships.

After the progress of 2003 and 2004 the POs had got to face new challenges. Due to the EU expansion new market situation appeared. The customs were abolished and huge

quantity of import fruit and vegetables entered the Hungarian market. The POs have to compete for the domestic markets and have to build up new relationships in foreign countries. For the competitive size the Hungarian authorities prescribe minimum turnover for the POs. The minimum turnover of member fruit and vegetable of preliminary recognized POs is 0.5 million Euro, in case of ultimate POs the threshold is 1 million Euro. Some POs could not fulfil the minimum threshold therefore they had to join another PO, which fulfil the minimum demands. After the joining and mergers the number of POs significantly decreased. At the end of 2006 – 9 ultimate recognized POs and 54 preliminary recognized POs operated. The majority of the successor POs fulfil the requirements of the ultimate recognition in spite of this the decreasing tendency is continuing. The market competition demands strong organizations that possess diverse fruit and vegetable goods and well-trained membership. In Hungary the most frequent company form of the POs is the co-operative. In the co-operative form every member has one vote in the general assembly.

On the basis of inform of the Hungarian Agricultural Ministry in Hungary the preliminary and ultimate POs jointly provide 15% of the Hungarian fruit and vegetable turnover. The share of the POs is about 95 million Euros. The 5 biggest POs' average annual turnover is about 7 million Euros. There are 20–25 POs between 1.5 and 3 million Euro average turnover. The smaller POs' annual average turnover is under 1 million Euros. The POs of the last group is in direct danger. Probably they will join bigger POs next years.

As the chairman of the ZÖLD-TERMÉK Producer Organization I introduce one of the Hungarian POs. Our co-operative was established in 2003. In the last 4 years the co-operative is developing continuously. The number of membership increased from 61 to 90 and co-ordinated cultivated area increased from 138 hectares to 189 hectares. The annual turnover is two-times bigger than in the beginning. Recently it approximates the 2 million Euros. The most important products are the paprika, cabbage, tomato and potato. The 75% of the turnover comes from the greenhouse technology that extends the production period from March to December. As a result of common projects we have built up the basic facilities of the effective operation (1000 m^2 warehouse, 800 m^2 cold-storage, 400 m^2 packaging house with packaging machines, offices, social rooms etc.). The co-operative has agreements with its commercial partners. These contracts provide homogeneous goods and their placing both in the domestic and European markets. The co-operative keeps records of membership. These registers contain data about cultivated lands, production forms, technological level, quantity and quality of products. The schedule of supplying, processing and sale are based on these data. Our consultants provide continuous consultation for the farmers about cultivation technology. In the winter period the farmers acquire new knowledge by trainings. Some farmers carry on experimental production in order to know the new brands and their natural and technological demands. The consumers and the markets are able to know these products. The farmer of every product is identifiable. The traceability of the product is solved. The using of fertilizers and plant protecting materials are being decreased by consultation. The co-operative promotes the environment friendly and integrated production technologies. In 2003 the co-operative has been recognized as a preliminary PO by the Hungarian Agricultural Ministry. Hopefully from 2008 we will receive the ultimate recognition. In

behalf of the successful operation the ZÖLD-TERMÉK Co-operative has participated in the first Hungarian secondary collaboration of POs.

The next phase of the common activity between POs is the secondary collaboration. There is one operating model of this in Hungary. 19 POs of the Southern Great Plain Region have established the DATÉSZ joint-stock company in 2004. The aim of the common company is to build up new selling relationships, to decrease the expenses of input materials by common procuring and to operate quality insurance system. The members of the DATÉSZ produce 100 thousand tonnes fruit and vegetables and annual income of the members together exceeds 32 million Euros.

THE REFORM OF THE FRUIT AND VEGETABLE SECTOR

POs have been the European Union's key instruments for reforming the F&V sector since 1997. The farmers receive major part of the subsidies via POs. On the one hand POs are very successful in some Member States for instance in Netherlands, Belgium, UK and Spain, on the other hand in the joining countries the progress is very slow, therefore some work is needed to improve the performance. The new CMO simplifies rules of POs and brings sector rules and strategies into line with the reformed CAP.

There are more than 1400 POs in the EU-25 and these organizations provide averagely 34% of the fruit and vegetable production. This is below the Commission's 60% target for 2013. The reform emphasize the need to make POs more attractive to growers, not only to concentrate supply and prevent crisis but also to improve production quality, protect the environment, and promote fruit and vegetable consumption. Rebalancing retailer price pressure and competition from imports, thereby stabilising incomes, remains a priority.

The new CMO will:

- Increase Member States' flexibility in recognising a PO.
- Allow multi-membership of different POs.
- Give extra support to areas with low levels of organization and to new Member States.
- Promote mergers of POs, formation of transnational of POs, and associations of Producer Organizations (APOs).
- Give supplementary support to organic production.
- Support crisis management programmes.
- Add new produce, such as culinary herbs, into CMO (allowing new POs to form).
- Emphasis environmental protection, earmarking a 20% minimum of operational programme funds for environmental activities and investments.
- Eliminate export subsidies.
- Decrease compensation of withdrawals.

Besides the POs the CMO reform changes other parts of the regulation. Fruit and vegetables become part of the Single Payment Scheme (decoupling). The new system is no longer linked to what a farmer produces (it is decoupled). The introduction of the SPS encourages the farmers to become more market oriented, to release their entrepreneurial potential, to produce what the consumers want and to make decision independently from the level of subsidy [European Commission 2007a].

CONCLUSIONS

In order to accomplish the demands of the market the farmers of the F&V sector has to produce homogenous, excellent quality products in huge quantity. The farmers have to take into account the changeable habits of the consumers and the meteorological circumstances. The possible solution is the PO. The EU according to the reform will encourage more and more the operation of POs. The POs provide several advantages for their members (safety of selling, stable prices, low input prices etc.). The next step of the common activity is the secondary collaboration of the viable POs. The accomplishment of the secondary collaboration is voluntary and it is beneficial for the founder members. In the established new company (that could be co-operative, Ltd. or joint-stock co.) the founders remain independent. They can make decision according to their shares. The new company due to its bigger size can operate expenditure effective and have strong bargain power. As a result of the collaboration the input material prices (seed and seedlings, fertilizers, plant protection materials) and the materials of selling (boxes, crates, packaging materials) are decreasing. The new company can build up new selling possibilities by the help of organized marketing and large volume goods in domestic market and export market, too. The information flow between the members promotes the establishment of the equivalent quality insurance systems. The common product appearance (branding), the use of marketing devices and counselling for the farmers are prominently important, too. In case of ZÖLD-TERMÉK PO the secondary company (DATÉSZ) has provided packaging materials lower price compared to the ZÖLD-TERMÉK PO's procurements, furthermore DATÉSZ could deliver for multinational retailer chains (e.g. LIDL). The EUREPGAP quality insurance system was set up by the help of DATÉSZ and we were able to participate in international exhibitions on joint stands (e.g. Fruit Logistica).

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FUNKCJONOWANIE ORGANIZACJI PRODUCENCKICH W SEKTORZE OWOCÓW I WARZYW W UNII EUROPEJSKIEJ

Streszczenie. W Unii Europejskiej rentowne organizacje producenckie stanowią kluczowy instrument regulacji sektora owoców i warzyw. Pomimo jednakowych standardów europejskich, funkcjonowanie organizacji producenckich przedstawia pewne zróżnicowanie w krajach członkowskich UE. Dotyczy to głównie liczby członków, obrotu i formy prawnej organizacji. W UE-15 rozwój organizacji producenckich rozpoczął się wiele dekad wcześniej, dlatego nowe kraje członkowskie, w tym Węgry, otrzymują pewne wsparcie w tym zakresie. Obecnie zasady regulacji tego sektora są dyskutowane i nowe standardy zostaną wprowadzone od 2008 r. W rezultacie rekompensaty UE przewiduje wzrost liczby organizacji producenckich w celu poprawienia pozycji przetargowej rolników w stosunku do detalistów, jak również spowodowania użycia przyjaznych środowisku technologii uprawy. W artykule przedstawiono główne cele regulacji oraz reformy. Ponadto, zbadano cechy organizacji producenckich w Unii Europejskiej, w tym na Węgrzech. Zbadano również sposoby umacniania roli i pozycji organizacji producenckich, m.in. poprzez tworzenie dodatkowych powiązań.

Słowa kluczowe: sektor owoców i warzyw, organizacje producenckie, Unia Europejska, Węgry, dodatkowe powiązania

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MIGRATION TRENDS IN THE EASTERN-EUROPEAN COUNTRIES AFTER THE ACCESSION

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Abstract. The European Union faces its greatest challenge ok its history at the beginning of the 21st century. Because of the englarment process of new member countries several problems were raised, one of them was the most important, which was the free movement of people. Before the Eastern-Central European countries' englarment, many member countries feared multitudinous migration wave, which lays the Western-Europe and the Eastern-Central-European employees are taking away work of other people. It followed that the member countries of the European Union restricted their labour market that stay clear of prospective multitudinous immigration. At the same time the Eastern-Central--European countries were given the unprecedented chance to introduce reverse limitations on the workforce migrating from EU-15 members by previous englarment's experience. The present paper is looking for the following questions: why the European Union was concerned about the free movement of people; how the number of the Eastern-Central--European citizens changed; how the number of foreign citizens in Hungary changed. The lessons were learnt from previous enlargements as well as workforce data and migration within the EU.

Key words: migration, European Union, net migration rate

INTRODUCTION

The idea of an integrated Europe and the intention of creating a common, unified market providing the free movement of people, goods, services and capital, developed gradually over time and resulted in the graduate enlargement of the European integration. Among the several problems, free movement of people has always been the greatest challenge. From the 1980s mass migration of nations has grown to world-wide dimension. However, in the respect of Europe, this migration stream took place after World War II in several transitory stages.

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The first stage – the second half of the 1940s – was characterised by the returning home of people having moved away from their residence. Countries, defeated in the war, were obliged to admit the minorities having been fled or expelled from their mother land returning mainly from the neighbouring countries.

In the second stage – the period between the 1950s and 1980s – the direction of migration, apart from a steam of refugees of the Hungarian, Czech and Polish revolution, was characteristically South to North. This direction determined the movement of Asian countries arriving to Europe as well. Officials of emergent colonies came back to their native countries like Great Britain, France, Belgium and the Netherlands and were followed by a group of colonial inhabitants who arrived to these countries with working purposes. Migration of foreign workers was also significant in this period. After the integration of all these people industrial countries of Western Europe started a recruitment in countries along the Mediterranean for satisfying their manlabour need. Germany joint the tendency of importing manlabour with delay, as she had the possibility to employ workers from the Eastern part of the country until the construction of the Eastern wall. As a result of the economic recession after the series of oil crisis in the 1970s the employment of own citizens decreased and unemployment started to grow rapidly. The change in the labour situation and the protection of the national labour markets led to the standstill of migration of manlabour in the countries of the European Community. In answer to the restricting measures the foreigner employees settled down together with their family and this way became immigrants [Cseresnyés 2005].

The third phase of migration – after the 1980s – brought the change of the direction of movement and the East-West migration flow became more powerful. Because of the crisis in the Soviet Union the successor states, together with Balkan territories, were converted into migrating regions. The liquidation of Europe's separation and the opening of boarders made possible this change. The participants of the East-West movement were mainly minorities protected by their mother countries – for instance Germany, Greece, Turkey – who could not only migrate back legally but got an adapting aid from the hosting countries as well. Though, the previous South-North migration played a significant role in the movement of South-European countries it remained in the background during this period. As an outgrowth of the changed direction we can scarcely find any case of migration in Spain or Italy till the 1980s [Cseresnyés 2005].

During the cold war the largest group of migrants consisted of persecuted people (Hungarians, Czechs, Slovakians, Poles, Eastern Germans). The wars and ethnic purges yield to mass migrations, for instance, millions of people escaped from Yugoslavia. Hopeless people longing for better living conditions formed another group of migrants and launched another flow of migration. This event proved the previous fears of the European Union, announced before the joining of the ten countries. They were afraid of a possible mass migration, resulting from the differences of incomes. Motivating their action by economic, social and labour – market reasons, they limited or closed their labour market before Eastern- and Middle-European countries.

There exists a number of approaches of migration. We call migration a process during the course of which individuals or groups change residence and society in a way that this change becomes permanent [Cseresnyés 2005]. Although migration of manlabour is a typical example of migration and has a long history, besides employment, migration

can be generated by other factors as well. We differentiate between religious, ethnic and political reasons. But if we take into consideration motivating factors we can conclude that economic and political reasons are tend to be combined.

The concept of migration is defined and differentiated by diverse typologies:

1. According to the spatial approach we distinguish intern migration, taking place within the country, above all from the countryside to the city and extern one, happening across the boards. International migration can even be divided into continental and intercontinental categories.
2. In the respect of time we can speak about restricted or periodical (like trainee teachings or seasonal labour) and permanent or continuous migration. Immigration, emigration and settling down are all connected to this latter one.
3. Examining migration from the respect of individuals we can differentiate voluntary and constrained migrations, resulting from religious or political persecutions and discrimination.
4. From the point of view of dimension there exist individual and group or collective type of migration. Involving a larger social strata, collective migration can be formed into mass migration [Cseresnyés 2005].

Overlapping of typologies is not rare, however. For example, a person is considered to be an individual migrant, nevertheless, he travels together with his family. At the same time, there is not a unified definition for a migrant or for how foreign labour force is calculated. For instance, the number of foreigner employees is determined by the number of labour permissions in France, in Belgium it is calculated on the basis of the residence permissions, while in Ireland it is defined by the personal civil service numbers [COM 2006].

In 1998 the ENSZ recommended the modification, comparison and harmonization of statistic data about the international migration [Lemaitre 2005].

Furthermore, migration can be regarded as a three-dimensional process consisting of the individual, the drawer country and the receptive country [Salt 2001]. From this follows that migration is influenced not just by the motivation of the individual but by the economic and social status of the drawer and receptive countries. As my previous studies shows there is an obvious connection between the rates of the migrants correlated to the entire population and between the economic potential of the receptive country. The ratio of the GDP per capita and the unemployment ratio, therefore, strongly influence the number of immigrants.

MATERIAL AND METHODS

Data were taken from database of the Central Statistical Office (KSH), from Eurostat and publications about migration. I have worked from SOPEMI Report, which is an OECD publication annually tracing migration trends within Europe, and from International Migration Outlook. I have examined international migration data during 1990 and 2005, making calculations from distributional ratio and net balances of migration for EU member states.

Net migration rate = (number of immigrants – number of emigrants)/1000 people

RESULTS

Socio-economic status of the ten joining countries can perfectly be characterized by the migratory tendency. After the collapse of the socialist system migration of masses started in many countries. The negative ratio of birth-rate contributed to this movement. Table 1 seems to prove this fact. This caused a serious problem in the Baltic States, where one part of the Russian population returned home. In spite of their less severe regulating system, similar processes went off in other nations as well (in Poland, Slovenia and the Czech Republic). The masses leaving the ravaged Eastern-Middle-Europe made towards Western-Europe where they hoped to reunite their family or find a stable economic and political situation. Actually, from the year of 1998 more than 550 thousand Eastern--Middle-European inhabitants immigrated to the Western part, while even a larger number did that illegally. The majority left their land at the beginning of the 1990s. Currently, migratory ratio of most of the ten joined countries, except for Lithuania, Latvia and Poland, went into negative. In Lithuania and Latvia we can see a moderate emigration, while in Poland the number is more significant.

Table 1. Net migratory ratio in the ten joining countries, 1991–2002
Tabela 1. Współczynnik migracji netto w nowych krajach członkowskich, 1991–2002

Country	Years											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Czech Republic	–5.5	1.1	0.5	1.0	1.0	1.0	1.2	0.9	0.9	0.6	–0.8	1.2
Estonia	–8.1	–27.1	–18.9	–14.2	–10.9	–9.5	–4.9	–4.8	–0.8	0.2	0.1	0.1
Cyprus	19.2	17.7	13.9	11.0	10.3	9.1	8.2	6.2	6.1	5.7	6.6	9.7
Latvia	–5.7	–20.5	–12.6	–9.0	–5.5	–4.1	–3.9	–2.4	–1.7	–2.3	–2.2	–0.8
Lithuana	–2.9	–6.6	–6.5	–6.6	–6.5	–6.5	–6.3	–6.2	–5.9	–5.8	–0.7	–0.6
Hungary	1.7	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.0	0.3
Malta	3.4	2.5	2.7	2.4	–0.5	1.6	1.6	1.1	23.7	3.4	5.9	4.7
Poland	–0.4	–0.3	–0.4	–0.5	–0.5	–0.3	–0.3	–0.3	–0.4	–0.5	–0.4	–0.3
Slovenia	–1.7	–2.8	–2.3	0.0	0.4	–1.7	–0.7	–2.7	5.4	1.4	2.5	1.1
Slovakia	0.0	–0.5	0.3	0.9	0.5	0.4	0.3	0.2	0.3	0.3	0.2	0.2

Source: Own calculation based on EUROSTAT.
Źródło: Obliczenia własne na podstawie danych EUROSTAT.

The significant income differences between the member states and the joining countries, furthermore, the unemployment problems in the Eastern-Middle European region all contributed to the migratory fears.

Immigration to South-European countries – mainly to Italy, Portugal and Spain as well as to Austria, Ireland and to the United Kingdom – strongly increased between the 1990s and the 2000s. At the same time decreased the number of immigrants to Belgium, Germany and to the Netherlands. Up to the 1990s the number of emigrants exceeded the number of immigrants in some countries like Slovakia and Slovenia which turned round over the last decade.

In 2005 the population of countries like the Czech Republic, Italy, Greece, Slovenia or Slovakia increased only by reason of the immigration. The opposite can be experienced

in Germany and Hungary where the decrease of population would have been even more serious without the calculation of the positive migratory ratio. In 2005 the entire net migratory ratio for 1000 citizens was +3.7 in the 25 EU member states, which brought a profit of 1.8 million people from national migration, so 85% of the total enlargement of the European population (Fig. 1).

Cyprus had the highest positive migratory balance in population size and is followed by Spain, Ireland, Austria, Italy, Malta, Switzerland, Norway and Portugal. The ranking list of the negative balance, however, is led by Lithuania, the Netherlands, Latvia, Poland, Romania and Bulgaria.

According to data, made in the first quarter of 2006, out of the ten EU countries, Polish, Lithuanian, Estonian and Slovakian employees work in the largest proportion in the 15 member states – in Ireland, Finland and in the UK. Chiefly, the age group between 18 and 35 with intermediate or academic qualifications is given occupation who is willing to accept jobs divergent from their professions.

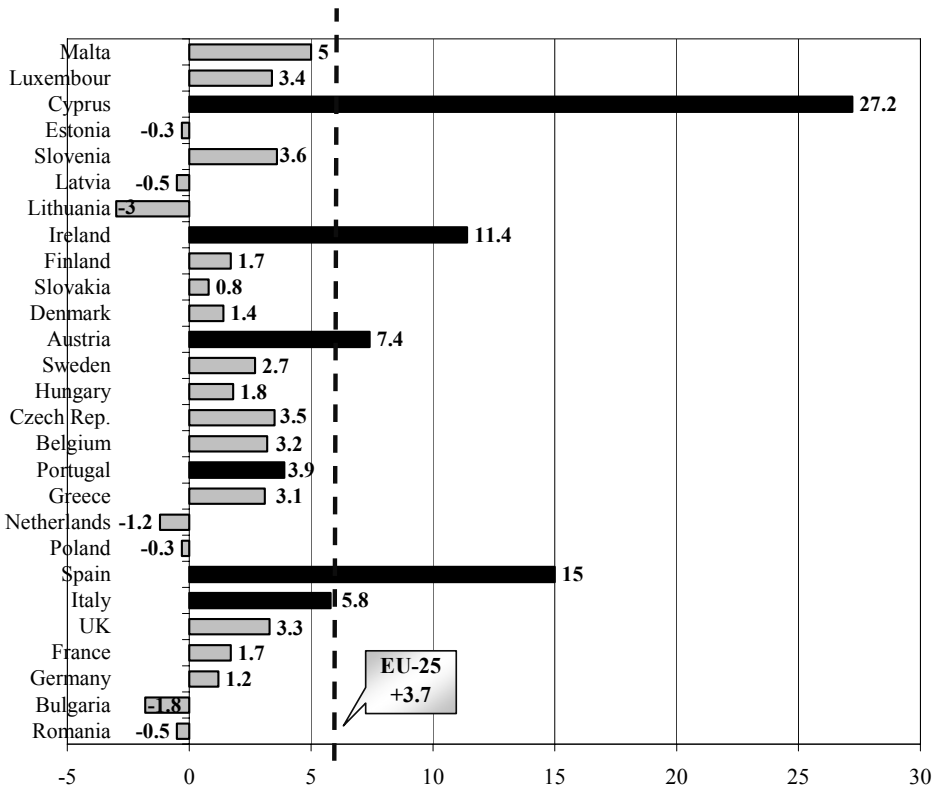

Fig. 1. Net migration per 1000 people in countries of the European Union, 2005
Rys. 1. Migracja netto na 1000 mieszkańców w krajach Unii Europejskiej, 2005
Source: Own calculation based on EUROSTAT.
Źródło: Obliczenia własne na podstawie danych EUROSTAT.

FOREIGNERS IN HUNGARY

Because of historical and geographic reasons migratory data of a given country is multi-colored and various. Command of a language is the most important factor for people arriving from the neighbouring countries. According to *Salt (2006)* vicinity is the most significant factor of these geographic conditions. KSH calls immigrants citizens with a longer period residence permission or immigrate permission who have stayed in Hungary for at least one year or have residence permission for an even longer period.

Between 1995 and 2005 there was not much change in the rate of nations, the top positions were occupied by citizens of the same country. During this time the number of foreigner employees arriving to Hungary was between 14 and 20 thousand with an increasing tendency within, though, the number of foreigners in 2005 decreased by 2 thousand, so diminished by 15% as opposed to 2004. The reason behind lied in the fact that the number of immigrants arriving out of Europe decreased more drastically than the growth of the proportion of immigrants arriving from Europe.

After 2001 the annual number of Romanian citizens made up 50% of the total number of foreigner citizens reaching Hungary. The proportion of immigrants from Ukrainian was also high, between 10 and 16%. The number of citizens of both countries shows a growing tendency to which Yugoslavia joint as well in 2004. Thus, immigrants from the three countries mentioned were capable of compensating the decrease in the 15 EU members.

Immigrants to the EU arrived mainly from Germany while the number of foreigners in England remained unbalanced. A decreasing tendency of immigration can also be experienced in Hungary in case of Croat, Polish and Russian people the proportion of which remained negligible within the inland population. The decrease in Poland can be explained by the collapse of the flourishing Hungarian mining which occupied a large number of Polish labour works in the 1990s [Illés 2004]. Due to the flow of refugees exiling from the Southern-Slovenian War the number of immigrants arriving from Yugoslavia and after 2003 from her descendant states remains quite indecisive [Illés 2004].

Among the proportion of foreigners, immigrants are arriving most intensively from Asia and especially from China. The appearance of Asian immigrants in a territory can be connected to the progressing economic potential of the country.

All things considered, we can establish that Hungary is chiefly involved in the migration within Europe and 70% of immigrants in Hungary come from the Eastern--Middle Europe.

CONCLUSIONS

With fears of the cheap labour of the ten joining countries, the 15 EU member states introduced days of grace for seven years in 2003 to restrict the free movement of labour. The free movement of people and rather the free movement of employers became a question under debate. In the first two years Ireland, the UK and Switzerland did not take advantage of these restrictions whilst the other member states limited labour work participation. Austria and Germany represent the firmest standing-point even today. With

their right of correlation Poland, Slovenia and Hungary enlarged their derogation to the 15 EU member states. Facts did not prove the fears even if the figure of a Polish mechanic became topic of campaign in 2005. The expected wave of migrant workers never arrived, consequently, countries having opened their labour marked after 1 May 2004 were out of danger. Ireland and England had the best labour market accomplishment from 2004 to 2006. Having seen the first two years' experience further member states decided on opening their labour market (Greece, Spain, Portugal and Finland). Data show that labour work mobility arriving from Asian countries is far bigger than that within the European Union. Austria and Germany are strongly against opening labour market. Only 10% of the capable population is foreigner out of which merely 1.5% arrived from the EU-10 member states in case of Austria, and 0.6% in case of Germany. The percentage of foreigner employees is the highest in Ireland where 2% out of the total 8% of foreigner workers arrive from the 10 EU member states, in especial from Poland. Thus we can conclude that the Eastern-Middle-European employees are not intensively present in the prior member states of the Union and does not generate confusion within the labour market.

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TENDENCJE MIGRACYJNE W PAŃSTWACH WSCHODNIOEUROPEJSKICH PO AKCESJI DO UE

Streszczenie. Na początku XXI w. Unia Europejska staje w obliczu największego wyzwania w jej całej historii. Proces rozszerzania UE powoduje powstawanie wielu problemów, spośród których jako najważniejszy należy wskazać swobodny przepływ osób. Przed rozszerzeniem UE o państwa wschodnioeuropejskie wielu obywateli UE obawiało się nieprzebranej fali migracji zarobkowej. Spowodowało to w krajach członkowskich zaostrzenie przepisów rynku pracy dla potencjalnych imigrantów. Jednocześnie, państwa wschodnio- i środkowoeuropejskie otrzymały bezprecedensową szansę wprowadzenia ograniczeń dla siły roboczej napływającej z unijnej piętnastki. W artykule poszukuje się odpowiedzi na następujące pytania: dlaczego Unia Europejska była zaniepokojona swobodnym przepły-

wem osób, jak liczba wschodnio- i środkowoeuropejskich obywateli zmieniła się oraz jak zmieniła się liczba obcokrajowców na Węgrzech. Odpowiedzi na pytania zostały sformułowane na podstawie doświadczeń z poprzednich rozszerzeń UE, jak również danych UE dotyczących siły roboczej i migracji.

Słowa kluczowe: migracja, Unia Europejska, współczynnik migracji netto

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THE COMPARISON OF CZECH AND AUSTRIAN AGRARIAN ENTERPRISES AFTER THE ACCESSION TO THE EU

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Abstract. The accession of the Czech Republic to the EU is linked with conditions of Common Agriculture Policy and with the system of direct payments. Progressive form of direct payments was set for new member states for time period 2004–2007. These direct payments are as high as 25–30% – 35–40% of the amount of direct payments in EU-15 and afterwards 10% annual rise with the possibility to increase the payments by additional 30% from the national budgets in every year, however maximally up to 100% of the rates in EU-15. Impacts of direct payments for economics of agrarian enterprises are given by the level of direct payment per hectare of arable land, possibly per livestock unit, or as the case might be according to the number of beef cows, sheep or goats. This mentioned impact is also reflected in financial situation of Czech enterprises after the accession to the EU. The paper deals with the impact of direct payments on particular case of agrarian enterprise farming in the Czech Republic in the comparison with enterprise farming in comparable conditions in Austria, namely in "Niederösterreich" region.

Key words: agricultural enterprise, accession to the EU, competitiveness of agricultural enterprise

INTRODUCTION

The accession of the Czech Republic to the EU is linked with conditions of Common Agriculture Policy and with the system of direct payments. The goal of direct payments is to accept suitable environmental measures related to agricultural area and agricultural production, to stabilize employment in agrarian sector, to sustain reasonable living standards of rural population, and contribute to overall economic welfare.

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Progressive form of direct payments was set for new member states for time period 2004–2007. These direct payments are as high as 25–30% – 35–40% of the amount of direct payments in EU-15 and afterwards 10% annual rise with the possibility to increase the payments by additional 30% from national budgets in so ever year, however maximally up to 100% of the rates in EU-15.

By the Decree of the Czech Government no 243/2004 Coll. the conditions for the Single Area Payment were established for future time period starting with year 2004. The following crops are applicable for the SAPS, where the crop type does not influence the payment size:

- arable land (R)
- herbage – permanent pasture (T-SP)
- herbage – other (T)
- vineyard (V)
- hop garden (C)
- orchard (S)
- other crops (O)

In order to receive such a payment, the applicant has to meet some requested requirements as the minimal acreage – it should be, in the sum of all of the land blocs/ /parts, at least one hectare of agrarian land (including one hectare). Further, the agrarian land, for that the payment is requested, has to be in the relevant time period agriculturally farmed with efficacious agricultural and environmental techniques, which means:

a) without the disruptive effects on the landscape components (e.g. balks, platforms, wind-breaks, grass-covered valley line and cart-road utilizing the natural steep lands with respect to the to the lever curves, if need be accompanied by the drains, water-courses or the surface water formations),
b) elimination of the production of the broad-line crop-plants (maize, potato, beet, bob-sled, soy, sunflower) on the land blocks/parts with the average slope is no more than 12 degrees,
c) defraying the barnyard manure in the liquid form into the land into 24 hours after the application into the land blocks/parts without the ground, whose average slope is no more than 3 degrees, provided this application is not excepted by the special legal regulations,
d) elimination of the herbage replacement by the arable land on the blocks/parts of the area under cultivation,
e) no burning of vegetable leftovers on the land blocks/parts after the harvest of the cereals, oil crops or pulse crops growing on this blocks/parts.

The Ministry of Agriculture set out the *Principles* setting out the conditions for administration the payments, that serve for reach out the level of direct payments into the agriculture, that were settled by the Accession agreement of the Czech Republic to the EU for year 2004 – additional payments (Top-Up).

The additional payment (Top-Up) is the payment provided as addition to the Single Area Payment Scheme (SAPS) and is administered by the Government Regulation that settles some details and closer conditions for the administrations of the national additional payments in addition to the direct payments by the State Agricultural Intervention Fund

for. This payment is provided in a form of subsidy. Top-Up is provided for following crops respectively livestock:

a) flax for fibre growing on the agricultural land that is stated in the Evidence of the land-use according to the owners states as agricultural cultivations arable land,
b) hops growing on the agricultural land that is stated in the Evidence of the land-use as a agriculture cultivation hop garden,
c) cattle, ovine and goat breeding (in the following "the ruminant breeding") on the farms registered in the Central evidence,
d) growing of the crops eligible for the payments on the arable land.

The applicant is consistent with the applicant for the SAPS payment. The general conditions for administration of the Top-Up are consistent with the conditions for SAPS payment.

Impact of direct payments is reflected in economics of agrarian enterprises in the Czech Republic. The impact on particular conditions of selected agrarian enterprise in the Czech Republic is compared with attained results of Austrian agrarian enterprise and thus as well mutual competitiveness and prosperity is analyzed for both mentioned enterprises.

GOALS AND METHODOLOGY

The goal of this paper is to evaluate economic situation – on the base of some indicators – of two selected agricultural enterprises operating in the Czech Republic and Austria. On the base of these selected indicators the evaluation of their mutual competitiveness follows.

This paper is solved within the research project of FBE MUAF in Brno, MSM 6215648904 "Czech economy in the processes of integration and globalization and the development of agrarian sector and service sector in new conditions of the European integrated market".

The methodology of the EU for calculation of direct payments was used while evaluating the financial situation of selected agricultural enterprises, further, data from enterprises' information system were used for years 2003–2005 in the case of Czech agrarian enterprise and in the case of Austrian agrarian enterprise the date from year 2004 were used.

For evaluation of economic situation the sets of ratio indicators were used, which are used in methods of companies' financial analysis and namely it is concerning following sets of indicators as well as individual indicators:

Liquidity indicators

a) 2^{nd} degree liquidity $= \dfrac{\text{cash + outstanding debts}}{\text{current liabilities}}$

b) 3^{rd} degree liquidity $= \dfrac{\text{short-term assets}}{\text{current liabilities}}$

Indebtedness indicators

c) share of equity capital (rate of internal financing) $= \frac{\text{shareholder's capital}}{\text{total capital}} \times 100$

d) rate of indebtedness $= \frac{\text{loan capital (total debts)}}{\text{total capital}} \times 100$

Activity indicators

e) turnover of total assets $= \frac{\text{incomes}}{\text{total assets}}$

f) turnover time of total assets $= \frac{\text{total assets}}{\text{incomes}}$

Profitability indicators

g) profitability of total capital $= \frac{\text{economic result per period}}{\text{total capital}} \times 100$

h) cost profitability $= \frac{\text{economic result}}{\text{total costs}} \times 100$

Complementary indicators

i) reproductive ability of assets $= \frac{\text{total assets}}{\text{result + depreciation}}$

j) cost – revenues ratio $= \frac{\text{costs}}{\text{revenues}}$

RESULTS

Analyzed agrarian enterprises operate in similar farming conditions. Czech agrarian enterprise is one-man farm operating on almost 100 hectares of agrarian land and with the focus on crop production and hog raising. Austrian agrarian enterprise operates in "Niederösterreich" region on 35 hectares of agrarian land and with focus on crop production and small-scale animal production, i.e. cattle and Hogs.

In Table 1 there is carried out comparison of direct payments for the analyzed agrarian enterprises. Czech agrarian enterprise "A" has these direct payments only partial compare to Austrian agrarian enterprise "B" – it has direct payments at top level as other countries of EU-15.

The total amount of subsidies gained by analyzed agrarian enterprise "A" in year 2003 before the accession to the EU and years 2004 respectively 2005 after the accession to the

Table 1. Direct payments gained by Czech agrarian enterprise "A" before and after the accession to the EU and also by Austrian agrarian enterprise "B"
Tabela 1. Płatności bezpośrednie otrzymane przez przedsiębiorstwo czeskie („A") przed akcesją i po akcesji oraz przez przedsiębiorstwo austriackie („B")

Indicator	Unit	2003	2004	2005	2004
Analyzed agrarian enterprise			A		B
SAPS from the EU budget	Ths. CZK		194	205	
	CZK/ha		1 822	2 113	
Subsidiary direct payment from national	Ths. CZK		148	178	
Budget (Top-Up)	CZK/ha		1 396	2 316	
Other subsidies	Ths. CZK		180	205	
	CZK/ha		1 697	2 116	
Subsidies in total	Ths. CZK	308	522	588	604
	CZK/ha	4 400	4 915	6 223	17 051

Source: Own research.
Źródło: Badania własne.

EU is listed in Table 1. The amount of total subsidies expressed per hectare of agrarian land in year 2004 in comparison to year 2003, when the Czech agrarian enterprise was before the accession to the EU, is more than 11.7% higher. When comparing the years 2004 and 2005 the increase of 26.6% can be noticed.

When comparing the Austrian agrarian Enterprise "B" and the Czech agrarian enterprise "A" the total amount of subsidies per one hectare of agrarian land are 3.5 times higher in 2004 and 2.7 times higher in year 2005. More details are shown in following Figure 1.

Fig. 1. Total amount of subsidies paid to the agrarian enterprises in time period 2003–2005 (CZK per one hectare)
Rys. 1. Całkowita kwota subsydiów wypłaconych przedsiębiorstwom rolniczym w latach 2003–2005 (CZK na 1 ha)
Source: Own research.
Źródło: Badania własne.

The structure of subsidies granted to the agrarian enterprise "A" in year 2004 is as follows: SAPS from EU budged corresponds with 37% of the total subsidies amount, subsidiary direct payments (Top-Up) correspond with 35% and the remaining part of subsidies is represented by payments for field and special crops recovery, and drawback of consumption tax. The structure of subsidies for year 2004 is shown in the Figure 2.

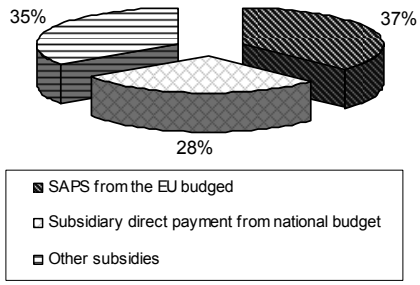

Fig. 2. Structure of subsidies granted to the Czech agrarian enterprise in 2004
Rys. 2. Struktura subsydiów wypłaconych czeskiemu przedsiębiorstwu w 2004
Source: Own research.
Źródło: Badania własne.

In Table 2 there are listed selected ratio indicators, which analyze economic situation of agrarian enterprise "A" before the accession to the EU (year 2003) and further also after the accession to the EU (years 2004 and 2005). Selected indicators of Austrian agrarian enterprise "B" for year 2004 are compared with the results of enterprise "A" in years 2004 respectively 2005.

Table 2. Indicators of economic situation for analyzed agrarian enterprises
Tabela 2. Wskaźniki sytuacji ekonomicznej analizowanych przedsiębiorstw rolniczych

	Indicator	2003	2004	2005	2004
	Analyzed agrarian enterpise		A		B
1	2nd degree liquidity	52.8	93.2	136.4	782.3
2	3rd degree liquidity	345.8	313.0	329.6	932.0
3	Share of equity capital	91.6	58.0	46.4	88.0
4	Rate of indebtedness	8.4	42.0	53.6	12.0
5	Turnover of total assets	0.9	0.6	0.6	0.3
6	Turnover time of total assets	1.2	1.7	1.7	3.3
7	Profitability of total capital	13.9	1.4	8.9	9.6
8	Cost profitability	19.3	2.6	18.3	45.7
9	Reproductive ability of assets	6.4	7.8	5.8	7.3
10	Cost – revenues ratio	0.8	1.0	0.9	0.7

Source: Own research.
Źródło: Badania własne.

While comparing these indicators the agrarian enterprise "B" is significantly better than enterprise "A" for liquidity, indebtedness (quite significant differences could be seen here, where the Czech agrarian enterprise "A" is constantli increasing its rate, thus at present time the intebtedness ratio is much higher for the enterprise "A" than for "B" – Figure 3 for overview), profitability ratios respective cost-revenues ratio. Turnover time of total assets of agrarian enterprise "B"shows high endowment especially with machinery and realty, which is reflected in higher level of this indicator – the turnover time is much longer, datail is shown again in Figure 3. Comparable indicator reproductive ability of assets (ratio of assets, profit and depreciation) is used for both companies only as a suplimentary indicator.

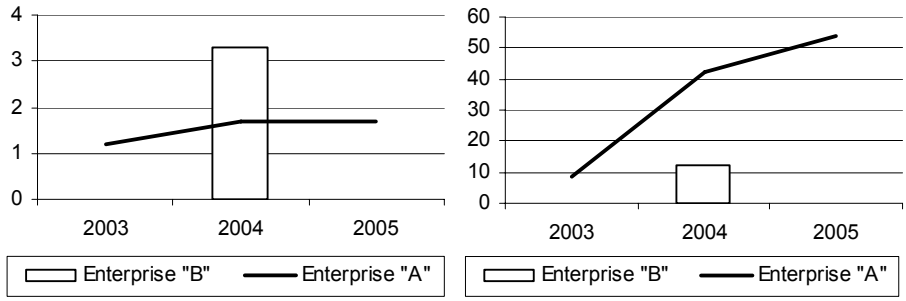

Fig. 3. Development of indebtedness ratio as for both enterprises (in %, left part of this figure) and development of turnover time of total assets (in years, right part of this figure)
Rys. 3. Zmiany wskaźnika zadłużenia w obu przedsiębiorstwach (w %, po lewej stronie) oraz zmiany długości obrotu (w latach, po prawej stronie)
Source: Own research.
Źródło: Badania własne.

CONCLUSIONS

The paper shows significant differences for the selected indicators, which compare economic situation of both agrarian enterprises. Economic situation of Czech agrarian enterprise was improoving in the analyzed time period only for the liquidity and profitability indicators. Profitability indicators and cost indicators in 2005 are compare to previous year 2004 better and are getting closer to the level they were prior to the accession to the EU. The improving situation of profitability indicators is influenced among other by increasing level of subsidies.

The competitiveness of Czech agrarian enterprise in coparison to Austrian agrarian enterprise is lower, as it is shown by carried out analysis of selected indicators. Influence of different levels of subsidies in EU-15 (including Austria) in copmarison to the new member states (the Czech Republic) is very important.

Mentioned situation arising from carried out analysis of two agrarian enterprises has its external and as well internal causes. Internal causes have to solve the agrarian enterpreneur alone by qualified decision-making while evaluating the economic situation, i.e. mainly securing the sales of good-quality products ant coresponding costs. External causes are given by different conditions of CAP application in new member states. This difference is significant while comparing the level of subsidies per one hectare of agrarian land, which is much higher motivation for the Austrian farmer while fulfiling desired production as well as non-production goals.

In the prepared program for rural-areas development for the time period 2007–2013 (EAFRD) is one of the four axis focused on improving the competitiveness of agriculture and forestry. If the Czech enterprises should use this program, they have to carefuly analyse their financial situation and compare it with selected agrarian enterprises within the Czech Republic and as well in other EU countries. It is also very important for datailed specification of this program to know the weaknesses and strengts of Czech agrarian enterprises in comparison to the foreign competition.

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PORÓWNANIE CZESKICH I AUSTRIACKICH PRZEDSIĘBIORSTW ROLNICZYCH PO AKCESJI DO UE

Streszczenie. Akcesja Republiki Czeskiej do Unii Europejskiej wiąże się z warunkami wspólnej polityki rolnej oraz systemem płatności bezpośrednich. Progresywna forma płatności bezpośrednich została ustalona na lata 2004–2007. Płatności te stanowią 25–30% – 35–40% kwoty płatności bezpośrednich w UE-15 oraz coroczny dziesięcioprocentowy wzrost z możliwością powiększenia o kolejne 30% z budżetu krajowego, maksymalnie do 100% kwoty EU-15. Wpływ płatności bezpośrednich na działalność gospodarczą przedsiębiorstw rolniczych obliczany jest jako poziom płatności na 1 ha UR, na 1 DJP albo na liczbę zwierząt konkretnego gatunku. Wpływ ten znajduje także odzwierciedlenie w sytuacji finansowej czeskich przedsiębiorstw po akcesji do EU. Artykuł oparty jest na konkretnym przykładzie przedsiębiorstwa rolniczego prowadzącego działalność w Czechach oraz przedsiębiorstwa działającego na zbliżonych warunkach w Austrii, w regionie Niederösterreich.

Słowa kluczowe: przedsiębiorstwo rolnicze, akcesja do UE, konkurencyjność przedsiębiorstwa rolniczego

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STRATEGIC ORIENTATION OF TOURISM IN MALOPOLSKA THROUGH REGIONAL PRODUCTS

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Abstract. The SOR analysis is a tool which allowing the regional actors and decision makers to establish effective tourism policy [McDonald 1992; Haberberg and Rieple 2001]. The policy which is the main field of interest in the COTOUR project is concentrated on the Regional Product treated as a tool of the region development. First step of the SOR analysis is SWOT analysis. The next step for SOR analysis purpose is the choice of elements described in SWOT analysis features these which are crucial for the research purposes. In case of COTOUR project we needed to choose these ones which had influence on tourism development from the regional product point of view. The paper reports part of research related to the EU INTERREG IIIC COTOUR project (www.cotour.org).

Key words: Strategic Orientation Round, Malopolska, regional, tourism

INTRODUCTION AND AIMS

Regions of origin play an important role in determining consumer attitudes toward and willingness to pay for speciality foods. Regional imagery (use of regional images) is increasingly being recognized as having commercial value by providing a subjective source of quality differentiation [Henchion and McIntyre 1999]. Regional images are sources of competitive advantage utilized in the strategic management while developing a strong destination brand.

The objective of the study is to identify and delineate the strategic options for tourism development in Malopolska, through the focus on regional products promotion and utilization of Strategic Orientation Round (SOR) approach.

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METHODOLOGY

The Strategic Orientation Round (SOR) approach is applied in order to develop strategic action plans or options [Frambach and Nijssen 1995]. In the SOR confrontation matrix, the cells are indicating the combinations of O and T with S and W.

The matrix can be directly used for listing the arguments and risks for the different strategic options and sketching main fields of action. The coordinates of Os Ts, Ws, and Ss may indicate the specific combination a proposal refers to (e.g. OS1 for a proposal in the maxi-maxi field).

To every cell of this matrix a score is given by experts to come to priority options. The individual scores are aggregated. The cells with a significant high total score are the main strategic options. Defining the strategic options by pair-wise combining of OT and SW is illustrated in Table 1.

Table 1. Using SWOT results as framework for strategy options
Tabela 1. Zastosowanie wyników analizy SWOT jako podstawy do rozwiązań strategicznych

	OPPORTUNITIES	**THREATS**
STRENGTHS	Maxi-maxi strategy **ATTACK**	Maxi-mini strategy **DEFENCE**
WEAKNESSES	Mini-maxi strategy **CLEAN SHIP**	Mini-mini strategy **CRISIS**

Source: Own elaboration.
Źródło: Opracowanie własne.

RESULTS: SWOT ANALYSIS

Analyzing step by step all internal and external features we came from the following long list of S-W-O-Ts:

Main strengths of Malopolska are:

- close neighborhood of Western and Eastern European markets,
- location on the West East – North-South communication corridors,
- rich history of the region,
- multicultural background especially in big cities,
- big differentiation of cultural attractions,
- a lot of unpolluted sites in the region,
- big number of national and landscapes parks,
- well developed transport network,
- dynamic development of Cracow airport,
- a lot of identified regional and local products,
- strong movement for regional product registration,
- well developed accommodation base in Cracow,
- good conditions for various types of tourism,
- various tourists routes (e.g. wooden architecture route, fruit route),
- developed spa – long tradition tourism (e.g. Krynica, Muszyna, Szczawnica – famous mineral water).

Main weaknesses:
- bad quality of roads in cities,
- poor transport services in small villages,
- low quality of tourist routes,
- low awareness of local product role in the region promotion,
- lack of registered regional products in the EU,
- lack of inexpensive but good quality accommodation offers,
- relatively low level of foreign language skills particularly in small cities and countryside,
- lack of sufficient tourist information,
- insufficient number of cultural events in the low season,
- lack of integrated tourism sets i.e. weekend offers links of different kinds of tourism.

Main opportunities:
- opening of the EU market to Malopolska businesses,
- development of economic and social cooperation in tourism between the EU countries,
- accession to the EU funds,
- decentralization of the public finances and strengthening of the role of regional and local authorities,
- new national law regulation dedicated to regional product (17.12.04),
- development of agro-tourism,
- development of a new form of tourism – eco-tourism based on unpolluted and varied environment.

Main threats:
- successful competition of neighboring regions,
- seasonal character of tourism,
- low level of investment in tourism,
- unstable legal regulations concerning investment,
- unfavorable ratio between budget incomes and assigned tasks of local authorities,
- high rate of unemployment, especially on agriculture areas,
- decrease in population incomes,
- low birth rate and increase in number of old people.

RESULTS: SOR ANALYSIS

Based on the list, the SOR matrix is prepared in order to combine the importance of many internal and external features. The importance of any chosen SWOT element was established with the experts and the members of the supporting board. Summing up the figures we get the following scores in the succeeding part of the matrix: SO = 31 points; ST = 24 points; WO = 17 points and WT = 23 points.

Attack by the highest score is pointed as the most important strategy. The difference between Defense and Crisis is insignificant (one point) therefore same attention should be placed into both strategies. The lowest score is coming with the Clean Ship strategic option.

The project started two years ago therefore it was decided to look through the SWOT as observe the big changes in the internal and external surroundings. The main strengths of Malopolska in 2007 are almost the same as those mentioned in the beginning of the analysis in 2005. The only differences are:

- strong movement of local initiatives dedicated to self awareness of local communities;
- rising number of cultural events basing on local food and not food products;
- creation of tourism products based on traditional and local food products.

The weaknesses seem to be the same as in the beginning but nowadays we may remove from the „old" list the point dedicated to the lack of inexpensive but good quality accommodation offers. In this moment the list of possible good quality accommodation in Cracow is getting significantly longer and it is possible to get good quality offer not only in the five stars hotels.

Important changes in opportunities must be mentioned:

- Cracow's placement in the very beginning place on the list of the most popular cities in the world;
- huge EU funds from the 2007–2013 financing period are dedicated to the wide variety activities associated with tourism development.

As the changes in SWOT seem to be not very big but still important, some changes in the SOR analysis are expected. The recent review of the SWOT Matrix with the priority points is presented in Table 2.

Table 2. SOR analysis for Malopolska – strategic options adapted in 2007
Tabela 2. Analiza SOR dla Małopolski – rozwiązania strategiczne zaadaptowane w 2007 roku

	Table after SWOT updating	O1	O2	O3	O4	T1	T2	T3	T4
		Increase tourist no	New forms of tourism	Acces to EU Funds	Strength role of local auth.	Decreasing world travel	Successful neighbour competition	Unstable law	Delay in access to external money
S1	Reach cultural atractions	3	2	3		3	3		3
S2	Reg. products registration movement		1		3				
S3	Local self awarnesss	3			3	2		3	2
S4	Different tourism condition		3	2			3	2	2
S5	Airport development	3	3	3	3	1	3		
W1	Low role reg. products in strategy	2		1	3	3	3		
W2	Lack of registered regional product							2	3
W3	Lack of tourism products	1	3	3		2		2	2
W4	Luck of tourism sets					1		3	
	Total	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
	Mean	2.4	2.4	2.4	3	2	3	2.4	2.4
	SD	0.89	0.89	0.89	0.00	0.89	0.00	0.55	0.55

1 – important; 2 – very important; 3 – extremely important
Source: Own elaboration.
Źródło: Opracowanie własne.

The updated results (SO = 35 points, ST = 27 points; WO = 13 points and WT = 21 points) confirm the main role of the attack strategy in the light of the direction of the changes.

CONCLUSIONS

The presented analysis shows that in spite of many positive changes in Malopolska, the region faces many threats. There is continuing decrease in population incomes (compared to overall increase in Polish economy) and a very slow decrease in the unemployment rate. Significant threat is also connected with utilization of external funds, i.e. there are significant delays with receiving of money available within a new programming period.

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STRATEGICZNA ORIENTACJA W TURYSTYCE MAŁOPOLSKI POPRZEZ PRODUKTY REGIONALNE

Streszczenie. Analiza SOR jest narzędziem umożliwiającym prowadzenie efektywnej polityki turystycznej w wymiarze regionalnym [McDonald 1992; Haberberg and Rieple 2001]. Polityka ta, będąc głównym obszarem zainteresowania projektu COTOUR, jest skoncentrowana na produkcie regionalnym rozumianym jako instrument rozwoju regionu. Pierwszym etapem analizy SOR jest analiza SWOT, a następnym wybór elementów opisanych w ramach SWOT, które są istotne dla celów badań. W przypadku projektu COTOUR zaistniała potrzeba wyboru takich czynników, które wpływają na rozwój turystyki z regionalnego punktu widzenia. W artykule zaprezentowano część badań związanych z unijnym projektem COTOUR w INTERREG IIIC (www.cotour.org).

Słowa kluczowe: strategiczna orientacja, Małopolska, regionalny, turystyka

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EFFECT OF ACCESSION TO THE EUROPEAN UNION ON FARMS OF BÉKÉS COUNTY

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Abstract. The most significant problems of agricultural enterprises are the lack of equipment and assets, financing production and development as well as the low level of income achieved through agricultural activity. Subsidies from the government, favourable credit constructions and the European Union resources play a particularly important role in improving the farmers' financial status and in implementing investments and financing operating funds. During the last five years several national and from May 2004 the European Union subsidies or low-premium credit constructions could be applied for by farmers. In this study based of the National Country Development and Planning Information System the intensity of utilizing the European Union subsidies was examined in the South Plain region in Békés county, focused on the Agricultural and Rural Development Operative Programme.

Key words: agricultural financing, European Union subsidies, Gross Domestic Product

INTRODUCTION

The South Plain region consists of Békés, Csongrád and Bács-Kiskun county. These three counties can be found at the south and south-eastern borders of Hungary, they occupy 20% of area of the country. This region due to its favourable geographical conditions and the high quality of soil has an agricultural potential above the average. The importance of agriculture is reflected by its position taken in the structure of workforce, the high rate of workers in agriculture and of the area cultivated in agriculture, a competitive food industry even on international level [Kelle 2004]. In the county out of 2284 operating agricultural enterprises 72% were enterpreneurs, 15% limited companies, 8% deposit companies and 4% were cooperative societies in 2003. Concentration of works takes place in Békés county, too, which is marked by the reducing number of private enterprises, and the growth of works size on the basis of common agricultural and enterprise structure recordings.

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Before joining the EU during almost a decade, Hungary completed the harmonizing processes which were the conditions of becoming a member of the EU. Significant adaptation was needed especially in agriculture, within this the most important changes have been made in the supportive system. Agricultural producers of the member states have numerous opportunities along with direct financing which is supposed to improve the efficiency of production. The farmers in Hungary got acquainted with a supportive system differing from the previously familiar one during applying for resources of Pre-joining Funds which system is in connection with subsidies available from Structural Funds and Cohesive Funds resources [Pusztainé et al. 2005].

In spite of the consolidation and low-premium credit constructions, a considerable part of agricultural enterprises are in a critical financial status. It affects the competitiveness of our agriculture disadvantageously within the European Union. Involvement of enterprises is a symptom, the consequence of advanced reasons. The aim must be but one: ceasing the reasons of these consequences, or at least reducing them to an acceptable level. The average support level (PSE) of the Hungarian agriculture was 18.1% in 2004, which is considerably behind the over 30% average support level of EU-15's agriculture. In this situation, for the Hungarian farmers availing themselves of the community supportive opportunities in a greater extent is a matter of life and death. As the member of the EU new resources became available to the Hungarian agriculture. According to the contract of joining, the new members, among them Hungary, can not obtain direct susidies altogether but only gradually [Guba-Harza 2006]. Before joining the EU, after having a yearly announced and almost yearly varying agricultural supportive system, most of the farmers could adjust to the new, complex supportive system quite hard and slowly. In the new system, susidies do not come to the farmers by right of the subjects, they have to apply for them by right of different titles to the same area provided that the farmer can meet the requirements of each titles.

Since 2004 Hungarian farmers have had the opportunity to utilize resources, to apply for European Union subsidies. After joining, in agriculture SAPARD supportive system financed by the Pre-joining Funds expired and was replaced by Agricultural and Rural Development Operative Programme (ARDOP) operating between 2004 and 2006. SAPARD programme had double purposes: on one hand, to offer help to countries intending to join with taking over common law, on the other hand, it contributed to establish a sustainable and competitive agriculture. The elements and measures of SAPARD can be found among the measures of ARDOP extended with some others [Kelle 2006]. In the first phase of ARDOP (2004–2006) to finance the projects of winner tenders 75.8 billion HUF (i.e. 0.3 billion EUR) EU subsidies, 26.2 billion HUF (i.e. 0.1 billion EUR) national resourses were at disposal, 105 billion HUF (i.e. 0.4 billion EUR) altogether. During the years of the phase above, the rate of subsidy amounts were: 23.3, 33.3, 43.4%. One part of the experience on examining the accomplishment of aims shows more advantageous tendencies compared to the previous state (SAPARD). However, there are still lessons to take to heart. Most of the priorities (measures) among the aims of ARDOP enabled SAPARD tenders, dismissed because of lack of assets, to be reasserted. The tender notice of measures and the practice of judgement procedure considerably differ from the pre-joining programme mentioned above. It is embodied by the much

greater number of submeasures which improved the choice of specializations to be developed, but crumbled up resources at disposal. The institutional and structural system judging claims on subsidies was reformed in the middle of 2004 and it established the preliminary decision-making work. Following the support quota at disposal consistently resulted in suspending measures, determining deadlines, and repeated announcement of these. Along with often altering tender conditions, it generated discontent among support claimants [Lengyel 2006].

In this paper based on data of the National Country Development and Planning Information System (NCDPIS) the intensity of utilizing the European Union subsidies was examined in the South Plain region in Békés county, paying a great attention to Agricultural and Rural Development Operative Programme.

MATERIAL AND METHODS

In this examination variation and intensity of utilizing the European Union subsidies in the South Plain region and in Békés county were analyzed. The analysis was carried out on the basis of database of the National Country Development and Planning Information System (NCDPIS in Hungarian). This system gives an overall picture of the state of society, economy, technical infrastructure and environment regarding different area units, based on the data and indexes representing specializations. The data in NCDPIS is based on those collected by the Central Statistics Office on one hand, and on data describing the environment, the state of nature, and characteristic features of it from regional point of view, along with some essential details of it from recordings at different specializations on the other hand. Indexes derived from data of the Valuation Office represent the income state of inhabitants in an area. From this database practically an unlimited number of indexes, diagrams and cartograms can be generated dinamically. In the Information System several documents and information on country development and planning can be viewed.

The data were examined by general and special statistical methods. The term examined covers the period from 1999 to 2006. In some cases data at disposal from the database cover shorter terms than this 7-year period.

During the analysis the next indexes were applied:

- Deviation of gross domestic product per capita from regional and national average (1000 HUF/capita);
- Gross added value per capita in agriculture, game and forest economy, fishery, national economic branches and their deviation from regional and national average (1000 HUF/capita);
- Value of the European Union subsidy per capita in Békés county (1000 HUF/capita);
- Value of average European Union subsidy in Békés county (1000 HUF/capita);
- Rate of Agricultural and Rural Development Operative Programme (ARDOP) within the European Union subsidies in Békés county (%);
- Efficiency ratio: claimed support amount for one tender/contracted support amount for one tender.

RESULTS AND DISCUSSION

In the economy of Békés county, the role of agriculture is admittedly significant, 6–7% of GDP in national agriculture is produced by farmers of the county, and the share of the South Plain region consisting our county is 22–24% in the national gross product (Table 1). Analysing the different periods, their share indicates a falling tendency. This process could also be considered favourable, as it indicates the increase of other national economy branches share which represents decline of the agrarian feature of our county and region.

Table 1. Gross added value per capita in agriculture, game and forest economy, fishery, national economic branches (million HUF)
Tabela 1. Wartość dodana brutto na osobę w rolnictwie, leśnictwie i w rybołówstwie (mln HUF)

Year	National GDP in agriculture	Regional GDP in agriculture	County GDP in agriculture	Ratio of Regional GDP in agriculture in National (%)	Ratio of County GDP in agriculture in National (%)	Ratio of County GDP in agriculture in Regional (%)
2001	561 182	136 668	40 175	24.4	7.2	29.4
2002	536 567	122 053	34 010	22.7	6.3	27.9
2003	521 388	116 935	33 547	22.4	6.4	28.7
2004	676 643	149 891	41 060	22.2	6.1	27.4
2005*	707 092	156 636	42 908	22.2	6.1	27.4
2006*	735 376	162 902	44 624	22.2	6.1	27.4

*Estimated values/wartości oszacowane
Source: Own calculation using the database of NCDPIS.
Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

The change of gross domestic product per capita in Békés county and the South Plain region marks an unfavourable process. In the past 8 years the efficiency of the county continuously fell behind the national average (61–67% of average), but even behind the regional average (88–92% of it), although the latter one is also lower than the national average (Table 2). However, it would be observed that this region shown symptoms of fallback: the pace of growth was behind the national and even regional, therefore deviation increased in economic efficiency. One reason of it could be the higher rate of agriculture. Gross added value (GAV) per capita in agriculture is 56–82% higher than the national average, but this surplus is of falling tendency, too. The hectic changes year by year are the consequences of weather and market exposure of agriculture (Table 3).

Joining the European Union offered the hope that the regional differences shown before would decrease, or could be decreased by the help of the supportive system whose key priority is regional politics. Even though, its success depends upon the active applicants and the proficiency of applications. Application activity in the county, naturally due to alteration of resources, turned from national support tenders to the European Union tenders. The number of supported tenders decreased altogether, due to a dramatic decline of national resources primarily, at the same time tenders applying for union resources shown a dynamic increase. This increase stopped in 2006 though, the support amount for one tender and the enter value of projects grew significantly, the average value of them almost quadrupled. It also indicates the economic growth and increase of enterprises

Table 2. Deviation of gross domestic product per capita from regional and national average (1000 HUF/capita)

Tabela 2. Odchylenia produktu krajowego brutto na osobę od średniej regionalnej i krajowej (tys. HUF/osobę)

Year	County GDP	Regional GDP	National GDP	Difference of County and Regional GDP	Change of difference (previous year = = 100%)	Difference of County and National GDP	Change of difference (previous year = = 100%	Ratio of County GDP in Regional GDP	Ratio of County GDP in National GDP
1999	750	819	1 113	–69		–363		91.58	67.39
2000	856	929	1 300	–73	105.80	–444	122.31	92.14	65.85
2001	954	1 044	1 471	–90	123.29	–517	116.44	91.38	64.85
2002	1 034	1 150	1 665	–116	128.89	–631	122.05	89.91	62.10
2003	1 120	1 254	1 841	–134	115.52	–721	114.26	89.31	60.84
2004	1 235	1 395	2 021	–160	119.40	–786	109.02	88.53	61.11
2005*	1 291	1 458	2 112	–167	104.38	–821	104.45	88.55	61.13

*Estimated values/wartości oszacowane

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 3. Gross added value per capita in agriculture, game and forest economy, fishery, national economic branches and its deviation from regional and national average

Tabela 3. Wartość dodana brutto na osobę w rolnictwie, leśnictwie i rybołówstwie oraz jej odchylenia od średniej regionalnej i krajowej

Year	County GAV per capita in agriculture	Regional GAV per capita in agriculture	National GAV per capita in agriculture	Ratio of County in Regional	Ratio of County in National	Difference from Regional	Change of difference (%)	Difference from National	Change of difference (%)
2001	99 958	99 007	55 016	100.96	181.69	+951		+43 991	
2002	85 225	88 883	52 735	95.89	161.61	–3 657	–384.62	+36 148	82.17
2003	84 687	85 537	51 407	99.01	164.74	–851	23.26	+34 130	–99.06
2004	104 520	110 197	66 883	94.85	156.27	–5 677	667.34	+43 313	126.91
2005*	109 223	115 155	69 893	94.85	156.27	–5 933	104.50	+45 262	–98.96
2006*	113 592	119 762	72 689	94.85	156.27	–6 170	104.00	+47 073	104.00

*Estimated values/wartości oszacowane

Source: Own calculation using the database of NCDPIS.

Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

(Table 4). Békés county takes the fourth-fifth place in the support amount per capita index in the ranking of counties according to NCDPIS data.

The supportive system after joining the Union secured the developmental resources through operative or credit programmes. During two and a half years out of 605 projects applying for the resources of the Agricultural and Rural Development Operative Programme and the Economic Competitiveness Operative Programme over 200 applications per programme received subsidies. Meanwhile, the average support amount was 16 or 24 million HUF. In respect of the county's development, projects implemented by Environment Protection and Infrastructure Operational Programme and Regional Development Operative Programme played the most significant role (Table 5). Utilizing national resources dropped.

Table 4. National and European Union subsidies in Békés county between 2002 and 2006
Tabela 4. Subsydia krajowe i unijne w Békés w latach 2002–2006

Year	National (piece)	National subsidies (M HUF)	Average amount of subsidies (M HUF/project)	EU (piece)	EU subsidies (M HUF)	Average amount of subsidies (M HUF/project)	Total (pieces)	Total subsidies (M HUF)	Average amount of subsidies (M HUF/project)
2002	668	9 563	14.3	12	346	28.8	680	9 909	14.6
2003	784	8 555	10.9	12	974	81.2	796	9 529	12.0
2004	654	5 787	8.8	38	5 451	143.4	692	11 238	16.2
2005	172	5 076	29.5	314	16 441	52.4	486	21 517	44.3
2006	148	4 766	32.2	223	19 153	85.9	371	23 919	64.5

Source: Own calculation using the database of NCDPIS.
Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 5. European Union subsidies in Békés county between 2002 and 2006 (on the base of programmes)
Tabela 5. Subsydia Unii Europejskiej w Békés w latach 2002–2006 (na podstawie programów)

Operative programme	Number of projects	Subsidies (M HUF)	Average subsidies (M HUF/project)
Environment Protection and Infrastructure OP	7	16 444	2349.1
Regional Development OP	25	8 069	322.8
Agricultural and Rural Development OP	243	5 940	24.4
Human Resources Development OP	62	4 322	69.7
Phare programme	42	4 083	97.2
Economic Competitiveness OP	226	3 608	16.0

Source: Own calculation using the database of NCDPIS.
Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 6 represents among the European Union subsidies especially the distribution of ARDOP subsidies supporting agriculture and country development between 2002 and 2007. Farmers received the first ARDOP subsidies from 2005, the average support amount per project was more than 24 million HUF (i.e. 0.1 million EUR) which takes 35% of the average support amount for all European Union subsidies. In respect of the amount of ARDOP subsidy per capita a significant drop can be detected in Békés county from 2005 by 2006: the amount of subsidy in 2006 is less than half of the amount in 2005, while in case of all EU subsidies this amount increased in a small extent. Farmers in Békés county handed in more than 70% of all ARDOP applications in 2005 which was beyond 70% of all ARDOP susbsidies amount.

In respect of the number of EU subsidies applied for between 2002 and 2006, it can be stated that Békés county received more than 3% of the national subsidies, and 6% of the support amount. Examining the support amount per one tender, it can be pointed out that in Békés county more than one and a half times higher support amount was given to one tender compared to the national average which demonstrates the application activity of the county (Table 7).

Regarding the efficiency of the European Union applications from 2004 it can be state that the efficiency ratio of Békés county was higher than the regional and national ratio

Table 6. European Union subsidies distribution in Békés county
Tabela 6. Rozdysponowanie subsydiów unijnych w Békés

Year	Number of ARDOP projects (piece)	Total number of EU porjects (piece)	Value of ARDOP subsidies (M HUF)	Value of EU subsidies (M HUF)	Average amount of ARDOP subsidies (M HUF)	Average amount of EU subsidies (M HUP)	Value of per capita subsidies ARDOP (M HUF)	Value of per capita EU subsidies (M HUF)
2002	0	12	0	346	0	28.8	0	867.0
2003	0	12	0	974	0	81.2	0	2 458.8
2004	0	38	0	5 451	0	143.4	0	13 875.7
2005	180	314	4 188	16 441	2.3	52.4	10 749.8	42 200.8
2006	57	223	1 652	19 153	29.0	85.9	4 281.5	49 638.9
2007	6	6	99	99	16.5	16.5	–	–
Total	243	605	5 940	42 465	24.4	70.2		

Source: Own calculation using the database of NCDPIS.
Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 7. European Union support amount for one tender
Tabela 7. Wartość wsparcia Unii Europejskiej na jeden wniosek

EU subsidies (2002–2006)	Békés county	Hungary	Ratio of Békés county in Hungary (%)
EU subsidies (piece)	599	16 197	3.7
EU subsidies (M HUF)	42 365	708 136	6.0
Total (piece)	3 025	93 120	3.2
Total (M HUF)	76 112	1 391 685	5.5
Amount of EU subsidies per project (M HUF)	70.7	43.7	161.8
Amount of total subsidies per project (M HUF)	25.2	14.9	168.4

Source: Own calculation using the database of NCDPIS.
Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

Table 8. EU subsidies and efficiency indexes of ARDOP (2004–2007)
Tabela 8. Subsydia UE i wskaźniki efektywności ARDOP (2004–2007)

Subsidies	Claimed	Obtained	Amount of projects (M HUF)		Efficiency ratio of		Claimed	Obtained	Efficiency ratio per project (%)
	projects (piece)		claimed	obtained	subsidy amount (%)	projects (%)	subsidies per project (M HUF)		
National EU	40 558	15 624	1 576 388	670 852	42.6	38.5	38.867	42.937	110.5
National ARDOP	11 019	4 059	197 133	105 489	53.5	36.8	17.890	25.989	145.3
Regional EU	5 950	2 444	222 281	97 702	44.0	41.1	37.358	39.976	107.0
Regional ARDOP	2 082	858	40 748	22 442	55.1	41.2	19.572	26.156	133.6
County EU	1 358	563	70 334	38 382	54.6	41.5	51.792	68.174	131.6
County ARDOP	533	243	10 463	5 940	56.8	45.6	19.630	24.444	124.5

Source: Own calculation using the database of NCDPIS.
Źródło: Obliczenia własne na podstawie bazy danych NCDPIS.

in case of both support amount and number of projects, and the same can be mentioned to the efficiency per one tender. In respect of the success of the ARDOP both efficiency indexes were also beyond the regional and national data, however, it was lower than those counting the support amount per one project (Table 8).

CONCLUSIONS

Agrarian feature of the South Plain region and Békés county in it determines their economic advancement. The gross added value per capita in the agrarian sector of the county and region considerably exceeds the national average and the share of this sector in gross domestic production is well above the national average. It also brings some disadvantegous consequences though:

- The growth of economic production in the county and region fell behind the national growth, between values of GDP per capita there is a growing gap;
- The fallback of region can be stopped by proper activity and proficiency of applications;
- The county's share in tender resources has increased, the contracted amount for one tender has grown;
- The size of projects has increased considerably which indicates the applicants' economic increase;
- The county's application activity is high, it is in the first third of counties;
- During the judgement of subsidies judges preferred applications of higher cost price (more complex).
- Applicants in Békés county took part in tenders for the EU subsidies with an efficiency well above the national and regional average;
- At the same time it is disadvantageous that the support amount per one project (and consequently the total cost of projects) in case of developments financed by ARDOP is lower than the national or regional average which is reflected by smaller individual developments;
- The efficiency of application indicates that the region and the county in it is prepared to take part in the EU tenders successfully, and it could be profitable in the period of 2007–2013: it will support the economy of the county to fall into line and the development of agrarian production, processing industry based on it.

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WPŁYW AKCESJI DO UNII EUROPEJSKIEJ NA GOSPODARSTWA ROLNE W GMINIE BÉKÉS

Streszczenie. Do najważniejszych problemów przedsiębiorstw rolniczych należy zaliczyć brak wyposażenia i aktywów, finansujących produkcję i rozwój, jak również niski poziom dochodów uzyskiwanych z działalności rolniczej. Rządowe subsydia, kredyty preferencyjne i środki Unii Europejskiej odgrywają znaczące role w poprawie sytuacji finansowej rolników i we wprowadzaniu inwestycji. W ostatnich pięciu latach rolnicy mogą korzystać z krajowych, a od maja 2004 roku także z unijnych subsydiów oraz niskooprocentowanych kredytów. Na podstawie Narodowego Systemu Informacyjnego Rozwoju Kraju i Planowania w artykule ukazano intensywność wykorzystania subsydiów unijnych w regionie South Plain – Békés, koncentrując się na Programie Operacyjnym Rozwoju Rolnictwa i Obszarów Wiejskich.

Słowa kluczowe: finansowanie rolnictwa, subsydia Unii Europejskiej, produkt krajowy brutto

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LIVING STANDARD VS LIFE QUALITY

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Abstract. The paper deals with two currently much discussed issues: living standard and life quality, which both refer to the social welfare of inhabitants in certain time and space conditionings. The problem is to find the determinants of these two phenomena, as well as to reveal the character of living standard and life quality. The author shows examples of a arithmetical presentation of the potential evaluation of living standard with the use of GDP and HDI measures. In case of life quality the issue of imponderables and the chance for their qualitative estimation has also been pointed out.

Key words: living standard, life quality, Gross Domestic Product (GDP), Human Development Index (HDI), development, progress, perception, process

INTRODUCTION

In the modern world progress is an integral part of development. This progress is a consequence of many processes conducted by people who are exposed to many external, as well as internal factors. All these factors constitute a certain sort of socio-economic plane or environment in which man has to work. This man, who consciously acts in economic life, i.e. *homo oeconomicus*, encounters the law of scarcity in everyday life. The result of this fact is the necessity to make a choice. Thus, we come to *homo eligens* deciding daily about the best choice considering the maximal utility, as well as maximal satisfaction. During each such decision mental well-being is an intrinsic sphere which influences the personal life. It occurs that one's approach has a significant impact on one's actions and the way one perceives events and other people. Then it may appear that man has an impact on his or her quality of life which seems to be a subjective category providing subjective life satisfaction. The other problem concerns the living standard which is mainly based on objective life conditionings which need not depend on our attitude to life and personal actions.

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LIVING STANDARD AND ITS MEASURING

A popular definition of living standard refers to the way in which people live, for example, how comfortable their houses are or how much money they have to spend on food and clothes. Everyone may also notice that living standards rose dramatically in the post-war period. But these are rather only examples of the perception of living standard by ordinary people who treat it as something practical and material. Since most of people would evaluate the living standard in such a way, we may regard this category as having a rather objective character. Thus, the standard of living may also be called economic welfare.

A.C. Pigou noticed in the 1920s that economic welfare is "that part of social welfare that can be brought directly or indirectly into relation with the measuring-rod of money". Additionally Pigou distinguished between "economic welfare" and "total welfare", the latter is now called well-being [cf. Sen 1987].

Hence, the living standard may be treated as a multifunctional category of welfare based on mostly objective criteria which also always have in certain sense a relative character. The issue refers to the point of reference which varies in many countries. In order to see an example of the differentiation of living standard using the EU point of reference, we may apply certain measures. One of such measures, of world-wide use, concerning the living standard, is the Gross Domestic Product (GDP). This measure, so as to be more objective is calculated per capita and at purchasing power parity. The detailed data for the EU-25 states are presented in Table 1.

Table 1. The Gross Domestic Product per capita in the EU-25 states (ranking)
Tabela 1. Produkt Krajowy Brutto na osobę w UE-25 (ranking)

Ordinal	Name of the State	GDP per capita at PPP**
X	EUROPEAN UNION*	0.24
1.	Luxembourg	1.00
2.	Ireland	0.50
3.	Denmark	0.37
4.	Austria	0.35
5.	Finland	0.32
6.	Belgium	0.31
7.	Netherlands	0.30
8.	United Kingdom	0.30
9.	Germany	0.29
10.	Sweden	0.29
11.	France	0.27
12.	Italy	0.26
13.	Spain	0.23
14.	Greece	0.16
15.	Slovenia	0.16
16.	Cyprus	0.14
17.	Malta	0.11
18.	Portugal	0.10
19.	Czech Republic	0.10
20.	Estonia	0.07
21.	Hungary	0.07

Table 1 – cont./ Tabela 1 cd.

22.	Slovakia	0.07
23.	Lithuania	0.04
24.	Latvia	0.01
25.	Poland	0.00

Remarks:
*Actual data for the EU = 29.300 USD.
**Data normalized by the Zero Unitarization Method <0, 1>.
Data updated to 31st December 2006 (sort of projection).
Source: Own elaboration on the basis of the EUROSTAT database 2006.
Źródło: Opracowanie własne na podstawie danych EUROSTAT 2006.

In Table 1 we may see the ranking of the EU countries in terms of the living standard calculated as Gross Domestic Product (GDP) per capita at purchasing power parity.

According to the UN guidelines the development of man is conditioned by the level of social infrastructure, its accessibility, social welfare, etc. In order to measure this social development the Pakistani economist Mahbud ul Haq developed in 1990 the index of human development which three years later was used by the United Nations Development Programme and calculated in its annual Human Development Report. The Human Development Index (HDI) is a comparative measure of:

- life expectancy at birth;
- education, i.e. the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weight) and the adult literacy rate (with two-thirds weight);
- standard of living (the log of GDP per capita at PPP) for countries worldwide.

Thus, the HDI measures the average achievements in a country in these three basic dimensions of human development determining the identification of developed, developing or underdeveloped states. As we may notice the HDI index uses also the GDP value being simultaneously a more complex index. In Table 2 the data for the EU-25 states have been presented, so as to show the structure of the HDI in United Europe and in order to reveal the gaps between the countries in terms of social welfare.

Table 2. The Human Development Index for the EU-25 states (ranking)
Tabela 2. Wskaźnik Rozwoju Społecznego w UE-25 (ranking)

Ordinal	Name of the State	Human Development Index**
X	EUROPEAN UNION*	0.69
1.	Ireland	1.00
2.	Sweden	0.95
3.	Finland	0.92
4.	Netherlands	0.92
5.	Luxembourg	0.90
6.	Belgium	0.90
7.	Austria	0.89
8.	Denmark	0.88
9.	France	0.87
10.	United Kingdom	0.86
11.	Italy	0.86
12.	Spain	0.84
13.	Germany	0.78
14.	Greece	0.68

Table 2 – cont./ Tabela 2 cd.

15.	Slovenia	0.59
16.	Portugal	0.53
17.	Cyprus	0.52
18.	Czech Republic	0.36
19.	Malta	0.27
20.	Hungary	0.22
21.	Poland	0.15
22.	Estonia	0.12
23.	Lithuania	0.11
24.	Slovakia	0.10
25.	Latvia	0.00

Remarks:
*Actual data for the EU in terms of HDI = 0.922.
**Data normalized by the Zero Unitarization Method <0, 1>.
Data updated to 31st December 2006 (sort of projection).
Source: Own elaboration on the basis of the Eurostat database 2006.
Źródło: Opracowanie własne na podstawie danych EUROSTAT 2006.

Table 3. The ranking of the EU-25 states (the GDP and the HDI measures combined together)
Tabela 3. Ranking państw UE-25 (PKB oraz WRS)

Ordinal	Name of the State	Sum of two indexes: GDP and HDI*	Final result**
X	EUROPEAN UNION	0.93	0.49
1.	Luxembourg	1.90	1.00
2.	Ireland	1.50	0.79
3.	Denmark	1.25	0.66
4.	Sweden	1.25	0.66
5.	Austria	1.24	0.65
6.	Finland	1.24	0.65
7.	Belgium	1.22	0.64
8.	Netherlands	1.22	0.64
9.	United Kingdom	1.15	0.60
10.	France	1.15	0.60
11.	Italy	1.11	0.58
12.	Germany	1.08	0.57
13.	Spain	1.07	0.56
14.	Greece	0.85	0.44
15.	Slovenia	0.75	0.39
16.	Cyprus	0.67	0.35
17.	Portugal	0.63	0.33
18.	Czech Republic	0.46	0.24
19.	Malta	0.38	0.20
20.	Hungary	0.29	0.15
21.	Estonia	0.19	0.10
22.	Slovakia	0.17	0.08
23.	Poland	0.15	0.07
24.	Lithuania	0.14	0.07
25.	Latvia	0.01	0.00

Remarks:
*ta normaDalized by the Zero Unitarization Method <0, 1>.
**Data from the 3rd column normalized once more by the Zero Unitarization Method <0, 1>.
Data updated to 31st December 2006 (sort of projection).
Source: Own elaboration on the basis of the Eurostat database 2006.
Źródło: Opracowanie własne na podstawie danych EUROSTAT 2006.

As we may notice there is a certain level of convergence between the HDI and the GDP measures which is logically understandable due to the fact that one of the constituents of the HDI is the value for GDP. Assuming the equal weight of both measures and combining together the HDI and the GDP we may obtain a resultant value which obviously contains the certain error which concerns the doubled calculation of the GDP but underlines the significance of the GDP as not only a supportive element of the HDI but an independent measure. The results of such combination are presented in Table 3.

All the three rankings concerning the GDP, the HDI or both of them seem to be convergent to a certain extent but also differ. In case of Poland we occupy the 25th place (in terms of the GDP), the 21st place (in terms of the HDI) and finally the 23rd place in the last combined measures ranking. The rankings above show the possibility of measuring the living standard which gives an impression of objectiveness in comparison to many imponderables characteristic for the issue of life quality.

LIFE QUALITY AND ITS PERCEPTION

The term "quality of life" became a subject of scientific consideration in the 1960s. The main purpose of quality of life, as a research discipline placed within the social sciences, is to promote and enhance the human well-being also by the improvement of the human lot. As W. Ostasiewicz rightly notices, the quality of life is an interdisciplinary issue within a network of social sciences: social psychology, welfare economics, philosophy, sociology, cultural anthropology, social indicators research, environmental studies and political sciences [cf. Ostasiewicz 2000]. Additionally, the quality of life is the resultant of every-day circumstances (reality) and individual characteristics (personal circumstances) in a given area and at a given time [Małuj 2004]. Life quality may also be perceived as the whole of features and factors deciding about the way of satisfying needs, realizing personal aims and general human functioning on the following planes of activity: physical, material, socio- emotional and intellectual [cf. Woźniak 2005]. Thus, it is obvious that the quality of life is a subjective notion conditioned by many factors: personal needs and preferences, the ability to perceive and assess, experience, age, assets possessed and family status [Kaczmarek 2004]. Hence, the subjective life quality, i.e. subjective well-being, indicates a degree of satisfaction from the particular spheres of life expressed in reflexive evaluations (appraisals) of these spheres [Campbell 1976].

According to Z. Woźniak [2005] the global indicators of life quality refer to the three main elements:

- satisfaction with one's personal life;
- evaluation of living conditions in the state;
- appraisal of one's living conditions.

This satisfaction with one's personal life pushes us back to the earlier mentioned subjective well-being, which in economic psychology denotes the welfare, i.e. the feeling of happiness that a man may experience in connection with his socio-economic situation. Thus, the subjective aspect of the quality of life indicates mental states accompanying man in the process of meeting his own needs [Sowińska 2000].

In case of assessment of one's living conditions we are dealing with an individual perception of man based on the denoted point of reference, e.g. neighbours, family, friends, etc.

But the feeling of happiness need not necessarily depend in great measure on how much man has, but rather on how he or she valuates what they possess – i.e. what or who they compare it to. This point of reference points out a relative character of life quality. Hence, one may state that the quality of life means the satisfaction of a man with a degree of having his needs met, being in certain sense an effect of the living standard, i.e. the conditions of his existence, but only to a certain extent [cf. Sowińska 2000].

An intrinsic element influencing life quality in a positive way may be the identification of people with an area inhabited. This could be named the feeling of "myness" of space, which would mean that a particular person identifies himself or herself with a definite area and feels attached to it and interested in what is relevant to it [cf. Małuj 2004].

Hence, we may notice a wide variety of attitudes to the issue of life quality depending on individual perception of different people with diverse experience.

At the end of this chapter it is necessary to mention about the endeavours to measure life quality. Carol Estwing Ferrans and Marjorie Powers in 1984 developed the Quality of Life Index (QLI), so as to measure the quality of life in terms of satisfaction with life. This index is based on the following nine determinants of life quality [The Economist 2006]: material wellbeing, health, political stability and security, family life, community life, climate and geography, job security, political freedom and gender equality. The result of the research is the ranking of countries in terms of the QLI which is presented in Table 4.

Table 4. The ranking of the EU 25 states (the Quality of Life Index)
Tabela 4. Ranking państw UE-25 (wskaźnik jakości życia)

Ordinal	State	Ordinal	State	Ordinal	State	Ordinal/State
1.	Ireland	8.	Netherlands	15.	Germany	22. Poland
2.	Luxembourg	9.	Portugal	16.	Slovenia	23. Lithuania
3.	Sweden	10.	Austria	17.	Malta	24. Latvia
4.	Italy	11.	Greece	18.	UK	25. Estonia
5.	Denmark	12.	Cyprus	19.	Czech Rep.	
6.	Spain	13.	Belgium	20.	Hungary	
7.	Finland	14.	France	21.	Slovakia	

Remarks:
Updating for 2005.
Source: Own elaboration on the basis of [The Economist 2006].
Źródło: Opracowanie własne na podstawie danych EUROSTAT 2006.

As one may notice, this ranking is not quite convergent with those referring to the living standard. The problem with the life quality measuring concerns its subjective character. Additionally, in case of QLI arises the danger of erasing the border between the quality of life and the living standard. This danger occurs while treating, e.g. material well-being counted on the basis of GDP per capita at PPP, as one of life quality determinants.

LIVING STANDARD VS LIFE QUALITY

There are different relationships between the living standard and the quality of life. Some of them seem to introduce a certain sense of divergence in terms of their determinants. This divergence occurs in the output of high living standard which may block the achievement of life quality improvement.

Already in the 1960s it appeared that the economic growth need not be totally convergent with the increase of social welfare, because of the differentiated layout and segmentation of population within the country, as well as the fact of negative environmental consequences of the exceeded growth influencing life quality.

The living conditions and the social well-being have also been determined by a Finnish scientist E. Allardt who distinguished three spheres of human needs [Allardt 1972]:

- to have – which refers to the sphere of possession and consumption of products, i.e. goods and services;
- to love – concerning the sphere of interpersonal relations;
- to be – which is connected with health conditions, environment, personal prestige, self-development, social and political activity.

In synthesis, the social well-being in its broader sense has been divided into two parts [cf. Allardt 1972]:

- the living standard (material needs) determined by the first sphere of human needs (to have);
- the quality of life (non-material needs) characterized by two spheres: the second (to love) and the third (to be).

In case of the living standard we are concentrating mostly on the objective indicators based on countable features. The life quality issue, in turn, treats output, i.e. final result in a distinctly subjective way which need not consider objective factors constituting the input, which would rather affect the positive standard of living. The reason for such situation lies in certain imponderables, like emotional reactions and reflections or personal intellectual evaluations, which result in the final effect, being a derivative of the level of satisfaction.

According to T. Słaby, the quality of life means all the elements of human life which are connected with his or her existence and their abilities to experience various emotional states stemming, e.g. from the fact that they have a family, friends, colleagues, etc., whereas the living standard mostly refers to the physiological needs [cf. Słaby 1990].

Summing up, the life quality means mostly the subjective feelings or impressions based on the evaluation of the ordering of the process of life and of the course of many individual sub-processes in the following dimensions:

- psychological (emotional),
- intellectual,
- social,
- political,
- economic (material).

The living standard, in turn, concerns the following data of living conditions for a defined period:

- financial,

– housing,
– technical infrastructure,
– social infrastructure,
– environmental (ecological).

It is easily noticeable that the living standard comprises the elements which are measurable, contrary to the quality of life.

CONCLUSIONS

The issues of living standard and life quality are of interdisciplinary character. Both of them are complex, but with special indication to the quality of life due to its rather subjective status based on many imponderable values. The intrinsic element for the living standard, as well as for the life quality is the point of reference, i.e. the phenomenon of relativism. This phenomenon, in case of the quality of life may refer to the family, friends and colleagues. The living standard, in turn, requires also dealing with a territorial aspect, comparing our status with commune, district, province or state. The life quality should be perceived as a process, whereas the living standard would be more of a static character. The comparison of these two phenomena has been presented in Table 5.

Table 5. Life Quality and Living Standard Matrix (*Matrix vitae perceptionis*)
Tabela 5. Macierz jakości życia i standardu życia

Attitude/Perception	Static (status quo)	Dynamic (process)
Subjective	Relativism	Quality of life
Objective	Living standard	Relativism

Source: Own elaboration.
Źródło: Opracowanie własne.

The question of the phenomenon of relativism, which occurs in both issues, concerns different points of reference. These points may be changed and thus influencing especially the variable life quality. In case of living standard such phenomenon also exists but anyway is more objective. Furthermore, one should mention here about a certain gap between the status quo and our needs and cravings, depending on our hierarchy of values. Thus, the bigger the gap the more subjective is our assessment and the more strongly the relativism is underlined.

The life quality is a subjective feeling (impression) of satisfaction from the course of the process of life in the following dimensions: psycho-social, material-economic, identitive-intellectual and personal-emotional. All these planes refer to the dynamic--chronological order and do not concern the moment of static-status quo.

The quality of life may also concern the positive life quality impression. Thus, the duration of the positive feeling of happiness may incline to enhance the evaluation of life quality by man, but probably only for a moment. The only condition for such improvement may concern the long-term positive impressions which are rather of a more permanent character. The quality of life involves mostly the qualitative but also the quantitative indicators showing the possibilities and their potential utilization. This level of utilization may additionally affect life quality.

The life quality is to a certain extent convergent with the living standard. This plus correlation means the life quality enhancement simultaneously with the increase of the material status but only to the extent which denotes the level of a definite income which positively influences the feeling of satisfaction and enables for example the self--realization.

Finally, we may state that the higher living standard need not mean the higher quality of life. The living standard is more easily obtainable than the life quality which should be rather associated with a continuous process, i.e. on a dynamic plane. It is just the rhythm, which being a derivative of the proper course of processes, enables at the same time the higher quality of life. Thus, the quality of life ought to be perceived as a resultant of a course of actions which obviously is determined, to a certain extent, by the living conditions which are in convergence with the living standard. All nations wish to develop and many of them have an opportunity for it, but they should also remember about the determinants of life quality which are not easily measurable and cannot be substituted by high HDI or GDP.

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STANDARD ŻYCIA A JAKOŚĆ ŻYCIA

S**treszczenie.** Artykuł obejmuje zagadnienia istotne dla współczesnego rozwoju świata, a związane ze standardem życia i poczuciem jakości życia. Wskazano na odmienny charakter tych dwóch pojęć, prezentując ewentualne możliwości ich kwantyfikacji. Zróżnicowanie postrzegania jakości życia i standardu życia wskazuje na pewien relatywizm w tym zakresie.

Słowa kluczowe: standard życia, jakość życia, PKB, HDI, rozwój, postęp, percepcja, proces

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PROBLEMS OF BUDGET ALLOCATION IN THE DEVELOPMENT OF LOCAL EDUCATION SYSTEM

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Abstract. Excluding the market mechanism allows the state for allocating public funds to finance educational tasks. Responsible for the quality of educational services offered are mainly the units of local self-government that are assigned funds to realize this aim within the frames of the educational part of general subvention. However, the basic indicator of decentralization of competencies is the principle of adequacy of financial means and the tasks assigned. The aim of the paper is to highlight the defects in the construction of the educational part of the general subvention that make it virtually impossible to prove the realization of the principle of the adequacy of means to the tasks assigned.

Key words: allocation, subvention, local self-government, education

INTRODUCTION

There is a widespread consensus on the question of the necessity of state funding of the classical public goods and services. The range of state engagement in the provision of these goods is implied by the fact that the market mechanism does not guarantee a just redistribution of national income. Thus, thanks to the allocative function of state budget, a part of goods and services is allocated beyond market mechanisms through the activities of government and local self-government. Exclusion of market mechanism allows the state to allocate public funds, among others, to finance the educational tasks. According to article 70 of the Constitution of the Republic of Poland [DzU 1997 No 7, item 483 with amendments], education is compulsory in Poland until the age of 18. The subjects responsible for enforcement of this provision are mainly the local self-government units (JST). This is due to the education system reform introduced in 1999 that put the burden of realization of most of educational tasks on communes, districts, and regional governments. Special attention should be paid to the commune level among the JST, because it is characterized by:

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– the longest self-government experience in public fund management (since 1990);
– is most numerous among the JST (nearly 2500 units);
– the highest degree of social and economic development differentiation among three administrative types (communes: urban, rural-urban, and rural).

According to art. 5a paragraph 2 of the Education System Act [DzU 2004 No 256, item 2572 with amendments], the educational task of communes is providing for education, upbringing, and care including social prevention in public kindergartens (including integrating groups in special kindergartens), primary schools and gymnasia (including those with integrating groups). Communes may also, based on an agreement with districts, carry out the tasks ascribed to the latter as if they were ascribed to the communes (for instance post-gymnasium schools). In order to accomplish this, JST are guaranteed a share in the budgetary income of the educational part of the general subvention (SO). The basic indicator that should lead to the systemic and legal changes connected to decentralization of competencies is the principle of the adequacy of financial means received in relation to tasks assigned (Konrberger-Sokołowska 2001). European Charter of Local Self-Governance sees this principle as fundamental in stating that, the adequacy of financial means received in relation to tasks assigned, the value of financial resources directed to local communities should be adjusted to the range of competencies assigned to them by the constitution or the law[1]. The aim of this paper is to highlight the defects in the construction of the educational part of the general subvention that make it virtually impossible to prove the realization of the principle of the adequacy of means to the tasks assigned.

PLANNING THE EDUCATIONAL PART OF GENERAL SUBVENTION

The amount of the educational subvention is planned on a yearly basis, together with the passing of budgetary statute. JST do not have a direct influence on the works on the budgetary statute draft, and even more so, on the procedure of passing this kind of law. The task of drafting a proposal of the amount of the subvention lies with the Minister of Finance. The Minister of Finance presents to the Council of Ministers his proposal concerning the public budget for the following year together with justification. The draft is passed by the Council of Ministers and submitted to the Sejm (Lower Chamber of the Polish Parliament) and the Senate before September 30th of the year preceding the planned budgetary year. If it turns out to be impossible to submit the budgetary statute draft, the Council of Ministers is obliged to submit a statute draft called interim budget. In this case the Sejm passes a statute on the provisional budget that sets only the general expenses for short term and in a simplified form. The budgetary statute should on principle be passed before January 1st of a given year – however this is not clearly settled. In the case when the budgetary statute of interim budget are not passed before the beginning of the year, the state public finances economy is based on the statute draft that has been presented to the Sejm. Polish law does not allow for the possibility to apply the prorogation of state budget – that is to say the possibility to prolong the enforcement of the budgetary statute

[1] See European Charter of Local Self-Government, DzU 1994 No 124, item 607.

from the previous to the following year. Within 21 days from the day of the promulgation of the budgetary statute the units responsible for budgetary parts present to the Minister of Finances a detailed revenues and expenditure plan of a given budgetary part that is later called 'implementation agreement'. The by the Constitution, and the public finances statute [Public finances statute of June 30th, 2005. DzU No 249, item 2104] implied schedule of passing the State Budget is not without impact on the schedule of passing the budgets of the local self-government units, and also on the financial plans of the organizational units subject to the JST (schools for example). The Minister of Finances, knowing the assumptions of the State Budget draft, submits to the JST on October 15th of the year preceding the fiscal year, at the latest, the planned amounts of the educational part of general subvention (which constitutes one of the most important revenue source in communes' budgets). The communes' Executives are obliged to prepare, before November 15th of the year preceding the fiscal year, drafts of the budgetary resolution (including the expenditure in part 801: Education and upbringing, and 854: Educational upbringing care that are both financed mainly by the SO). Local self-government units enacting budgetary resolutions should base on the final public funds transfer quota, including the SO quota. Those means are enforced only after the State Budget is enacted. The legislative bodies of the JST should nevertheless pass the budgetary resolutions until March 31st of the fiscal year at the latest[2]. Depending on the date when the budgetary statute is passed, the final deadline for the enactment of the financial plans of the organizational units subject to the JST can be prolonged even until May 21st of the fiscal year. In the school calendar this virtually means the end of classes realized in the spring semester.

In the process of establishing the rules of division of the educational part of general subvention for JST, an important role is played by the Ministry of Education and the Joint Committee of Government and Local Self-Government (KWRiST). The first of these institutions realizes the educational policy of current authorities. This concerns most of all the promulgation of implementation acts to the two most important legal acts of the field: Educational system statute, and the Teachers' Charter statute. The Joint Committee of Government and Local Self-Government in turn, is assumed to enable the JTS a real influence on the shape of state policies concerning the socio-economic development. The tasks assigned to the Committee include among others:

- analyzing the information concerning the preparation of drafted legal acts, documents, and governmental programs concerning issues connected to self-government, and especially the envisaged financial impacts;
- expressing opinion on normative acts programs, and other governmental documents concerning issues connected to local self-government, including also those that determine relations between local self-government and other organs of public administration[3].

[2] If the Budget is not passed by this deadline, regional accounting chamber, within April 30th of the fiscal year determines the JST budget in reference to its own tasks and assigned tasks. Until the day the budget is determined by the accounting chamber, the basis for activities remains the State Budget draft.

[3] Statute of May 6th, 2005 on the Joint Committee of the Government and Local Self-Government and the representatives of the Republic of Poland in the Committee of Regions of the European Union. DzU No 90, item 759.

In the framework of works concerning the allocation of the subvention to finance educational tasks for JST especially important are works undertaken by the Group on Education, Culture and Sport of the Joint Committee of Government and Local Self--Government. Resolution drafts concerning the allocation of the educational part of general subvention constitute one of the most important and most difficult at the same time, fields of opinion-expression by the Committee. Negative opinion by the representatives of JST, concerning the drafts of educational legal acts is not binding for the governmental side. Similar legal effects are the result of a negative opinion of the representatives of groups who are participating in social consultation on legal basis (among others: labor unions, National Executive Committee of the Polish Teachers' Union, the Secretary of the Episcopate of Poland). It is worth noting that the self--government circles demanded multiple times that in the case of legal acts drafts that concern local self-government the opinion of the self-governmental side of the KWRiST should be obligatorily submitted by the first reading of a statute draft in the Sejm. Also in further proceedings the participation of the self-governmental side should be granted the right, with the possibility to express her opinion in a given case. The only active participation within the frame of institutional dealing with the SO is assigned to JST in the process of expenditures control.

REDISTRIBUTION OF THE EDUCATIONAL PART OF GENERAL SUBVENTION

According to art. 28 of the statute of November 13th, 2003 on the revenues of local self-government units [DzU No 203, item 1966 with amendments] the method of redistribution of the educational part of general subvention should take into account especially the types and kinds of schools, and units led by JST, the degrees of teachers' promotion, and the number of pupils in these schools and educational establishments. The distribution of the educational part, after deducting a reserve at the disposal of the proper minister responsible for public finances, is based on the algorithmic formula determined in the attachment to the resolution of the minister responsible for education. This way of regulating the method of redistribution of subvention means is contrary to the provisions of art. 167 of the Constitution and has its legislative effects:

1) it is established arbitrarily by one minister, most often without considering the opinion of the local self-government part of the Joint Committee of the Government and Local Self-Government, or respective self-government organizations;
2) causes an unacceptable instability of the greatest part of financial support of JST (over 25% on average) through introducing unjustified changes at least once a year (even if the range of educational tasks remains the same);
3) is passed and promulgated on a date much later than the legal deadline indicating when the Minister of Finance should inform JST about the indicators necessary to construct draft budgets (within October 15th of the year preceding the fiscal year);
4) local self-governments do not have at their disposal the initial data that would enable reliable analysis of the algorithm proposal (it happens that the minister refuses to disclose data).

The rules of subsiding should take into account the principle of law stability, and 'should not be changed too often' [Ofiarski 2002]. This principle is not respected in the case of educational subvention. For every unit of local self-governance it has been established that the indicator for the subvention redistribution should be the general number of 'calculative' pupils (Up). This is a wrong approach because calculative pupil does not constitute any of the educational tasks categories that are listed in Art. 5a of the School Education Act. The number of calculative pupils determines in turn the amount of the financial standard A of subvention redistribution (a calculative unit quota per pupil). In absolute quota terms the amount of standard A in 2006 was 1028.86 PLN higher than in the year 2000, whereas in absolute relative terms standard A was in 2006 153.2% of standard A in 2000. It is difficult however to look, on the basis of this analysis, to what extent the increase in standard A corresponded to real increase in educational tasks. This catalogue includes so differentiated in financial terms tasks as for example:

– financing current expenditures (including wages and their derivatives) of schools and establishments administered by units of local self-government;
– financing expenditures connected to individual teaching;
– additional funding for pupils who are not Polish citizens.

To responsibly use the word 'financing' would mean to guarantee the full coverage from the subvention of the expenditures for a given task, and the wording 'additional funding' would mean determining the degree of support by state budget.

The algorithm in current form refers to a partial refund of the teachers' remuneration costs that the JST actually bear (see Table 1). In the face of the lack of the standard number of pupils per teacher with an expected promotion degree JST arbitrarily shape the local hiring policy. Therefore the teachers' wages costs are territorially highly differentiated.

Table 1. The amount of financial standard A per pupil in relation to the minimal teachers' wage according to their promotion degree

Tabela 1. Wielkość standardu finansowego A na ucznia w odniesieniu do minimalnej płacy nauczycieli w zależności od ich stopnia

Fiscal year	Amount of standard A per pupil [in PLN]	Minimal monthly teachers' wage (university degree and pedagogical training) according to promotion degrees [in PLN]			
		Trainee teacher	Contract teacher	Appointed teacher	Chartered teacher
2000	1932.97	1009	1177	1401	1513
2001	2122.43	1046	1220	1453	1569
2002	2271.41	1046	1240	1568	1883
2003	2403.77	1078	1278	1617	1941
2004	2644.24	1110	1316	1666	1999
2005	2769.80	1160	1375	1742	2090
2006	2769.80	1160	1375	1742	2090

Source: Economic Department of the MEN and the resolutions of the minister responsible for education concerning minimal wages of teachers[4].

Źródło: Wydzial Gospodarczy MEN oraz rozporządzenia ministra odpowiedzialnego za edukację dotyczące minimalnych płac nauczycieli.

[4] Ruling of the Minister of National Education of May 11th, 2000 on the amount of minimal teachers wages, the method of calculating the basic wage amount per calculative hour, list of positions and additional tasks and activities that allow for granting a functional bonus, general conditions of

Educational part of the general subvention does not influence the selection of teaching cadre at schools, and it does not have direct connection to the state of the material educational basis in the region. Applying in the algorithm the weightings that increase the standard A does not guarantee a full differentiation of education costs according to the type and kind of an educational establishment. For example, for the I, II, and III education phase (level of primary school and gymnasium) a common weighting has been worked out. Costs of education in secondary general schools, secondary vocational schools, and vocational schools are unified through a common weighting for all post--gymnasium schools. The weightings applied do not also reflect the variety of costs of administering one type of educational unit within a JST of the same administration type but different functional type (e.g. rural communes surrounding agglomeration with high density of population versus rural communes with low population density). This lack of differentiation of means adjustment results in a situation where some JST manage to cover current expenditures from the subventions, whereas others do not.

The third indicator of SO redistribution, which is the number of pupils in the educational units is made visible only in the case of educational services for national minorities that in Poland constitute an insignificant percentage of population of pupils in general. Finally, educational part of general subvention does not also generate effects corresponding to the costs incurred in the light of external monitoring, i.e. the results of final tests after primary school, and the gymnasium exam (see Table 2).

Table 2. Pearson's Correlation Coefficient in sections 801 (education and upbringing) and 854 (educational upbringing care) with annual average results of 6th class test, and the gymnasium exam

Tabela 2. Współczynnik korelacji Pearsona w działach 801 (oświata i wychowanie) oraz 854 (edukacyjna opieka wychowawcza) z rocznymi średnimi wynikami testu na koniec 6 klasy oraz egzaminu gimnazjalnego

Characteristics	Test			Exam					
				Humanities part			Mathematics and biology part		
	U	UR	R	U	UR	R	U	UR	R
General expenditures per pupil	0.09	0.15	0.11	0.16	0.11	–0.02	0.05	0.06	–0.09
Expenditures covered by subvention per pupil	–0.21	–0.21	–0.08	–0.11	–0.10	–0.21	–0.06	0.06	–0.11
Expenditures covered by other means per pupil	0.16	0.25	0.14	0.19	0.15	0.03	0.07	0.03	–0.06

Legend: U – urban communes excluding towns with district rights, UR – urban-rural communes, R – rural communes

Source: Economic conditioning of the results of the 6th class tests and the gymnasium exam conducted in years 2002–2004. MEN, Warsaw 2004.

Źródło: Economic conditioning of the results of the 6th class tests and the gymnasium exam conducted in years 2002–2004. MEN, Warszawa 2004.

granting motivation bonus, list of difficult, and onerous work conditions constituting the basis for granting work conditions bonus, and detailed cases of including the work periods and other periods granting the right to the years service bonus. DzU No 39, item 455. Amended. DzU 2001 No 52, item 544; 2002 No 160, item 1323; 2003 No 34, item 286; 2004 No 74, item 667, and the Ruling of the Ministry of National Education of January 31st, 2005, concerning the level of minimal basic wage of teachers, general conditions of granting of the bonuses to the basic wage, and increases for work on Polish bank holidays, DzU No 22, item. 18. Amended 2006 No 43, item 293.

In the regression analysis of 'bi-deciles groups, that is to say according to means embracing successive 5% (1/20) of the whole set, the decrease in education results was also noted together with the increase in the amount of subvention. In case of rural communes was noted even that the highest average test results were obtained in those bi-deciles, where the indicator of the amount of the financial means coming from the educational subvention per pupil was the lowest. The research shows that the greatest influence on the education results is not by the amount and structure of education funds, but the family and local environment of pupils (overwhelming impact of social status expressed in the level of education, and wealth of a pupil's parents).

THE SPECIFICITY OF RURAL COMMUNES IN THE ALGORITHM OF REDISTRIBUTION OF EDUCATIONAL PART OF THE GENERAL SUBVENTION

Rural communes incur additional costs of administrating educational units because of, among others:

- objectively smaller rural schools which is correlated with the population density per square kilometer,
- lack of decrease of the teachers number corresponding to the service to a decreased number of pupils (demographic trend effect),
- the obligation to provide for school transport (due to the reorganization of school network),
- existence of dayrooms, implied by commuting and with it connected times of waiting
- payment of rural and rent allowance to teachers working (but not necessarily living) in rural areas,
- performing additional educational services, given the poorer (than in cities) scientific and cultural infrastructure (financed in the frames of the school system).

It is nevertheless difficult to prove that an increased standard A covers totally or to a significant extent the greater financial needs in the field of educational tasks performance in rural areas (Kowalska 2003). Additionally it is worth mentioning hat the rural education is characterized by a difference that can be notice every school year between the number of births, and the number of pupils attending schools. The reason for that should first of all be traced to the fact of the 'flight' of pupils to rural schools (especially in communes located in the neighborhood of bigger cities), and to the change of living place by whole families. The pupils' flight from villages to cities usually limits the educational subvention that remains at the disposal of the commune. The limitation of the subvention brings with it the necessity to introduce various kinds of savings, generally assuming the dissolution or reorganization of primary and filial schools, or creeping combination of classes from these units. This in turn causes increasing for the pupil the distance between home and school, and impoverishes the educational offer, which further enhances the migration of pupils to cities. In this way a kind of vicious circle emerges, multiplying the effects of the already very disadvantageous for rural education, financing solutions.

CONCLUSIONS

The construction of educational part of general subvention is so designed as to make it impossible for JST to prove the lack of adequacy between means and assigned tasks. Even though the currently existing law does not include a provision that would imply the state budget's responsibility to finance – within the frames of the educational part of general subvention – all costs of performing educational tasks by JST, this means transfer in practice constitutes the most important educational tasks funding source at every level of local self-government in Poland. So far, in the field of administration theory and theory of public finances, the exact enough criteria useful for evaluating the degree of realization of the adequacy of means and ends principle have not been worked out. The officers in local self-governments expect from the government that it launches works on the 'educational standard' that would determine the minimal educational offer that will allow to create comparable teaching and care conditions in towns, and villages. Such standards should include, apart from the realization of framework teaching plans, the determination of conditions in which the activities would be pursued. The MEN representatives are rather skeptical towards realization of these expectations referring to the definition of the notion 'standard' – pattern, determining an average norm, average type, and as a consequence securing an average or minimal realization of the assumed aim. According to MEN the determination of standards in the field of education could as a result be perceived as establishing an average educational norm (not only in the financial and organizational, but also quality aspects), and thus – as a systematic solution that would exhaust the expectations of the state and local societies in this respect. Whereas, raison d'etat in the field of education is to introduce legal solutions that allow for, and initiate activities above average expectations. Establishing standards in this area does not correspond with the qualitative development of schools and educational units that should be the fundamental aim of the state's educational policy[5]. However, given the prepared by the Ministry of Finance proposal to enact task-oriented budgets, the financial responsibility for realizing educational tasks should be divided between JST and the government [Kowalska 2000a, b]. The first step of the analyses should be to establish what the costs of realization of the framework teaching plans are according to the type and kind of the educational establishment. This issue is the most fundamental for the proposed research direction due to the multi-aspect approach to education financing. The framework teaching plans' analysis highlights for example the factors that actually differentiate the financial needs of JST. Basing on this, the educational subvention model, in which the basic weighting is connected to the administrative division into rural and urban communes, could be abandoned.

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PROBLEMY ALOKACJI BUDŻETOWEJ W ROZWOJU LOKALNEGO SYSTEMU OŚWIATY

Streszczenie. Wyłączenie mechanizmu rynkowego pozwala państwu na alokację środków publicznych na realizację zadań z zakresu oświaty. Odpowiedzialność za jakość świadczonych usług oświatowych spoczywa w głównej mierze na jednostkach samorządu terytorialnego otrzymujących na ten cel środki w ramach części oświatowej subwencji ogólnej. Podstawowym wyznacznikiem decentralizacji kompetencji jest jednak zasada adekwatności środków finansowych do przekazanych zadań. Celem artykułu jest próba uwypuklenia wad konstrukcyjnych części oświatowej subwencji ogólnej, które praktycznie uniemożliwiają udowodnienie realizacji zasady adekwatności środków do zadań.

Słowa kluczowe: alokacja, subwencja, samorząd, oświata

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EUREPGAP – THE PRINCIPLES OF CERTIFICATION AND THEIR IMPLEMENTATION IN HORTICULTURAL HOLDINGS

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Abstract. This paper presents the history and principles of EUREPGAP certification. The system is evaluated on the basis of research conducted among three big producers of fresh tomatoes and cucumbers in the Lublin Province. EUREPGAP consists of voluntary standards for the certification of such agricultural products as fresh fruit and vegetables, cut flowers, green coffee, meat, fish and seafood. The certificate is required by all main international chains of supermarkets. Certifying food safety management system in horticultural holdings is quite advantagous to them. It is shown by presenting opinions of investigated producers about costs and benefits of EUREPGAP. The interviewed farmers have also given the reasons for implementing the system and described the difficulties that have appeared whilst certifying and maintaining EUREPGAP.

Key words: food quality and safety, EUREPGAP certificate, greenhouse vegetable producers, chains of supermarkets

INTRUDUCTION

In the days of central planning economy, Polish consumers faced chronic deficit of agricultural and food products. The majority of farmers and entrepreneurs focused on maximizing the quantity of production without being concerned about the quality. Directly after the transformation of Polish economy into a market economy in 1989, agrifood production increased rapidly. It caused a big surplus of food articles on the market. Overproduction of agrifood arose from an increase in food prices along with a stable income of the population. In the nineties economic situation of Polish agricultural holdings was continually getting worse. It was more and more difficult to find a purchaser of offered commodities. Food manufacturers, retailers or wholesalers rarely contracted agrifood production. It significantly raised the financial risk of farmers' activity. The

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relation between agrifood prices and the prices of production means and services was very unprofitable for farmers. Agrifood prices often fluctuated and it was hardly possible to predict the level of prices for next season. In this situation, farmers were not willing to specialize. The specialization could contribute to lower costs of production and improved quality. In the nineties export of Polish agricultural products to the European Union countries was much lower than import. It was mainly caused by the periodical duty-free import of grain and fodder. Falling profitability of agrifood production in Poland influenced the decrease in the number of holdings with the ability to develop. Polish agriculture did not keep pace with the developing economy and growing requirements of agrifood market.

At present, Polish individual farmers are still in an unfavorable situation. Their major problems are: low profitability of agricultural production, abrupt short-term changes of agrifood prices and low marketability of farm products. Polish agriculture is underdeveloped compared to the countries of EU-15 or USA. However, Poland's accession to the EU has produced more possibilities of farm development. Due to financial support from EU structural funds and better export conditions, farmers have a bigger chance to increase their income. Since the first of May 2004 Poland has not encountered legislative and trading barriers on the EU common market, which occurred before. The proof of it is a tremendous growth of turnover of agricultural products in Poland's foreign trade in 2004.

Nowadays, globalization implies aggressive and continually rising competitiveness on the agrifood market. In effect, the quality of production becomes a big market value. Ensuring high quality of farm products is a basic condition under which farmers can enter the market, stay there, find a client and keep him. Whilst purchasing agrifood, quality and safety become crucial determinants of consumers or clients' choice. They look forward to buying high and stable quality goods (often certified), and are willing to pay for good quality and safety.

At present, the concentration process is characteristic of the world trade in agrifood. Rapid development of supermarkets is also noticed in Poland. However, as compared to other EU countries, the concentration process on the food distribution market in Poland is slower. It is the result of a big number of small-scale agricultural holdings that do not meet the requirements of food retail chains. Therefore, quick and efficacious adjustments to these requirements are necessary.

To supply supermarkets with fresh fruit and vegetables, horticultural holdings have to have the crops EUREPGAP certified. It can be explained by a necessity of product traceability and safety. Moreover, farmers have to ensure big and constant deliveries. The reliability of supermarkets, which depends on farmers' deliveries, implies the loyalty of customers. It is highly possible that larger-scale agricultural producers having their crops quality certified enter into trade contacts with international food retail chains. These contacts would give farmers a much higher probability of selling bigger lots of goods and more stable income. If Polish horticultural holdings do not implement the EUREPGAP system, supermarkets will have no choice and they will offer in their stores in Poland fruit and vegetables from abroad.

The EUREPGAP certificate is usually required when Polish horticultural products are exported to other EU countries. This can be a threat to some farmers, as non-compliance with the EUREPGAP standards may lead to the exclusion from certain export markets.

Hence, the EUREPGAP certification of crops should give Polish farmers measurable benefits. It is worth noticing that Poland is the fourth producer of fruit and vegetables in the EU[1].

Therefore, more and more Polish farmers produce in compliance with the EUREPGAP standards or are in the process of implementing the system. It might be said that EUREPGAP is a peculiar "pass" to enter the market.

High quality production of agricultural raw materials confirmed with a certificate should implicate that farmers will come into trading contacts and maintain them for a longer time. EUREPGAP should also ensure Polish producers a stronger position whilst negotiating the terms of trade.

Favorable terms of trade consist of good payment conditions, satisfying levels of prices, contractation and so on. At present, integration initiative usually belongs to the food retail chains. Supermarkets cannot base their activity on differentiated goods delivered by accidental agricultural producers. A farmer who is interested in long-term cooperation has to meet the standards required by a big food chain e.g. by implementing EUREPGAP. The principal benefits of contractation of agricultural production are lower sale risk and financial risk (thanks to EUREPGAP it is easier to find a purchaser who pays on time). Contractation and other favorable terms of trade should also cause an increase of farmers' income. A higher and surer return on agricultural production would let the farmers invest and modernize their holdings, enlarge the area of their farms and increase the scale of production.

EUREPGAP – CERTIFICATION OF THE SYSTEM

In the last few decades, the probability of food contamination has increased dramatically. It has been a result of intensifying agricultural production by increasing the use of pesticides, fertilizers, growth hormones and antibiotics, more and more common application of genetically modified organisms, BSE (Mad Cow Disease – bovine spongiform encephalopathy) cases and presence of dioxins in fodder. As consumers and customers demand for high quality and safe food was constantly increasing, in order to ensure safety and good quality of primary products, a new voluntary standard was developed [Luning, Marcelis, Jongen 2005]. To feel secure, the European Union issued a directive, which said that retailers were responsible for the safety of supplied food articles. In response to that, in 1997 the Euro-Retailer Produce Working Group (EUREP) started an initiative of working on the EUREPGAP standard. There were fifteen members of this organization (the biggest international food retailer chains like Ahold, Tesco, Marks&Spencer, Safeway, Metro Group) [Urbaniak 2006]. They developed the new standard specifying requirements for food safety management system in horticultural holdings. Today EUREPGAP can be implemented in farms, which produce fruit, vegetables, cut flowers, mushrooms, green coffee, meat, fish and seafood. EUREPGAP includes the requirements of GAP (Good Agricultural Practices), HACCP (Hazard Analysis and Critical Control Points) and is based on integrated crop and pest management principles.

[1] Average production of fruit and vegetables in Poland in 2002–2004 equaled 8279 thousands of tons. 9.4% of this amount was exported. Italy, Spain and France were the only EU countries with a bigger production of fruit and vegetables [Szybiga 2006].

EUREPGAP requirements are based on several basic concepts:

1. Food safety – the standard is based on food safety criteria, derived from the application of generic HACCP principles (e.g. traceability of food products, fertilizer storage, hygiene risk analysis in produce handling or storing process);
2. Environmental Protection – the standard consists of environmental protection measures included in Good Agricultural Practices, which are designed to minimize the negative impact of agricultural production on the environment (e.g. by reducing the use of pesticides and fertilizers, waste and pollution management, recycling and re-use, suitability of equipment and its accessibility for cleaning, maintenance and preventive maintenance);
3. Occupational Health, Safety and Welfare – the standard establishes a global level of occupational health and safety criteria on farms, as well as awareness and responsibility regarding socially related issues (by establishing the lay-out of premises, including workspace and employee facilities, training activities and so on);
4. Animal Welfare (where applicable) – the standard establishes a global level of animal welfare criteria on farms including proper and humanitarian treating of livestock (e.g. during transport or in case of an illness) [Wiśniewska (5) 2006].

EUREPGAP is a pre-farm-gate-standard that means the certificate covers the process of the certified product from before the seed is planted until it leaves the farm.

Technically speaking, EUREPGAP is a set of normative documents. These documents cover the EUREPGAP General Regulations, the EUREPGAP Control Points and Compliance Criteria and the EUREPGAP Checklist.

The EUREPGAP General Regulations is a document, which explains the structure of certification to the EUREPGAP Standard, and the procedures that should be followed in order to obtain and maintain the certificate.

The EUREPGAP Control Points and Compliance Criteria Protocol (CPCC) gives specific details on how the grower complies with each of the scheme requirements. The CPCC consists of 14 different sections and 2 annexes, with a total of 210 Control Points. All Control Points must be audited; the possible answers are: compliance (yes), non-compliance (no) or Not Applicable (N/A). The CPCC scheme is divided into 47 Major Musts (red background), 98 Minor Musts (yellow background) and 65 Recommendations (green background). To obtain and maintain certification producers have to demonstrate 100% compliance with Major Musts and 95% compliance with Minor Musts. It is up to them which Recommendations they will take into account.

The EUREPGAP Checklist is the ground of the grower external audit and a set of points, which the grower must control to fulfill the annual internal audit requirements.

The EUREPGAP Protocol is divided into the following 14 sections: traceability, record keeping and internal self-inspection, varieties and rootstocks, site history and site management, soil and substrate management, fertilizer use, irrigation/fertigation, crop protection, harvesting, produce handling, waste and pollution management, recycling and re-use, worker health, safety and welfare, environmental issues and complaint form. Annex 1 gives guidelines for risk assessment for new plantings. Annex 2 deals with crop protection product use in the countries that allow extrapolation [Wiśniewska 2005].

The EUREPGAP system can be certified by independent authorized registered certification bodies accredited to ISO Guide 65 (EN 45011). In Poland there are only

branch offices of international certification bodies that certify EUREPGAP (e.g. BCS Poland, CERES-Poland, Control Union Certifications-Poland, Agro Quality Support (AQS), SGS Poland).

Both individual growers and grower organizations can apply for the EUREPGAP certification. In both cases internal and external audits have to be conducted annually to maintain the certificate. The aim of the audits is to determine whether the food safety management system conforms to the planned arrangements and to the requirements of the standard and is effectively implemented and updated. External audits are conducted by approved certification bodies. Group certification additionally requires the implementation of a common EUREPGAP management system in all farms belonging to the group. All the audits and verification processes are conducted among all the members of the group and on the level of organization. Moreover, all the producers in the group have to use the same procedure of internal audit.

Another option for the EUREPGAP certification is a benchmarking option. This option is a specially designed approval process that facilitates existing national or regional quality assurance schemes to prove equivalence with the EUREPGAP requirements. Hereby multiple audits are avoided at grower level and the development of regionally adjusted integrated crop management systems is encouraged.

Farmers who want to get certified to EUREPGAP have to take certain costs into account. Generally they have to pay for registration, inspection and certification.

The EUREPGAP certification is valid one year. In order to maintain the certificate, producers have to apply for re-certification. A farmer who obtains the EUREPGAP certificate receives an individual registration number, which can be given to his trading partners [Wiśniewska (6) 2006].

The aforementioned principles of implementing, certifying and maintaining the EUREPGAP system do not seem to be too hard or to be a burden for agricultural producers. It is worth making an effort and applying for the certificate especially in case of larger-scale farmers. The EUREPGAP certification is an intelligible means, recognized in the whole world, of confirming meeting quality requirements set forth in the international trade. Moreover, certification of applied quality and safety management systems is desirable especially in food production. EUREPGAP is a business-to-business label and is therefore not directly visible to the consumers. However, consumers are able to evaluate only sensuous characteristics of food products. To learn about nutritive values and sanitary safety of food, they have to rely on producer's declaration. EUREPGAP is a document of the reliability of activities designed to ensure quality and safety. This document enhances the reliability of agrifood producer and his products. Thus, the certificate should increase customers' loyalty.

In 2002 EUREPGAP was implemented in a Polish farm for the first time. In the beginning, only bigger agrifood producers that were selling their commodities in Western Europe were interested in obtaining the certificate. EUREPGAP was a condition on which international trading contacts could be maintained. Agricultural producers appreciated the value of the EUREPGAP certificate after the accession of Poland into the European Union when export to other European countries was facilitated. Since 2004, more and more small and medium producers (especially those that belong to agricultural producer groups) have become interested in obtaining the certificate. EUREPGAP has

become more common in farms, which have wanted to meet the requirements of big chains of supermarkets (Tesco, Real, Hypernova, Macro Cash and Carry etc.). For the past four years these farmers have created a prevailing group of holdings among the producers applying for and already maintaining the EUREPGAP certificate. Nowadays, producers of tomatoes in greenhouses, apples, soft fruit and mushrooms are the most interested in the certification [Katulski 2005].

Horticultural holdings, which produce safe food in compliance with the EUREPGAP principles, still have some opportunities to choose a buyer of their products. They can also profit from the changing tide of agrifood market. This is possible because there is a small number of EUREPGAP certified holdings in Poland (in 2006 there were about 90 of them) [Wiśniewska (6) 2006].

So far, there has been no reliable and systematically updated register of EUREPGAP certified farms in Poland. However, some records can be found on the websites of EUREPGAP consulting groups. One of the consulting companies, which advises Polish farmers how to implement and maintain EUREPGAP, is HACCP Center. This firm took part in implementing the system in 33 horticultural holdings in Poland (in 4 holdings in Lubelski Region; in Niemce, Cuple, Osiny and Granice).

FARMERS' OPINIONS ABOUT EUREPGAP

The application of the EUREPGAP system in practice was evaluated on the basis of research conducted among three big horticultural holdings in the Lublin Province (two of them are located in the Chodel gmina [commune], and one – in the Niemce commune). The author of the article interviewed the following producers: the director of Gospodarstwo Szklarniowe LEONÓW Sp. z o.o. (Greenhouse Holding LEONÓW Ltd) in Niemce, the owner of Produkcja Ogrodnicza Andrzej Chechliński (Andrzej Chechliński Horticultural Production) in Cuple and the manager of Gospodarstwo Ogrodnicze Agnieszka Janik (Agnieszka Janik Horticultural Holding) in Osiny. The number of studied farms results from the information about EUREPGAP certified holdings that the author of the article managed to find (as was already said, no official register of these holdings was available). Unfortunately, the author did not succeeded in interviewing the horticultural producer in Granice.

The producers were interviewed in their holdings in January 2007. The questionnaire consisted of four main parts: the first section dealt with farm activities, the second – with the reasons for implementing EUREPGAP, the third part referred to difficulties and inconveniences that appeared whilst implementing and maintaining the system and the fourth section concerned the benefits of the EUREPGAP certification.

All the three studied farms produce tomatoes and cucumbers in greenhouses and have all the crops EUREPGAP certified. The Horticultural Holdings in Cuple and Osiny are one-owner businesses whereas Leonów is a limited company owned by the employees. The farms have been on the market for 20–35 years but they have operated in the present legal forms for 7–10 years. Leonów differs from the other two holdings because it was the property of the Treasury before 2000. Moreover, Leonów has been the biggest greenhouse producer of tomatoes and cucumbers in the Lublin Province for 35 years. For

many years Leonów has been a well-known brand in the whole country and even abroad. It has had a big impact on its trade contacts. However, horticultural holdings in Cuple and Osiny seem to be more innovative, modernized and more up-to-date. These producers use the latest technologies and infrastructure solutions. Their know-how comes from the best Dutch specialists. The relation between the number of employees and the cultivated area (the number of ha per one permanent full-time employee) is also more profitable in these two farms (column 4 in Table 1). What is more, labor efficiency in the holdings in Cuple and Osiny is higher than it is in Leonów (column 5 in Table 1). However, area productivity of the holdings in Osiny and Leonów is much higher than it is in the farm in Cuple (column 6 in Table 1).

Table 1. The profile of studied horticultural holdings
Tabela 1. Profile badanych holdingów ogrodniczych

Name of holding	Area of crops in greenhouses (in ha)	Total annual production (in tons)	Number of permanent full-time employees	3:1	2:3	2:1
	1	2	3	4	5	6
Greenhouse Holding LEONÓW Ltd in Niemce	19.6	8000	240	12.2	33.3	408.2
Horticultural Production Andrzej Chechliński in Cuple	13.5	3500	38	2.8	92.1	259.3
Horticultural Holding Agnieszka Janik in Osiny	6.5	3000	60	9.2	50.0	461.5

Source: Own elaboration on the basis of conducted research.
Źródło: Opracowanie własne na podstawie przeprowadzonych badań.

The products of the farms in Cuple and Osiny are partly exported (50% of their total annual production) and sold to big chains of supermarkets in Poland, but only through intermediaries. According to the farmers the biggest advantage of intermediaries is that they pay cash and are not late with payments. Leonów exports its vegetables (25% of its total annual production) both through middlemen and on its own. The farm makes trade agreements with all the chains of supermarkets that operate in Poland.

The producers under investigation completed the certification procedure not long ago: Leonów – in August 2005 (as the first farm in Poland), the holding in Cuple – in October 2005 and Osiny – in July 2006. The process of implementing the EUREPGAP system lasted for about 3 months in the farm in Cuple, 6 months in Leonów and one year in Osiny. All the respondents claimed that all the employees had taken part in implementing the system. Each farm hired the same consulting company (HACCP Centre) whilst working on complying with the EUREPGAP standards. The interviewed producers were unanimous in their opinion about the level of the costs of implementing and maintaining the certificate. They did not find these costs too high. The biggest expenditures were related to adapting the premises to the EUREPGAP standards (inevitable adjustments of floors, pavements, bathrooms, toilets, storage rooms etc.). None of the investigated producers has applied for a financial support from the EU structural funds designed for the modernization of farms. However, they are planning to use the EU resources in the nearest future.

The director of Leonów, when asked why they implemented EUREPGAP, said that they thought that EUREPGAP might be obligatory in the near future. In Cuple the decision about certifying the crops was made on the basis of increasing orientation for big clients (like Tesco, Real, Macro Cash and Carry etc.). The producer hoped that the certificate would help him to sell his products on the common EU market while the accession of Polish agrifood producers to this market became easier after the first of May 2004. The owner of the horticultural holding in Osiny admitted that the EUREPGAP certificate was usually requested whilst exporting food articles to Western Europe and Scandinavian countries and that the certificate was sometimes required by the clients from Southern and Eastern Europe (however, the quality requirements of the countries from these parts of Europe are rising rapidly). Besides that, it is quite possible to get a better price for the products thanks to EUREPGAP.

All the three interviewed producers judged the process of implementing and maintaning the EUREPGAP certificate as not too hard. Certainly, they ran into some difficulties, especially in the beginning. Leonów has had problems with finding a firm which would pick up waste products (empty fertilizer and pesticide packages, soiled foil, glass pieces, empty plastic bottles etc.) and acknowledge the collection of them with invoices. The producer has also had some problems with maintaining the system of monitoring and

Table 2. Benefits of the EUREPGAP certification according to the producers
Tabela 2. Korzyści z certyfikacji EUREPGAP według producentów

Benefits	Greenhouse Holding LEONÓW Ltd in Niemce	Horticultural Production A. Chechliński in Cuple	Horticultural Holding A. Janik in Osiny
Improvements in products quality			+
Improvements in hygienic conditions	+	+	+
Better work conditions		+	+
Better social conditions for employees		+	+
Greater access to the market		+	+
More stable marketability of products			+
EUREPGAP raises the competitiveness of the farm on the domestic market			+
EUREPGAP raises the competitiveness of the farm on the international market	+	+	+
Higher possibility of choosing a purchaser of products		+	+
Strenghenning the farm's position on the market	It's hard to say	+	+
Increased reliability of the farm regarding food safety and quality issues	+		+
Constant improvement in production skills			+
Minimizing destructive impact of the production on the environment		+	+
Positive organizational arrangements		+	
Putting the documents in order	+		
EUREPGAP prepares the farm to fulfill HACCP requirements		+	+

Source: Own draft on the basis of conducted research.
Źródło: Opracowanie własne na podstawie przeprowadzonych badań.

controlling vermin. The producers from Cuple and Osiny did not agree with the director of Leonów about the difficulties with collection of waste products. The number of this type of firms has steadily increased. They pick up waste products and give disinfectants and cleaners in return. The main process engineer in Cuple claimed that the only problem with EUREPGAP was to get used to the activities necessary for maintaining the certificate. In the very beginning, some activities seemed to be pointless (like e.g. labeling each lot of goods). In the course of time, it turned out that the system improved production work and farm management (e.g. in the case of incompatibility only a specific batch is withdrawn). According to all the interviewed producers, establishing and maintaining the EUREPGAP documentation has been no problem on condition that the records have been regularly and scrupulously updated. The director of Leonów has emphasized that the EUREPGAP system is created every day.

In terms of the benefits that the EUREPGAP certification brings to the producer, the studied farmers were quite unanimous. They claimed that the system had favorably influenced the hygienic conditions in their holdings and the competitiveness of their products on the international agrifood market (Table 2). When the farmers were talking about increasing marketability of their production after the EUREPGAP certification, they emphasized the positive impact of the certificate on the level of agrifood prices and other terms of trade. The implemented and certified system gives the farmers a high possibility of signing the contract agreement with big chains of supermarkets. However, in order to aim at it, a farmer must run a large-scale production enterprise (e.g. production at Osiny is too small). If a farmer does not fulfill the terms of contract, he will have to pay a high fine. This situation might even threaten the producer with bankruptcy (which happened to one of the producers in the Lublin Province).

CONCLUSIONS

EUREPGAP is a globally recognized agrifood safety and quality management system, which has been developed for the producers of fruit, vegetables, cut flowers, mushrooms, green coffee, meat, fish and seafood. There are many advantages of implementing the system in horticultural holdings both for farmers and other participants in the food chain. Moreover, the maintaining of the EUREPGAP certification reduces the negative environmental effects of agricultural production.

Keeping up with the EUREPGAP standards is conducive to improvements in food safety and quality. It implies a bigger chance to win consumers' confidence. Food safety and quality assurance influences consumers' health and life. The conducted research confirmed that the EUREPGAP certificate raised the competitiveness of a farm and the marketability of its products, particularly on the international market. The certificate gives the farmers the opportunity of concluding agreements (e.g. contract agreements) with big chains of supermarkets or purchasers from abroad (e.g. Western Europe). These contacts should lower the sale risk and financial risk, which are really high for Polish farmers these days. Therefore, more and more Polish agricultural producers decide to implement and maintain EUREPGAP hoping that the certificate will bring them safer income. Furthermore, the farmers expect that the certification will bring financial gains, which will let them expand their production in the future.

The EUREPGAP certificate protects a supermarket when the offered fruit or vegetables turn out to be unsafe for consumers' health. Due to the EU directive a chain of supermarkets is responsible for the safety of food offered in its stores. Thanks to EUREPGAP the chain can shift the responsibility for unsafe agrifood onto the supplier e.g. a horticultural holding. The farmer can also shift the responsibility for unsafe commodities onto the certified laboratory that tested them.

In a global economy it is necessary to care about safety and quality of food products and to certify the systems dealing with it. It is a condition for entering the market, which becomes more and more competitive. In the process of concentration of the food trade in Poland and the whole world, EUREPGAP is a good choice for more significant horticultural producers.

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EUREPGAP – ZASADY CERTYFIKACJI I ICH REALIZACJA W PRAKTYCE

Streszczenie. W artykule omówiono genezę i zasady certyfikacji systemu EUREPGAP, który może być wdrożony w gospodarstwach produkujących świeże owoce i warzywa, kwiaty cięte, zieloną kawę, mięso, ryby i owoce morza. System oceniono na podstawie wywiadów przeprowadzonych bezpośrednio w trzech dużych gospodarstwach ogrodniczych z województwa lubelskiego zajmujących się produkcją pomidorów i ogórków pod szkłem. Certyfikat EUREPGAP jest wymagany przy dostawach świeżych owoców i warzyw do wszystkich większych sieci supermarketów na świecie. Jednocześnie certyfikacja przynosi wiele korzyści ogrodnikom. Są one omówione w referacie na podstawie zebranych opinii rolników. Badani producenci rolni mówią też o kosztach wdrożenia i utrzymania systemu, o przesłankach wdrożenia go, i o trudnościach, jakie pojawiały się podczas certyfikacji.

Słowa kluczowe: bezpieczeństwo zdrowotne i jakość żywności, certyfikat EUREPGAP, producenci warzyw pod szkłem, sieci supermarketów

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MARKET OF ORGANIC PRODUCTS IN THE CZECH REPUBLIC AFTER ENTRANCE TO EU

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Abstract. The organic farming is an important part of agrarian policy of the Czech Ministry of Agriculture. It is perspective way of farming with new market with organic products (it is same expression as bio products). The organic agriculture develops new labor opportunities and country-side as well as it saves an environment. Development of organic farming offers chances for the Czech organic products on the European market. There is demand rising. Since the Czech Republic is a member of the EU the export divides into export to the EU and out of the EU more and more. The Czech market is not as developed and as well supplied with wide range of products as those in western countries, but its recent development shows it is changing and improving.

Key words: organic product, market, food, farming, Czech Republic

INTRODUCTION

Organic farming is a way of agriculture with specific requirements. In the plant production soil fertility is made by soil microbes and organic fertilizers to improve soil structure etc. A contour tillage is substituted by soil loosening. A soil cover is common by under sowing and mulch. Good rotation of crops reduces the incidence of weeds, diseases and pests.

Livestock is a part of nature cycle in the organic farming. Feeds are from own production of ecological farm. The livestock is kept in accordance with natural needs.

Organic (or "bio") product is a product of organic farming that has been grown/bred under very carefully controlled conditions. The conditions are described in the Czech law about organic farming number 242/2000 coll. and its later modifications and controlled by accredited control organizations.

In the Czech Republic the organic farming started at the second half of eighty years of last century. Systematically it was developed from the ninety years due to state support. The second wave of the development came at 1998–2000 [Moudrý, Prugar 2002]. Nowadays the third wave of the organic farming development is coming.

The organic farming is an important part of agrarian policy of the Czech Ministry of Agriculture. It is perspective way of farming with new market with organic products (it is

same expression as bio products). The organic agriculture develops new labor opportunities and country-side as well as it saves an environment. Development of organic farming offers chances for the Czech organic products on the European market. There is demand rising [Czech Ministry of Agriculture 2004].

ORGANIC AGRICULTURE IN THE CZECH REPUBLIC

The organic farming is framed by the Czech legal system as well as the EU law. The Czech law may be equal or stricter than in the EU. In the Czech Republic it is Act No 242/2000 coll. on Organic Farming as amended in Act No 30/2006 coll. The Act has been revised, reduced and simplified in order to eliminate duplicities with the EU legislation. Production of BIO Products and BIO Food is also determined by the Act No 110/1997 coll. on Foodstuffs and Tobacco as amended. The EU legal frame is specified in Council Regulation (EEC) No 2092/91 and Council Regulation (EEC) No 1991/2006. The EU has introduced European Action Plan for Organic Food and Farming that was modified according to local conditions and presented through Action Plan for Development of Organic Farming till 2010 in the Czech Republic (further only Action Plan).

Nowadays in the Czech Republic there are 963 ecological farms and 152 producers of organic foods. The organic farming is almost 7% from the Czech soil found in 2006.

MARKET WITH ORGANIC PRODUCTS

Market with organic products has own differences. Food demand is influenced by a range of factors – incomes, buying power, food prices, participation of expenses for food to family budget, alimentation practices, level of education and information. Demand about bio products has some specific factors. They are guarantied origin, product quality, proceeding process control and so on. Consumption of organic products is a question of life style. It is effort to combine a city life style with a good nutrition and comeback to nature as well. The key for the rising of organic product demand is propagation and time, because the trend comes toward to the higher life level.

The Czech market is not as developed and as well supplied with wide range of products as those in western countries, but its recent development shows it is changing and improving. The sales increase along with increase of consumers' interest. The total retail turnover of organic food market increased 16.6% to approximately 180 millions CZK in 2003. In 2004 it was already 270 millions CZK which presents stunning 50% growths since 2003. In 2005 the turnover in organic food reached up to 480 millions CZE. It was astonishing 78% increase in comparison with the previous year 2004. In 2006 the increase was comparable to year 2004 (58%) [Václavík 2007].

The share of organic food on total consumption grew from 0.06 (in 2002) to 0.073% in 2003, in 2004 it was already 0.12%, in 2005 it rose to 0.25%, and in 2006 it reached up to 0.35.

As Václavík [2006] researched most organic products are sold through hypermarkets and supermarkets. Their share is 57% of all sold organic products in the Czech Republic during the year 2005. About 37% of these products are sold through specialized shops and

shops with healthy products. Customers mostly know the seller, but only rarely producer or farmer. The share of specialized healthy nutrition shops is increasing on the contrary to sales through super and hypermarkets.

In the study presented by Synergy marketing and GFK Prague [2006], the sellers (about 76%) explain the reason why they do not sell organic products is that there is no demand, 18% of them say no distributors offered them such goods, and 2% of them say that there is not sufficient promotion, 2% of the sellers have lack of space and at 2% of them cases there is a specialized shop nearby. 70% of retailers also mentioned that customers do not ask about organic products, 24% said only few customers ask and 6% noted that from time to time somebody asks. 78% of sellers were never offered organic products for sale and 42% of them would not like to examine to sell them. The main reason for denial is low demand of customers and high price as well as lack of sale space. 40% of the retailers believe that high price is the reason for low demand. Another 30% believe that the reason is lack of information, promotion, and low awareness of the customers.

IMPORT AND EXPORT

There is a big share of import in the Czech organic market. The processing industry in the Czech Republic is insufficient and therefore the space in the market is taken by foreign producers. The situation is slowly improving, but there is still a lot to be done. Part of the difficulties is also caused by bad marketing tactics of farmers/producers who are professionals in production however do not master marketing and management, but this problem is already recessive.

Since the Czech Republic entered the EU the import increased. The increase was caused by dissolution of tariff barriers as well as due to the fact that the EU organic products do not need to be recertified. Foreign organic producers are very interested in the Czech market. The import of organic products has more than tripled since May 2004 till September 2005.

A big share of organic farming exports are raw products from farms. Further processing is performed in foreign countries as the processing industry in the Czech Republic is insufficient therefore a part of Czech organic production is exported abroad to be processed and some of it returns back in import. The main commodity for export is wheat and about 75% of produced herbs. One of the greatest Czech exporters is organization named Sluneční brána s.r.o. (Sun Gate) that processes and exports teas and spices.

Export to the EU is hardly measurable as the data is no more accessible. It is also not possible to find out what the Czech export numbers out of the EU are as the goods may be exported through one or more other countries.

CONCLUSION

More then 100 thousand of farms manage by organic way in the European Union. Their land area is about 5 millions hectares. In the Czech Republic the organic farming have a good prediction. The prognoses about organic food market are very good. It is

supposed the sales rising about 30%. A question of finances affects the organic market mostly. Prices of organic product are higher than the process of common products. The reason is a costingness of organic food production.

Admission of the Czech Republic to the European Union brings some changes in the organic food market. Since the Czech Republic is a member of the EU the export divides into export to the EU and out of the EU more and more. Information about organic products is increasing now, but consumers are less informed about organic food and farming. There is a need for active communication.

Some national organic market leader is important. This leader is able to push total national market; he is able to influence development of total market as well. In the Czech Republic is not enough domestic organic food available in supermarkets: fresh produce, milk, meat – poultry and pork, eggs – there is a need to closer co-operation between retailers and suppliers. The need is also attract more consumers with organic by telling stories about farmers and specifics/benefits of the organic production process.

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RYNEK PRODUKTÓW ORGANICZNYCH W REPUBLICE CZESKIEJ PO WEJŚCIU DO UE

Streszczenie. Rolnictwo organiczne stanowi ważną część polityki rolnej czeskiego ministerstwa rolnictwa. Rolnictwo organiczne rozwija nowe szanse zatrudnienia na obszarach wiejskich jak również chroni środowisko naturalne. Rozwój rolnictwa organicznego stanowi szansę dla czeskich produktów organicznych na rynku europejskim z uwagi na rosnący na nie popyt. Od czasu wstąpienia Republiki Czeskiej do UE, znacznie pogłębiła się dysproporcja między eksportem do UE i eksportem do innych krajów. Czeski rynek nie jest tak dobrze rozwinięty i zaopatrzony w szeroką gamę produktów jak inne zachodnie rynki, ale ostatnio jego rozwój wskazuje na zmiany i poprawę sytuacji.

Słowa kluczowe: produkt organiczny, rynek, żywność, rolnictwo, Republika Czeska

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THE APPLICATION OF THE METHOD OF LOGARITHM FINDING IN THE CAUSAL ANALYSIS OF THE FINANCIAL RESULTS OF ENTERPRISES OF THE FOOD SECTOR

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Abstract. Causal analysis facilitates to determine the cause-and-effects relations between economic phenomena in order to understand the changes and prepare decisions' fundaments about the future. In the cause analysis financial results can be calculated as the result of a multiplication of two, three or four factors. In this paper a four factors model was applied. This approach looks into the causes which influence on the level of net profits as: changes in the level of employment, changes in the equipment per employee and other quality factors as assets' productivity and sales profitability. In order to determine the influence of particular factors on the result of the analyzed phenomenon the method of logarithm finding was applied. This method provides relatively exact results. The analysis contains selected enterprises of the food sector. Based on the results managing efficiency was evaluated for analyzed enterprises. These results could be useful in the future to improve the decision making process from an economic point of view and compare levels of resources efficiency utilization of enterprises of a similar production profile.

Key words: causal analysis, net profit, the method of logarithm

INTRODUCTION

The companies functioning in present conditions demand analyses which expose factors stimulating the increase of the management effectiveness. The financial analysis allows to estimate the financial state of the firm and gives a relatively comparable financial information. The financial estimation means a search for cause-effect relationships between economic phenomena, an assessment of causes of changes in those phenomena and a preparation of decisions concerning the future. The practical value of the financial analysis is subject to the adequate assessment of the factors influencing the financial condition of the firm and the exact assessment of their trends.

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This goal of this work is an attempt to assess the factors which are most powerful in affecting the financial result of the analyzed firms and an estimation of the management efficiency on the basis of the conducted investigations. The method of logarithm and the partial difference method were used. The study comprised the years 2002–2005.

MATERIAL AND METHODS

Three confectionery manufacturers were subjected to an analysis. They are joint stock companies.

The first part of the investigations comprised the ratio analysis of the companies. It is possible to employ ratios of a variable economic substance and a various informative--analytical significance in the ratio analysis. Regarding a great number and similarities concerning both the components and the research areas, it is necessary to select the ratios and classify them correspondingly. The most typical solution allows to distinguish four areas of the ratio analysis: liquidity, financial support, productivity, rate of return [Bednarski 1997].

The second part of the investigation concerns the causal analysis of the financial result in the companies. The most universal model which shows the subjection of the net profit to the degree of the production factors usage is the four factors model. It allows to examine the dependencies affecting the profit rate of the quantitative factors such as the changes in the employment and the rate of the equipment per employee and the qualitative factors not often demanding supplementary expenses, i.e. the assets productivity and the return on sales [Urbańczyk 1997]. The profit in this method is considered as a product of four factors:

$$Z_n = R \times T \times W_{pm} \times W_{rs}$$

where:
Z_n – net profit,
R – employment,
T – equipment per employee (total assets/employment),
W_{pm} – assets productivity (yield on sales/total equipment),
W_{rs} – return on sale (net profit/yield on sales).

The causal analysis of the net financial result of the analyzed companies comprised a comparison of two periods. The results of the analysis were presented in the form of a comparison with the preceding year, therefore they refer to the years 2003–2005. The numerical assessment of the influence of the respective factors on the value of the investigated phenomenon uses various mathematical methods. This study applies the method of logarithm. The choice of the method of logarithm was caused by the possibility of its application with four factors and the achievement of exact results which are the closest to the deviation values calculated by means of the function method. Apparently this method can seem complicated regarding the necessity of logarithms calculation. Assuming, however, the use of a computer in the logarithm finding, the difficulty in this method and the laboriousness are considerably scarce [Bednarski et al. 1996].

The method of logarithm has, however, certain limitations. It cannot apply to a situation in which at least one ratio of the dynamics has a negative value (there is no logarithm of a negative number). Therefore, another method, e.g. the partial difference method, should be applied. However, its results are less accurate.

RESULTS OF RATIO ANALYSIS

Shareholders and managers of the companies assess the economic-financial situation upon the ratios. The conducted ratio analysis indicated a considerable diversification of the investigated companies in comparison of both time and space.

The highest rate of the current liquidity in the investigated period was achieved by Jutrzenka Co., to be followed by Wawel Co. Those companies in the years 2002–2005 did not have problems with the payment of their current liabilities. On the other hand, that ratio in Mieszko Co. was below 1.1 in all the analyzed years, what indicates the threat to the financial safety of the firm. The analysis of the rate of the gross debt allows to state that the highest share of the foreign equity in the firm activity was observed in Mieszko Co. in the years 2002–2005. The average time of the payments amounted to 100 days in Jutrzenka Co., 99 days in Mieszko Co., and 90 days in Wawel Co. It is thus evident that those firms freeze liability assets for over 3 months. The calculated profitability ratios in Jutrzenka Co. and Wawel Co. indicated insignificant fluctuations while compared in time. The highest rate of the return on sales was noted by Jutrzenka Co. in 2004 (14.6%), whereas the highest rate of the return on assets and the return on equity were noted in Wawel Co. in 2004 (16.5% and 27.7%, respectively). The increase of all the profitability ratios in the years 2003–2005 was positively estimated in Mieszko Co.

Results of the causal analysis with the use of the method of logarithm

Extension of the ratio analysis with the causal analysis of the financial result employing the four factors model allows to assess its dependencies of the profit deviation on the degree of the production factors usage. For the number assessment of the influence of the respective factors on the deviation of the net profit, the method of logarithm was used in seven cases, whereas the partial difference method in two cases (Mieszko Co. in 2003 and 2004). The results of the causal analysis are shown in Table 1.

Jutrzenka Co. noted a betterment of the net profit in 2003 and 2004 in comparison to the previous year by PLN 4 953 000 and PLN 21 030 000, respectively. A positive effect on the above deviations was exercised in both years by the intensive factor, ie. the return on sale, the increase of which resulted in the betterment of the net profit by PLN 4 626 100 in 2003 and by PLN 19 798 900 in 2004. A drop in the employment contributed to a negative deviation of the profit by PLN 217 900 and PLN 1 513 900, respectively. The increase of the assets productivity in 2003 caused the increase of the net profit by PLN 683 000, whereas a decline of the equipment per employee affected a decline of the net financial result by PLN 138 200. A positive effect on the deviation of the net profit in 2004 was exercised by a betterment of the equipment per employee, whereas a negative one – by a decline of the assets productivity. The financial condition of Jutrzenka Co.

Table 1. Results of the causal analysis in the investigated companies
Tabela 1. Wyniki analizy przyczynowej badanych przedsiębiorstw

Company	Deviation of net profit (thousands PLN)	Partial deviations (thousand PLN)			
		Quantitative factors		Qualitative factors	
		Employment	Equipment per employee	Assets productivity	Return on sale
Year 2003					
Jutrzenka	4 953.0	–217.9	–138.2	683.0	4 626.1
Mieszko	–18 331.0	–1 450.8	2 734.1	–1 123.9	–18 490.4
Wawel	1 973.0	–295.7	844.5	48.9	1 375.3
Year 2004					
Jutrzenka	21 030.0	–1 513.9	10 417.9	–7 672.9	19 798.9
Mieszko	12 365.0	305.4	–193.3	–1 455.6	13 708.5
Wawel	13 707.0	–993.3	3 051.1	–165.8	11 815.0
Year 2005					
Jutrzenka	–11 549.0	9 461.3	–7 222.5	7 101.5	–20 889.3
Mieszko	1 319.0	–21.7	67.6	–25.4	1 298.5
Wawel	4 254.0	–1 320.4	9 274.1	–6 101.6	2 401.9

Source: Author's calculations.
Źródło: Obliczenia własne.

worsened in 2005 when it noted a drop in the net profit by PLN 11 549 000 in comparison to the previous year. The company was still profitable, however, its return on sale significantly worsened which contributed to the decrease of the net profit by PLN 20 889 300. The other qualitative factor, i.e. the assets productivity, as well as the increase in the employment had a positive influence on the deviation of the profit.

Mieszko Co. noted a decrease of the net financial result by PLN 18 331 000 merely in 2003 as compared to the previous year. From a profitable company in 2002 it became a losing one, subject to the following factors: the return on sale, the assets productivity and the employment. Their decline caused a decrease in the financial result by PLN 21 065 100. The increase of the equipment per employee reduced merely a negative influence of the presented factors by PLN 2 734 100. The financial condition of the firm was successively improving in the following years. That resulted mainly from the intensive factor – the return on sale, the betterment of which caused an increase of the financial result by PLN 13 708 500 in 2004 and PLN 1 298 500 in 2005.

Wawel Co. was improving its financial result in each of the analyzed years. The highest increase of the net profit was noted in 2004 by PLN 13 707 000 in comparison to the previous year. A positive influence was exercised by two factors: a quantitative one – the equipment, and a qualitative one – the return on sale. Their betterment caused an increase of the net profit by PLN 3 051 100 and PLN 11 815 000, respectively.

On the basis of the conducted investigations and the positive effect of both qualitative factors on the deviation of the profit, it can be stated that Jutrzenka Co. and Wawel Co. were economically effective merely in 2003. Mieszko Co. was ineffective in using its resources in 2003. In the remaining years the investigated companies were characterized by a diversified effectiveness. The conducted analysis indicates that an immense effect

on the deviation of the financial result both positive and negative was due to the return on sale (intensive factor). In this connection the managing staff should analyze with full particulars the volume of sale, the production structure and the sales prices in order to improve that ratio.

CONCLUSIONS

The following conclusions emerge from the conducted study:

1. The ratio analysis indicated considerable diversification of the examined companies at the achieved rate of the respective economical ratios. It is hard to uniformly state if better management was in the firm which achieved a higher rate of productivity or in another, characterized by the optimum rate of the liquidity, considered as the basic measures in the estimation of the financial situation of the companies.
2. The causal analysis of the financial result has a practical application in the estimation of the effectiveness of the joint stock companies. Obtained results can be used by the managing staff in the more effective management of the possessed resources, while the continuation of the causal investigations concentrated on a separate, detailed estimation of each factor would allow to reach the root causes affecting the effectiveness of management.

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WYKORZYSTANIE METODY LOGARYTMOWANIA W ANALIZIE PRZYCZYNOWEJ WYNIKU FINANSOWEGO PRZEDSIĘBIORSTW GOSPODARKI ŻYWNOŚCIOWEJ

Streszczenie. Analiza przyczynowa pozwala na określenie związków przyczynowo-skutkowych między zjawiskami gospodarczymi, określanie przyczyn zmian w tych zjawiskach oraz przygotowanie decyzji dotyczących przyszłości. W analizie przyczynowej wielkość wyniku finansowego może być traktowana jako iloczyn wynikający z pomnożenia oddziałujących na niego dwóch, trzech lub czterech czynników. W opracowaniu do analizy przyczynowej wyniku finansowego netto wykorzystano model czteroczynnikowy. Pozwala on na zbadanie zależności wpływających na poziom zysku netto czynników ilościowych, takich jak: zmiany w stanie zatrudnienia i w poziomie wyposażenia majątkowego na jednego zatrudnionego oraz czynników jakościowych, to jest: produktywności majątku i rentowności sprzedaży. Do liczbowego określenia wpływu poszczególnych czynników na wielkość badanego zjawiska zastosowano metodę logarytmowania. Metoda ta daje stosunkowo dokładne wyniki. Analizie poddano wybrane przedsiębiorstwa gospodarki żywnościowej. Wyniki przeprowadzonej analizy stały się podstawą do oceny efektywności gospodarowania badanych przedsiębiorstw. Wyniki badań mogą być wykorzystane dla celów podejmo-

wania ekonomicznie uzasadnionych decyzji oraz porównania efektywności wykorzystania zasobów przez przedsiębiorstwa o podobnym charakterze produkcji.

Słowa kluczowe: analiza przyczynowa, zysk netto, metoda logarytmowania

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POSSIBILITIES OF UTILIZATION OF STRAW FOR ENERGETIC PURPOSES IN THE OPINION OF FARMERS FROM LUBLIN REGION

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Abstract. The goal of the present study was estimation of the scale of straw production in Poland and, particularly, in Lublin region, in order to assess a straw balance and determine its amount possible to assign for energetic purposes. Conducted was a comparative analysis of costs of energy production from straw and other carriers. Identified were opinions of users of straw-fed boiler houses compared to the opinions of users of traditional fuels.

Key words: energy from straw, straw production, costs of energy

INTRODUCTION

A reasonable utilization of renewable sources, as well as shaping and protecting of the environment, became at present one of the most important areas of a general economical policy and of the social-economical development policy.

Theoretically Poland has a great potential of renewable energy sources, exceeding consumption of all fossil fuels. Unfortunately, a full exploitation of that potential is limited by technical, urbanist, demographical and economical possibilities. That's why only its small part may play a practical role [Tymiński 1997].

Straw makes an energetic stuff competitive to traditional fuels. In farming straw is used for many purposes – for feeding animals, for bedding, as an organic fertilizer or isolation material. Despite its numerous applications, in some parts of Poland appear its surplusses, possible for utilization for energy production.

MATERIALS AND METHODS

Tested were 14 users of straw-fed boiler houses, as well as 28 users of boiler houses working on traditional fuels. The evaluation was conducted in 2005 in Lublin region.

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Drawn up was a straw balance in order to estimate straw surplusses possible to apply for energetic purposes. The assessment was performed for Poland in general and for Lublin region in the years 1999–2004.

For evaluation of straw crops used were indicators determining the relation between straw crop and grain crop [Harasim 1994]:

- winter wheat – 0.91,
- winter triticale – 1.13,
- rye – 1.44,
- winter barley – 0,87,
- spring wheat – 0.94,
- spring barley – 0.86,
- oats – 1.08,

Straw crops were computed as a product of grain crops of separate cereal species and indicators listed above. The total straw income was calculated from multiplying its crop by the area of cereal growing.

In order to assess possibilities of straw utilization for energetic purposes, its crops were lessened by its farm consumption. It was assumed, that straw first of all should be used in animal production (for fodder and bedding) and as a fertilizer, to balance the organic matter in soil. Calculations were done according to the following formula (Gradziuk 2003):

$$N = P - (Z_s + Z_p + Z_n)$$

when:
N – straw surplus for alternative utilization,
P – straw production from basic cereals and rape,
Z_s – straw demand for bedding,
Z_p – straw demand for fodder,
Z_n – straw demand for plowing.

The straw demand for fodder and bedding was evaluated on the basis of farm animal population and yearly norms for separate species (Table 1 and formulas by Gradziuk):

$$Z_s = \sum_{i=1}^{n} q_i s_i \qquad \text{i} \qquad Z_p = \sum_{i=1}^{n} q_i p_i$$

when:
Z_s – straw demand for bedding,
Z_p – straw demand for fodder,
q_i – population of a certain animal species or breeding group,
s_i – straw for bedding demand norm for the same species/group,
p_i – straw for fodder demand norm for the same species/group.

In order to identify the factors positively influencing taking a decision about installing a straw-fed boiler house, as well as factors restraining it, the farmers were interviewed.

In co-operation with supporters and opponents of straw-fed boiler houses, the analysis of a force field was conducted. Its graphic model was illustrated in the Figure1.

Table 1. Standards of yearly straw demand for fodder and bedding and of manure production (in tons per year)
Tabela 1. Roczne normy zapotrzebowania na słomę na paszę i ściółkę oraz produkcji obornika (w tonach rocznie)

Specification	Fodders (p_i)	Bedding (s_i)	Manure (o_i) (dry matter)
Cattle:			
cows	1.2	1.0	2.5
others	0.8	0.5	1.5
Pigs:			
sows	–	0.5	0.625
others	–	0.2	0.4
Sheep	0.2	0.2	0.25
Horses	0.8	1.0	2.0

Source: Majewski E., Wojtkiewicz M., Zabrzewska W., 1983: Ćwiczenia z organizacji i ekonomiki gospodarstw rolniczych – zbiór danych liczbowych. Wydawnictwo SGGW-AR, Warszawa. Kozakiewicz J., Nieściór E., 1984: Słoma i sposoby jej użytkowania w gospodarstwach rolniczych. IUNG, Puławy.
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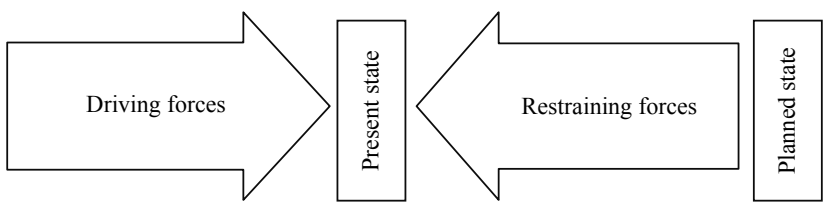

Fig. 1. The model of force field analysis
Rys. 1. Model analizy sił pola
Source: Own study.
Źródło: Badania własne.

In an analysis of a force field every change is defined as a lack of balance between driving forces and restraining forces. Those forces act simultaneously, in opposite directions. The balance is achieved in another point than the desired one. Specified were the following Modelling and Decision Support Tools:

Step 1. Definition of two groups of factors: supporting and restraining changes, what enabled achieving a full image of circumstances accompanying planned actions.

The driving forces were defined, interviewing 14 users of private, straw-fed boiler houses. The restraining forces were identified through investigations among 28 owners of private boiler houses working on traditional fuels, neighboring with owners of straw-fed boiler houses.

Step 2. Ranking the separate forces according to their importance, from 1 to 5 points. The weights of separate factors were defined on the basis of research conducted using questionnaire forms. The lowest point score was assigned to factors influencing the users' decisions to the lowest degree. The highest mark was assigned to those factors, what exerted the highest influence on taking a decision of installing a straw-fed boiler house.

Step 3. Summing up the results weighing in favor or against the planned change.

Step 4. That step was a complementary one, assuming planned actions within the program of changes strengthening the driving forces, whereas weakening the restraining forces.

RESULTS

Straw production is influenced by many factors. The most important from them are the following ones: the area of growing straw-producing plants; the amount of crops; plant species and varieties; fertilizing; weather etc.

In the years 1999–2004 straw crops in Poland exceeded demand for it, resulting from farm production. The average yearly surplus in tested years reached 7697.5 thou. tons. Growing straw surplusses were caused by its decreasing consumption for fodder and bedding, from 16 860 thou. tons in 1999 to 14 729 thou. tons in 2004. That, in turn, was caused by the reducing population of farm animals.

In analysed years observed were also fluctuations in straw crops, what influenced a level of its surplusses. Such fluctuations seem rather disadvantageous, but characteristical for agriculture and resulting from some years with poorer harvest. Such significant fluctuations, occurring every several years, make one of the obstacles restraining non-agricultural straw utilization (Table 2).

Table 2. The balance-sheet of straw utilization in Poland, in the years 1999–2004 (in thou. tons)
Tabela 2. Bilans zużycia słomy w Polsce w latach 1999–2004 (w tys. ton)

Years	Straw production (P)	Straw for bedding (Z_s)	Straw for fodder (Z_p)	Straw for fodder and bedding together (Z)	Straw for plowing (Z_n)	Balance (N)
1999	28 228	10 203	6 657	16 860	2 599	9 085
2000	21 962	9 449	6 165	15 614	3 368	2 981
2001	30 148	9 240	5 866	15 106	3 630	11 862
2002	25 257	9 251	5 521	14 772	3 026	7 714
2003	22 090	9 220	5 506	14 726	2 968	4 850
2004	28 253	9 371	5 358	14 729	4 114	9 693

Source: Own study.
Źródło: Badania własne.

The calculations conducted for Lublin region confirm general tendencies occurring in Poland.

From the balance sheet, elaborated for the Lublin region, results, that an average amount of straw for utilization, in the years 1999–2004, reached about 808 thou. tons yearly. In 2000 those surplusses amounted only 370 thou. tons, whereas in 2003 they were triple higher – reaching 1.2 mln tons (Table 3).

In the Lublin region noted were growing straw surplusses, caused by decreasing demand for fodder and bedding (from 1435 thou. tons to 1067 thou. tons). The least demand for straw to be plowed as an organic fertilizer noted was in 2003 (337 thou. tons), whereas its highest level noted was in 2004 – 649 thou. tons.

Table 3. The balance sheet of straw utilization in in the years 1999–2004 (in thou. tons)
Tabela 3. Bilans zużycia słomy w latach 1999–2004 (w tys. ton)

Years	Lublin region					
	Straw production (P)	Straw for bedding (Z_s)	Straw for fodder (Z_p)	Straw for fodder and bedding together (Z)	Straw for plowing (Z_n)	Balance (N)
1999	2 531	819	617	1 435	456	639
2000	2 342	756	588	1 344	629	369
2001	2 968	758	575	1 332	576	1 059
2002	2 247	716	497	1 213	451	585
2003	2 638	707	485	1 192	337	1 109
2004	2 804	620	447	1 067	649	1 088

Source: Own study.
Źródło: Badania własne.

Assuming the same levels of straw production and surplusses, as it was in the years 1999–2004, in subsequent years foreseen was a significant growth of straw production and its surplusses for energetic utilization (Fig. 2).

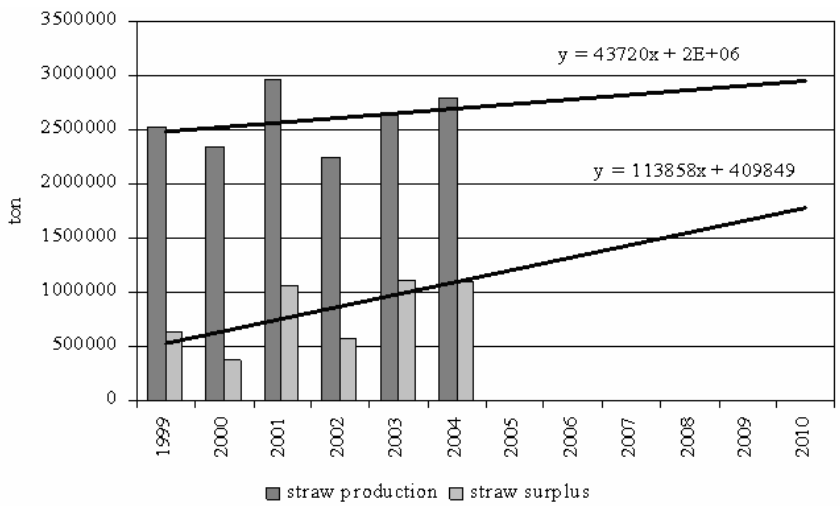

Fig. 2. Production and technical potential of straw for energetic utilization in Lublin region in the years 1999–2010
Rys. 2. Produkcja i potencjalna produkcja słomy na cele energetyczne w regionie lubelskim w latach 1999–2010
Source: Own study.
Źródło: Badania własne.

In the Table 4 shown are calculations of heating of a single-family house with different kinds of fuels. Calculations were done for the unheated building with an area of 100 m^2.

The highest costs were spent for heating with electricity, using the round-the-clock system, whereas the lowest ones appeared by using straw as a fuel.

Table 4. Calculations of costs of heating with different kinds of fuels
Tabela 4. Kalkulacja kosztów ogrzewania różnymi rodzajami paliwa

Fuel	Unit of measure	Calorific value (MJ/kg)	Boiler efficiency (%)	Fuel consumption (kg/kWh)	Unit cost (PLN)	Price of (1 kWh)	Cost of heating of 100 m^2 floor area (PLN) (180 days)
Straw	kg	14	80	0.321	0.1	0.032	444.34
Wood	kg	16.5	80	0.273	0.15	0.041	565.53
Coal	kg	28	70	0.184	0.45	0.083	1 142.60
Fueloil	l	42.7	92	0.092	2.51	0.230	3 179.76
GZ-50	m^3	34.4	92	0.114	1.35	0.154	2 122.87
Propane	l	46	92	0.085	3.00	0.255	3 527.86
Electricity – night rate	kWh	3.6	98	1.020	0.222	0.227	3 068.93
Electricity round-the-clock rate	kWh	3.6	98	1.020	0.373	0.381	5 261.58

*heating cost based on average yearly demand for heat per $1m^2$
*koszt ogrzewania oparty jest na średniorocznym zapotrzebowaniu ciepła na $1m^2$
Source: Own study.
Źródło: Badania własne.

On the basis of interviewing users of boiler houses for traditional fuels, defined were factors, which, in their opinions, restrained investments in straw-fed boiler houses.

Farmers using private boiler houses using traditional fuels weren't keen on taking up straw technology because of its high investment costs. That factor exerted the greatest influence on their decisions (136 points). Next factors in that ranking, with weights 124 and 122 points, respectively, were: lack of straw surplusses and problems with its loading (Fig. 3).

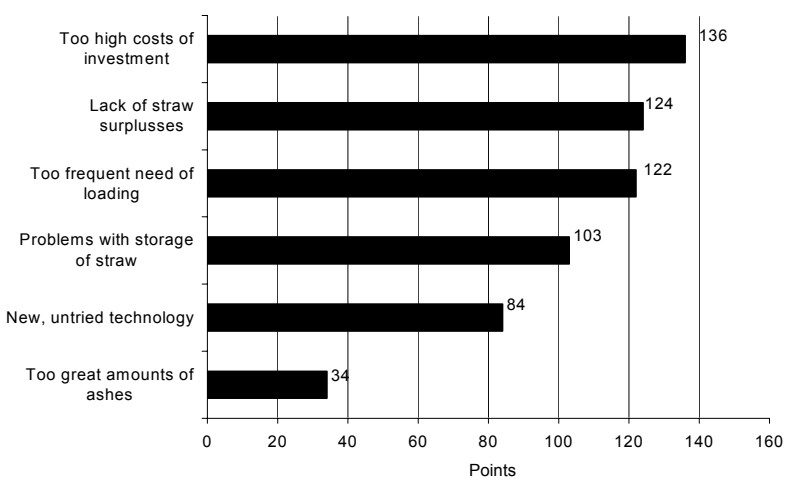

Fig. 3. Factors restraining installation of straw-fed boiler houses
Rys. 3. Czynniki hamujące instalację pieców na słomę
Source: Own study.
Źródło: Badania własne.

Users of straw-fed boiler houses chose that way of heating first of all because of possibilities for utilization of straw surplusses in their farms. The next factor, according to its importance, was easy accessibility of that fuel (61 points) and its low price (54 points) (Fig. 4).

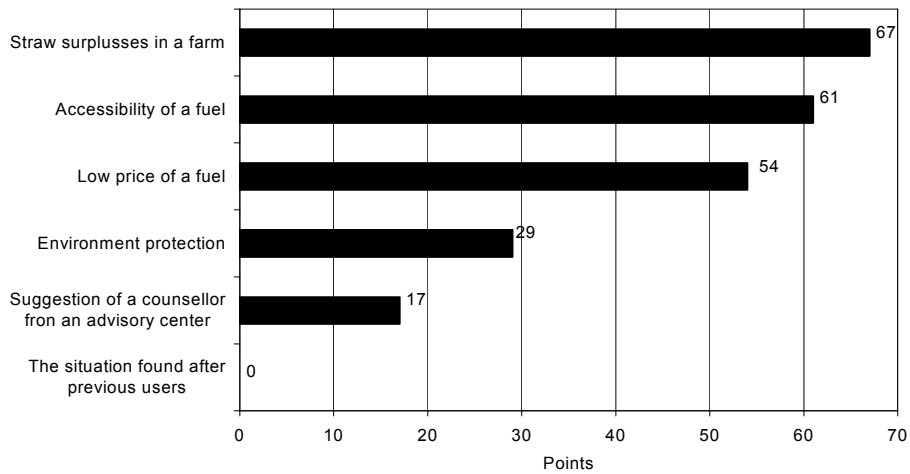

Fig. 4. Factors supporting installation of straw-fed boiler house
Rys. 4. Czynniki przemawiające za instalacją pieców na słomę
Source: Own study.
Źródło: Badania własne.

Factors influencing either positive, or negative decisions, were ranked, assigning them weights according to their importance. Weights were assigned on the basis of point scores, from 1 to 5. 1 meaned the lowest influence on the interviewed user,s decision, whereas 5 – the highest one (Fig. 5).

In general opinions of interviewed persons factors witnessing against energetic utilization of straw prevailed. Such a situation may be changed through improving education activities and possibilities of obtaining financial support for that investment. The conducted research confirmed a strong need for taking up such activities.

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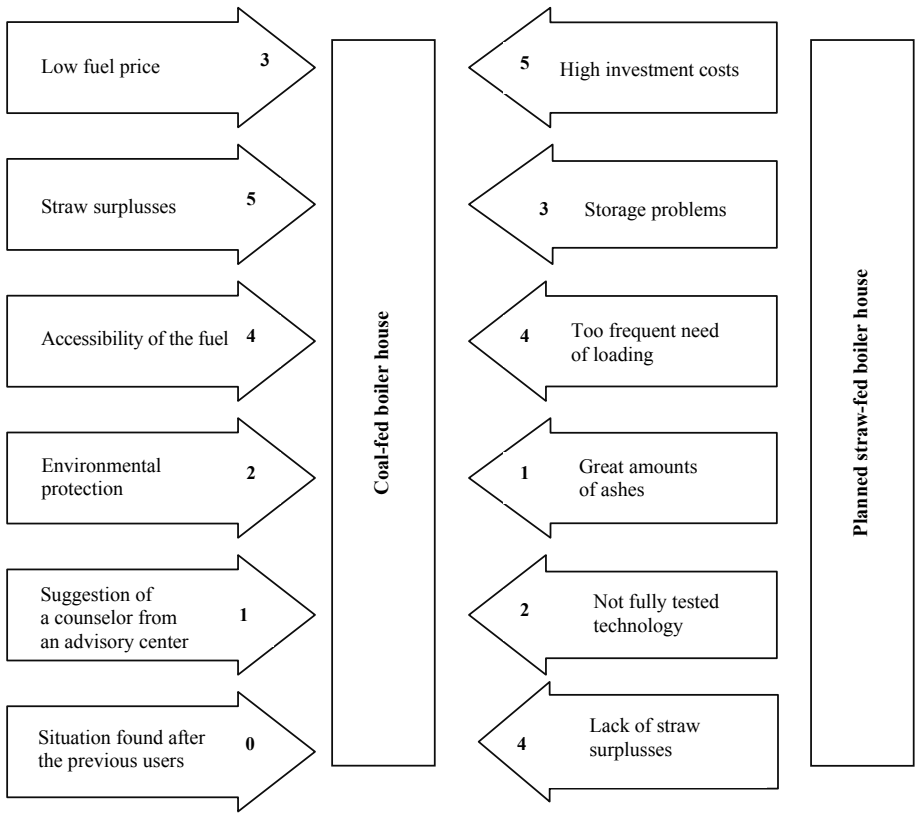

Fig. 5. Analysis of the force field, concerning influence of separate factors on decisions taken by the users

Rys. 5. Analiza siły pola dotycząca wpływu poszczególnych czynników na decyzje podjmowane przez użytkowników

Source: Own study based on interviews carried out.

Źródło: Badania własne.

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MOŻLIWOŚCI PRZEZNACZENIA SŁOMY NA CELE ENERGETYCZNE W OPINII ROLNIKÓW REGIONU LUBELSKIEGO

Streszczenie. Celem artykułu było oszacowanie skali produkcji słomy w Polsce, ze szczególnym uwzględnieniem regionu lubelskiego, w celu ustalenia bilansu słomy oraz ilości, jaka może być przeznaczona na cele energetyczne. Przeprowadzono analizę porównawczą kosztów produkcji energii ze słomy oraz z innych źródeł. Przedstawiono także opinie użytkowników domów z zainstalowanymi piecami na słomę w porównaniu z opiniami osób stosujących tradycyjne rozwiązania energetyczne.

Słowa kluczowe: energia ze słomy, produkcja słomy, koszty energii

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ECONOMIC ASPECTS OF CHEMICAL REDUCTION ON FARMING – FUTURE ROLE OF PRECISION FARMING

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Abstract. The social need for the decrease in the chemical use of the agriculture and its environmental impacts is growing. The decreased level of chemical use can be resulted by several means from the reduced number and quantity of treatments, the organic production, the sustainable production by integrated chemical plant protection methods to the precision production techniques. The use of these methods will change the whole operation and production system of the farms. With the help of model calculation, the present paper examines the viable size of a crop production farm turned into precision farming (weed management) under Hungarian conditions. The results show that the break-even point is at 205 hectares, in case of which the expected return on investment costs is included as well. In this case precision farming means rational pesticide use. Applying the concepts of integrated crop production to precision farming can help to found the most cost-efficient and economically viable crop production system.

Key words: alternative strategies, precision weed management, viable size

INTRODUCTION

Parallel with the social and economic development in Hungary, it is more and more desired to reduce the chemical use and environmental load in agriculture. The present paper – based on international experiences – aims to explore what methods can model and measure the reduction of pesticide use and risks, examining each technology on farm level, sector level and macroeconomic level. The paper includes those tasks at government and sector level which should be faced following the EU integration.

Regarding the tendency in the developed countries that it is necessary to reduce the use of pesticides, the farmers have to make new strategies. The following trends can characterize the alternatives for the application of technologies with reduced chemical use:

– the application of integrated crop production systems,
– organic farming,

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– an outright ban for chemical use,
– reduction of the application of any chemicals,
– the implementation of precisional farming to promote the rational application of chemicals.

In the past few years in the developed countries there was an increasing need for reducing the risks of chemical application. One of the schools of the research examined that how the economic consequences of the reduction of pesticide use can be considered both from the point of view of the potential methods and the application. The necessity of examining the economic effects of this type of programs were drawn up at 3 former OECD events [Uppsala 1995: „Pesticide Risk Reduction"; Neushatel 1998: „Integrated Pest Management and Pesticide Risk Reduction", Coppenhagen 2001: „Workshop on the Economics of Pesticide Risk Reduction in Agriculture"].

In my opinion, the most important is to determine the procedures which can be applied and supported in the countries at different development levels. Eventually, the application of chemicals cannot be totally banned in areas where it is difficult to produce even the basic crops. However, in areas where the agricultural excess production is usual, dead stock is accumulated, the dose of fertilizers per hectare is high (450–500 kgs per hectare), the average number of plant protection treatments is high (8–9 for autumn wheat), it is necessary to investigate the impact of radical reduction of chemical application. Certainly, these investigations should cover not only the change in cost and yield due to chemical reduction but also the extra expenses on its implementation (costs of transformation, necessary investment, quality assurance). The investigations must be carried out not just on farm level, but we also have to deal with its impact on the sector and on the national economy. An analysis, based on years of data collecting, carried out in Denmark, stated that on the level of national economy the 33% decrease of of chemical application level in the past decade did not reduce significantly the income level of farmers. Income supplements for producers were not necessary.

Precision farming can meet both requirements: it can be a tool of reducing chemical use and a way of profitable farming at the same time. It is necessary to examine the economic aspects of this new technology, regarding the consequences of turning to a new farming strategy that could reduce chemical use and environmental pollution at the same time [Ørum et al. 2001; Swinton 2005; Wiles 2004; Kis 2006].

Defining what precision farming means from the point of view of herbicide use, we can state that precision weed control has two meanings:
– first we can reduce the doze of herbicide depending on the humus content and the adherence of soil (in one land unit it could be differed 3.2–4.5 kg/ha from the same chemical);
– and we can save 30–40% of costs by not treating plots based on the data of weed--collection during the vegetation period.

The evolution of precision farming and precision weed management goes back to the beginning of the 1990s when development of global positioning, geographic information systems and hardware and software technologies has speeded up. This has opened the gate for a new production strategy trying to offer solutions to the problems of uneven distribution of pests on a given field, while treatments across the fields are usually homogenous. This is especially true in the case of perennial weeds [Maxwell, Luschei 2005].

There are three basic elements of precision farming that is continuous, high precision positioning, geographic information tools and automated work processes on the field. At different points of the field the infestation of the varying factors has to be measured before and during the vegetation period; authenticated on the soil-maps, based on soil examinations (humus content, nutritive ingredients, adherency), and, of course, use of the new technology – called GPS. Herbicide can be applied by an automated sprayer equipped with GPS and controlled with a computer. The sprayer is constantly monitoring its position on the field, and according to sensors or the weed map it will spray only in those places and amounts or doses of herbicides that were determined in advance by a specialist [Reisinger et al. 2004; Neményi, Milics 2006]. Recently, it was discovered that in most cases only 10–20 weed species can be found in a field, and only a few dangerous species mean big threat to production. Therefore, when choosing the weed management strategy, the main attention has to be paid to them. If these species are mainly perennials for which the uneven, patchy distribution is more characteristic, the possibility of the application of a precision weed management strategy will receive high priority [Reisinger 2001].

The economic consequences of precision farming have not got such attention among scientists yet. The costs of precision farming – including costs of weed control – are higher by 10–20% than costs of conventional production, but in some cases they are lower by 10–15% due to cost saving in chemical use. On the other hand, the need of extra investment must be taken into consideration. It is about 5–6 million HUF (20.000–24.000 EUR) per farm.

During the last few years, the investment need and return on investment when changing into precision farming technology was examined under Hungarian conditions. Based on the data of earlier model calculations, the viable size of a crop production farm with own machinery is 100–140 ha (60 kW power) and 160–215 ha (120 kW power) under Hungarian conditions [Takăcs-György 1998].

It was calculated that the purchase of all the required technical equipment is worth only when a crop producing farm operates on more than 250–270 hectare [Székely, Kovács 2006; Csete et al. 2002] The farm must have more than 500 hectares (plant production) to built up this technology from the first step. In some cases – if there is a real machinery service background available for the farmer – this technology can be built up in smaller farms, too, but the risk of technology will increase. At the same time precision weed management can also be seen as an alternative farming strategy that is the most sophisticated variant of the integrated crop production requiring high level professional skills [Takăcs-György 2003; Kis, Takăcs-György 2005].

MATERIALS AND METHODS

During the research I have updated the former model calculations and made cost-margin analysis in order to show how the viable size – covering the simple capital replacement, too – is modified by the introduction of precision farming with average crop production structure. Upon the calculation of investment costs I presumed that the required machinery is developed parallel with the introduction of the technology and the purchase of basic instruments is not delayed, therefore only the extra investment costs were defined on

the basis of Hungarian distributors' data of 2006. Thus the extra investment need of a 250–300 ha farm is 22.000 EUR.

Production costs include costs corrected with income expectations from the invested assets. The produced crops are as follows: 30% winter wheat (5.15 t/ha) – where precision crop protection is not significant – 15% sunflower (2.49 t/ha), 35% maize (7.35 t/ha) – in case of these latter ones, significant cost savings can be calculated due to precision crop protecion – and 20% alfalfa which is utilised within the farm so it was not taken into account upon calculating the viable farm size. The crop yield was calculated on the basis of average Hungarian yield data of test farms in 2004. In the calculations, the material cost saving of precision farming was 10%, the cultivation cost was more by 5%, the yield was more by 10%. The model was built under Hungarian conditions, calculating the costs on price level of 2006.

RESULTS

In case of applying precision crop protection, the calculations help to determine the income per unit in connection with production size compared to the income of conventional farming (it was integrated crop production in this model).

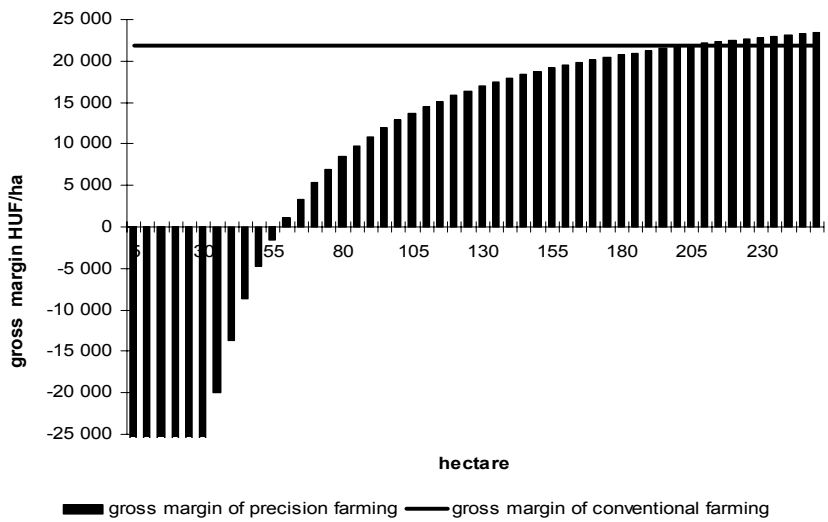

Fig. 1. Viable size determination in case of precision and conventional farming
Rys. 1. Wskaźnik opłacalności w rolnictwie precyzyjnym i tradycyjnym
Source: Own research.
Źródło: Badania własne.

In the examined case, at least 206 hectares – involved in precision farming – is required for crop production in order to realise the same income as in case of production without extra investments, considering also the costs of necessary extra investment for the given year, presuming that the other factors are the same. It means that this type of

farming can be viable for medium-size farms. Others should find some ways of co-operation – common machinery use, machine lending, machine leasing – that can help to avoid significant extra investment.

CONCLUSIONS

The results of the research indicate that although the precision plant protection within a farm requires further investigations, it provides the opportunity for rational chemical use. Due to this, it is not the amount of the applied chemicals that can be reduced, but the unnecessary amount of chemicals going into the environment in such way that at the same time the income rises (surplus in the break-even income). At a certain size a farm can operate in a profitable way, and considering the introduction of precision farming, besides the extra costs of the sophisticated equipment and the possible pesticide reduction, farmers should not forget about the additional costs of obtaining the necessary information for the high-tech technology.

Acknowledgement

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ASPEKTY EKONOMICZNE REDUKCJI ŚRODKÓW CHEMICZNYCH W ROLNICTWIE – PRZYSZŁOŚCIOWA ROLA ROLNICTWA PRECYZYJNEGO

Streszczenie. Potrzeba społeczna ograniczenia zużycia środków chemicznych w rolnictwie i jej znaczenie środowiskowe wzrasta. Niższy poziom zużycia środków chemicznych może być rezultatem wielu czynników, począwszy od zredukowanej liczby i ilości zabiegów, produkcji organicznej, produkcji zrównoważonej poprzez zintegrowane metody chemicznej ochrony roślin, aż po precyzyjne technologie produkcji. Zastosowanie takich metod zmieni cały system produkcji gospodarstw rolnych. Na podstawie modelu kalkulacji w artykule zbadano rentowny rozmiar gospodarstwa prowadzącego produkcję roślinną, przekształconą w uprawę precyzyjną (zwalczanie chwastów) w warunkach węgierskich. Wyniki pokazują, że punktem krytycznym jest 205 ha, w przypadku oczekiwanego zwrotu kosztów inwestycyjnych. W tym przypadku rolnictwo precyzyjne oznacza racjonalne zużycie pestycydów. Zastosowanie koncepcji zintegrowanej uprawy roślin w rolnictwie precyzyjnym może pomóc w znalezieniu najbardziej rentownego systemu produkcji roślinnej.

Słowa kluczowe: strategie alternatywne, precyzyjne zwalczanie chwastów, wielkość rentowna

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REGIONAL AND TRADITIONAL PRODUCTS AS AN IMPORTANT PART OF RURAL TOURISM OFFER

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Abstract. Transition to market economy resulted in changing the main objective of agricultural economy but also caused decrease of agricultural income for most of the farms. As a consequence farms have been forced to seek additional sources of income. For a significant part of them rural tourism and accompanying services create such a chance. Growing interest in spending holiday and free time in rural areas and agritourism farms has been seen as partial solution of rural population's economic problems. Traditional and regional products can be a specific part of agritourism product, create regional identity and uniqueness. Paper presents results of surveys conducted in agritourism farms in Czorsztyn, Wadowice, Andrychow and Bochnia Districts and samples of dwellers of Tarnow and Nowy Sącz. The surveys concerned gastronomic activities – board for tourists offered by agritourism farms and farmers knowledge of traditional and regional dishes and products. The survey of town dwellers concerned their expectations towards full- or part-board offered by agritourism farms and also their knowledge of traditional and regional dishes and products.

Key words: traditional and regional products, rural tourism, agritourism, tourism offer

INTRODUCTION

Transition to market economy resulted in changing the main objective of agricultural economy (agricultural policy), an economy once focused on production intensification and growth and now aimed to ensure economic growth and income stability in the farming sector by rising economic effectiveness and production quality. The basic objective of the development strategy for agriculture also changed: the policy for the intensification and growth in agricultural production was replaced by a market policy, i.e. goals resulting from the demand-supply-prices relationship, both in the economy as a whole and in the agricultural and food sector [Tomczak 2005].

The transformation process exposed the development gap between the peasant family economy – prevailing system of agricultural production- and the developmental needs

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and capabilities of the whole national economy (e.g. reduced food demand, export difficulties, openness to imports, etc.). The family agricultural economy in Poland has been experiencing basic adjustment difficulties. Specific conditions for agricultural production in the south-eastern part of Poland, Malopolska region, meaning very small and fragmented farms, hidden and official agrarian overpopulation and unemployment make farmers life rather difficult.

In this region few farms are able to ensure (apart from food for the farming household, although even that part of farms activity is often ceased or stopped) a sufficiently high level of income to meet contemporary needs of farmers and their families. The family farm, considering its character and requirements as a place of work and source of income fails to provide such a level of income. Small farms mean also low competitiveness, small potential to invest, low labour productivity, low incomes, low accessibility to the market, low resistance to unfavourable development conditions etc. For decades small farms in that part of Poland supported their income from non-agricultural wages that had been lost in the beginning of 90. with the industry restructurisation. That dual-occupation population lost their chances of easy obtained jobs and now had to create jobs by themselves. Given the existing level of unemployment in non-agricultural sectors, the scope of jobs available for farmers is extremely limited. Multifunctional rural development and entrepreneurship of farmers seems to be seen by politicians and economists as the best or at least the quickest way of moderating the problem. Family farming in Poland, including the Malopolska region, has some of important assets, such as low labour costs, good ecological quality of the agricultural environment, advantageous location in relation to foreign markets. In combination with excessive labour force and free rooms in often quite spacious family houses favourable conditions for agritourism seem to be obvious. With relatively small costs and the knowledge that for years has been provided for farmers during countless trainings and courses they can start a new activity – farm tourism, agritourism. The obvious advantage of that kind of activity is that the product is produced in the farms but the market is in the towns and cities. With the growing interest of city dwellers, in Poland and other countries, in that kind of spending free time, providing tourism services can be a way of supporting family income, especially on small farms situated in a picturesque part of Poland.

Although agricultural non-food economy (fibres, biofuels, production niches, landscape and environmental protection etc.) seems to be a new way of integrated agricultural economy, the processes undergoing in those directions can still take a lot of time and political decisions. The declining role of agriculture in terms of its functions related to food provisions and the growing importance of agribusiness, something which is already evident in developed countries, is directly associated with an increasingly wide acceptance of non-agricultural functions of agriculture and farms [Tomczak 2005].

In Malopolska region rural tourism has always been an important part of rural population's activity and meaningful source of income. Thanks to the mountains and sub-mountains regions the tourist season has been much longer than for instance at the seaside. Winter sports give additional income if only winter is frosty and snowy enough.

Rural tourism is a multi-faceted activity that takes different shapes in different parts of the world [Lane 1994]. Part of the universal appeal of rural tourism rests on the ordinary and everyday happenings of a rural community. The conceptual definition

embraces notions of local identity, personal contact, closeness to nature, and access to the heritage and residents of the area.

Definition of farm tourism [Denman and Denman 1990, 1993] refers to rural tourism conducted on working farms where the working environment forms part of product from the perspective of the consumer. Farm tourism, as the definition suggests, is wider in scope than accommodation provision; it covers attraction, activities, and hospitality plus mutually supportive combinations. Although accommodation understood as renting rooms in farmers' houses is the most basic and frequent form of agritourism services, the other forms such as providing meals, offering additional facilities can enrich the offer and provide additional income.

The European Union policy supporting development of rural areas also has been supporting development of rural tourism and agritourism. The financial support is available also to Polish farmers and rural areas dwellers. One of the goals of the regional policy of European Union is protection of regional and traditional products and dishes. Regional products and cuisine are and should be a very important part of regionally-oriented tourism concept.

The importance of what is offered to tourists as food confirms International Culinary Tourism Association (ICTA), a non-profit organization comprised of professionals who represent the world's food, beverage and travel industries. Member businesses include associations, destination marketing organizations, chambers of commerce, lodging properties, attractions, tour operators, special events, food/drink service establishments, food growers, food/beverage manufactures and individuals. Association membership is currently comprised of nearly 500 businesses in a dozen countries. The Association's educational events are produced by ICTA's education and training arm, the International Culinary Tourism Institute. The main goal of the Association is to promote food/beverages a tourism attraction.

The same goal should be a guiding principle of our rural tourism services' providers. In the conditions of strong competitiveness it is more and more difficult to attract tourists. Traditional, regional products and dishes can distinguish tourist offer, attract not only a gourmand but also less sophisticated clientele.

It is also important to protect and preserve traditional ways of production, products themselves and the whole culinary heritage of regions and countries. Growing interest in that part of tourist offer leads to a special kind of tourism – the Culinary Tourism.

The European Union regulations take special care in that matter. In 1992 the European Union created systems known as Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), and Traditional Speciality Guaranteed (TSG) to promote and protect food products.

A PDO (Protected Designation of Origin) covers the term used to describe foodstuffs which are produced, processed and prepared in a given geographical area using recognised know-how. In the case of the PGI (Protected Geographical Indication) the geographical link must occur in at least one of the stages of production, processing or preparation. Furthermore, the product can benefit from a good reputation. A TSG (Traditional Speciality Guaranteed) does not refer to the origin but highlights traditional character, either in the composition or means of production [Jasiński 2005].

Those European systems have three main goals:
- to encourage diverse agricultural production,
- to protect product names from misuse and imitation,
- to help consumers by giving them information concerning the specific character of the products.

The systems protect the names of wines, cheeses, hams, sausages, olives, and even regional breads, fruits and vegetables. As such, foods such as Gorgonzola, Parmigiano Reggiano, Asiago Cheese, Camembert de Normandie and Champagne can only be labelled as suchif they come from the designated region. To qualify as Roquefort, for example, cheese must be made from milk of a certain breed of sheep, and matured in the natural caves near town of Roquefort in the Aveyron region of France where it is infected with the spores of a fungus (Penicillum roqueforti) that grows in these caves.

There are several categories of products covered by EU Regulations, starting from fresh meat, meat based products, fish, beer up to prepared dishes, ice-creams and sorbets.

Poland has long and creditable tradition of good cuisine, several traditional and specific products and dishes known and served in the whole country. But has also hundreds of products and dishes known and sometimes served only in particular regions of Poland. It is very important to recognize, preserve and market those products for the glory of diversity of Polish cuisine and attracting tourists, also the foreigners appreciating culinary art and regional specialties.

Traditional, regional product and served dishes can be as important to tourists as perfect accommodation, castles, see beaches or mountains. The best would be the combination of high class accommodation, superb regional cuisine and other tourist attractions.

For several reasons Poland does not have wine production, wine cellars, famous cheeses production, oceans' seafood that could be the magnet for tourist. France seems to be the country with long and rich tradition in that matter – the whole country has some specific traditional local products (from wines and ciders to fish and shellfish, chesses and meat dishes) served in local restaurants, pensions and farms accepting tourists. Local, regional, traditional products are and always have been an important part of marketing strategy, all tourists' guides include suggestions for gastronomic stays, traditional culinary feasts and markets. Wine-testing is included in all organised tours and visits to the country.

Poland should also do all that should be done to register our regional, traditional products. By now only two products – oscypek and bryndza have been undergoing the process of the EU registration.

Holidays in farms with vineyards have become very popular all over Europe, it is an important feature of an educated, successful person to know about wines as much as possible. A visit in a specialized vineyard where the grapes are transformed into a precious and delightful liquid seems to the best and rather quick way to learn how to evaluate, serve or drink wine.

To have an offer of that kind the Malopolska region has to wait same more years if the project or vineyards' revitalisation is successful. But even now we have in Poland famous, regional drinks with a very long tradition – especially meads and tinctures, if not mention vodkas. That kind of tourism attracts also more and more Poles.

Our culinary heritage is not less rich or differentiated. The problem is, for decades we have not pay attention or care to preserve it, to teach young generations or use it in our

tourist marketing. Tourist "consume" landscape, rural atmosphere, quiet environment but not enough have been done to let them know and taste local products, traditional dishes and drinks – that part of consuming is also very important, can attract people and increase income of providers. In the last three years a lot has been done to popularise the idea of local, regional traditional products, to recognise and locally register those products in particular regions, mostly as a first step of the EU registrations. But even now this process can help and give additional meaning to tourists' board in local inns, restaurants, agricultural farms. Part of the process of revitalisation of traditional cuisine and products are competitions organised by the Rural Housewives Circles, Extension Advisors and other rural organisations, seminars and conferences, training and courses supported with the EU funds [Byszewska 2005; Gąsiorowski 2000].

GOALS AND METHODOLOGY

The survey of 110 agritourism farms conducted in the second part of 2006 and beginning of 2007 in four provinces (Wadowice 30 farms, Andrychów 25, Czorsztyn 32, Bochnia 23) concerned several issues of such activity. Among them were questions concerning knowledge of traditional, regional products and dishes and their utilisation, serving for tourists, planes in that matter, participation in regional products and dishes competitions and so on.

The survey was also conducted among dwellers of Tarnow (56 persons) and Nowy Sącz (60 persons). They were asked several questions about spending free time, tourism habits, agritourism, and also about traditional and regional products, knowledge, expectations as part of tourist product.

Similar surveys were conducted in 2005 and 2006 in different provinces and towns in the Malopolska region [Tyran 2006] but results to some degree could be, in authors' opinion, comparable.

RESULTS AND DISCUSSION

All together 110 farms were surveyed, 68 of them (71%) provided full board, 9 only breakfasts, the rest – 23 farms (21%) guaranteed access to kitchens for self preparation of meals. Women running the farms and feeding tourists were using their own vegetables and fruits, also in processed forms – jams, juices, desserts, and so on. Some of farms (about 50%) served also their own dairy products, meat (poultry mostly), bread or batter. Much higher percent than in the previous surveys declared knowledge of traditional, regional products and dishes (100%), all farms providing meals declared to some extent serving traditional products and dishes (at least once during a guest stay on farm). Women running the agritourism farms (70%) declared taking part in Rural Housewives Circles activities of which some concerned traditional regional cuisine, exchange of recipes, discussion on propositions of traditional dishes prepared for local competitions "Our culinary heritage" as an elimination to higher level competition – for instance in a district.

Traditional dishes have also been served during Agritourism Fairs organised every year by and at the Agricultural University in Cracow. Last one was organised on April 14–15, 2007 in the Congress Centre and Students Club "Arka".

The whole set of projects, seminars, printed materials promoting recognition, "revitalisation" and appreciation of regional products and dishes in the last years have been much more active and successful in the rural areas than in the urban areas.

Nearly all city dwellers (116 persons) associated the term "traditional products" (92%) but asked about examples, the most often they indicated, like in the previous surveys, "oscypek" (kind of hard cheese), and "śliwowica łącka" (strong plum vodka made in Łącko region). About 48% was able to add other examples such as "bryndza podhalańska" (kind of soft cheese), "karp zatorski" (carp produced in Zator province) – probably thanks to the TV programs mentioning attempts of registering those products according to the EU rules.

Traditional regional dishes were even less recognised. Examples provided by respondents were dishes known and treated as traditional in the whole Poland, for instance: barszcz czerwony (red beetroot soup), bigos (dish prepared from pickled cabbage and meat) and flaki (soup made of tripe).

This means that during nearly last two years the knowledge about regional products and dishes has significantly improved in rural areas, they are more often served in agritourism farms, persons running such farms try to improve their skills in that matter. The products and dishes are more often prepared and included in culinary proposition of agritourism farms and rural inns and restaurants. City dwellers need much more education to know, appreciate and demand those unique products and dishes.

CONCLUSIONS

Rural tourism and agritourism are growing industries in several countries and present a number of opportunities for rural dwellers and farmers in those countries, ranging from seasonal to year-round activities, to enhance the profitability of farming operations accommodation should be enriched by very specific food served as a part of the tourism offer. Of course there are several other components necessary for successful operations, but this article is devoted to the role of traditional, regional products as a part of agritourism offer.

If rural tourism, agritourism should consist a meaningful part of income it must win the competition with other needs and products offered to city dwellers.

Our everyday life, rush and duties, quite often makes us rather poor connoisseurs, that hardly have time or care about preparing "slow" food. We mostly eat our meals at home and try to prepare them as quickly as possible. This also causes that our expectations about food as tourism clients are rather low and blurred and mostly describes as "healthy, fresh, ecological, rural, differentiated, regional (although research confirmed that term "regional" is not clear to investigated city dwellers).

Domestic and European Union activities connected with promotion of traditional and regional products have been much more successful among the rural population, which was proved by the survey and personal discussions with persons providing agritourism

services, also in the areas included in the previous surveys. Practical knowledge was obtained through participation in culinary competitions of traditional, regional products and dishes.

Much more has to be done to familiarize city dwellers and teach them to appreciate traditional products and dishes, especially as they very often can be equated with "slow" food winning more and more enthusiasts.

Products and dishes registered as traditional in particular districts of Poland or in EU should be also associated with best quality, uniqueness, be the pride of our country. If connoisseurs can travel to France because of its food and beverages we should do as much as possible to promote our culinary heritage as part of tourism offer.

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PRODUKTY REGIONALNE I TRADYCYJNE JAKO WAŻNA CZĘŚĆ OFERTY TURYSTYKI WIEJSKIEJ

Streszczenie. Rosnące zainteresowanie spędzaniem wolnego czasu na obszarach wiejskich stanowi szansę dla obszarów atrakcyjnych turystycznie, w tym również dla gospodarstw rolnych, na wytworzenie dochodu poprzez świadczenie szeroko rozumianych usług turystycznych. Badania wykazują, że wyżywienie jest ważne dla osób przebywających na wypoczynku. Tradycyjne produkty i dania regionalne stanowić mogą część niepowtarzalnej oferty turystycznej lub same w sobie być magnesem przyciągającym klientów. Unia Europejska stworzyła systemy chroniące tradycyjne produkty regionalne. Polska posiada szeroką gamę produktów regionalnych i tradycyjnych – należy zadbać o ich rejestrację oraz wykorzystanie w ofercie turystycznej. Badania przeprowadzone wśród właścicieli gospodarstw agroturystycznych w powiatach czorsztyńskim, wadowickim, andrychowskim i bocheńskim wskazują na rosnące zainteresowanie, znajomość i zastosowanie produktów i dań regionalnych w ofercie dla turystów. Badania mieszkańców miast – Tarnowa i Nowego

Sącza wskazują na dość słabą znajomość produktów i dań regionalnych, ale wyrażali oni gotowość poznania tego rodzaju produktów.

Słowa kluczowe: produkty regionalne i tradycyjne, turystyka wiejska, agroturystyka. oferta turystyczna

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