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RUSSIA AND WORLD DEVELOPMENT: PERSPECTIVES IN CONCEPTS AND SCENARIOS IN SUSTAINABLE DEVELOPMENT CONDITIONS ................................................................. 169
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Dear followers of idea for sustainable development,

Dear readers,

Dear authors and friends,

You hold serial 17-th volume (number 2/2007) of scientific journal “Management and sustainable development”, published since 1999 from Faculty of Business Management at the University of Forestry, Sofia, Bulgaria.

In this volume you can find the integral text of the part of presented papers before the IX-th International Scientific Conference “Management and Sustainable Development”, held in Yundola in the period 23-25.03.2007. From received for participation 210 applications, with paper abstracts and posters in Conference took part 152 scientists, practical experts, post-graduate students from 25 universities from Bulgaria, 4 universties from Europe, 3 scientific institutes of Bulgarian Academi of Science, 2 colleges, experts from National Board of Forests at Ministry of Agriculture and Forests, 4 NGO’s and 5 enterprises. In 1 plenary and 4 parallel thematic sections were presented 186 scientific papers and 14 posters. The activities of partner organizations – “Dictus” – Sofia - Book Trading Company and Bulgarian-Swiss Forestry Programme, “Sylvica” Fondation, were presented before the participants. The special excursion and programme for the international participants and accompanying persons was organized.

The important issues of management and sustainable development in an EU accession context were discussed. Some main aspects could been summarized as follows: multifunctional forest management have to be developed and encouraged in Bulgarian forests, because of their high importance for environment improvement and biodiversity conservation, there are a high potential to encourage utilization of revenuible energy sources, based on the forest biomass; contemporary practical and theoretical issues in human resources management; more attention have to be pointed out to the social aspects for sustainable management; presentation and implementation of the best practices and innovations; the practice for sustainable development shaping have to be reestablished; more attention have to be intended to the students and post-graduated students investigations; the more important issues have to be separated and have to be discussed into a suitable approach – for example, order of round tables, unformal discussions etc.; the all thematic fields have to be protected and the conference have to be approved as a forum for ideas exchange.


In the same time we offer of all of you not only to read published papers. You could send to our journal results of your investigations, ideas and papers on the issues of management and sustainable development.

Kind regards of all our readers!

Editorial board
The article presents an analysis of the development trends and prospects of the Latvian labour market. The author highlights the most relevant factors causing disparity in demand and supply and arrives at a conclusion that, irrespective of the existing possibilities to ensure stable and sufficiently rapid economic growth, it is necessary to attract labour from third countries.

There is close interrelation between national labour resources and labour market. However, the processes of their formation are relatively independent. If quantitatively labour resources are dependent on the demographic situation, then quality of labour is dependent on the education system in the state, the availability of which is in its turn dependent on the financial situation of the population, motivation, as well as state support.

The situation in the labour market is generally determined by the supply and demand. These two factors are also being closely interrelated. However, the demand side is dominant, which is basically predetermined by the structure of national economy and its possible transformations.

If we consider the trends of Latvian national economy and employment in the time period from 2000 to 2005, we can see that the number of persons employed has increased from 971 thousand to 1036 thousand or by 10.9% [1,81]. An in-depth analysis shows that employment dynamics varies by branch. If the number of persons employed in one branch increases, the number of persons employed in another branches reduces. For example, in this time period the number of persons employed in construction has grown by 35 thousand, in forestry and woodworking – by 16 thousand, in transport and communications industry also by 16 thousand. These industries have ensured more than 70% of growth. At the same time the number of persons employed in the manufacturing sector has reduced by 16 thousand, and in agriculture, forestry and related services – by 27 thousand [1,84].

A more extensive analysis of the changes in the employment structure and dynamics shows that more than 2/3 (68.4%) of the additionally employed are men. We consider that all studies conducted so far have ignored this fact.

The number of men has also reduced in the sphere of trade and education. In other industries the proportion of reduction and growth is approximately the same.

Despite the fact that there is a reduction of the number of persons in the manufacturing industry on the whole, different branches demonstrate different trends. Thus currently there is a trend for the number of highly skilled personnel and basically men’s labour to increase in certain industries, at the same time in some industries, which are basically employing women, the number is decreasing. For example, in this time period the number of persons employed by foodstuff, drinks, textile goods and clothing manufacturers has reduced by 3.4 thousand; at the same time in the branches manufacturing units for mechanisms, machinery and equipment, as well as furniture the number of persons employed has increased by 2.4 thousand [1,47].

Thus current development trends of national economy as well as developing industries basically demand men’s labour.

How does this demand for labour correspond to the demographic situation in Latvia? If currently the share of men in the structure of population constitutes 46.1%, and the share of women is 53.9%, then in the structure of actively employed population the respective figures are 51.6% and 48.4%.

From the national economy development perspective there is sufficient ground for a serious concern due to the fact that in the time period from 2000 to 2005 the number of persons below the age of gainfully employed population has reduced by 100 thousand persons and the share of this group has dropped from 18.1% in 2000. to 14.5% in 2006 [1,22].

Of course, it may be alleged that national economy has certain reserves of labour force, the same as in any other state. For example, at the end of 2005, there were 78482 unemployed, 20581 of them being unemployed for a longer time. But as the research shows, the use of these persons in production and provision of services is complicated due to a number of reasons, starting from their wish to work and completing the list with different addictions these people are suffering from, e.g. alcohol or drugs. Thus the analysis shows that there is a certain discrepancy in Latvia between the demand for labour and labour supply, which in the future may unfavourably impact the economic development on the whole.

The issue of topmost importance is: can we
sufficiently rapidly change the structure of national economy to match the labour supply, or vice versa. The authors of this research maintain the opinion that drastic changes in the structure of national economy are impossible to implement, so it is necessary to focus on the activities to improve the situation in the sphere of labour resources, since these reserves also lack an internal potential for quantitative growth. Therefore, it has to be admitted and clearly stated that the required labour force will be sought and attracted from other countries, the same as it is done by the old EU states.

The second relevant issue to be addressed is how to prepare and effectively utilise the reducing potential labour resources, primarily young people at school age. This is directly related with the structure of education system and its ability to educate/train qualified labour to meet the needs of national economy, since this is a topical issue in terms of quality of education, the possibilities of families to pay for education, as well as the lack of motivation to study, since good academic performance implies time and effort to be devoted for acquisition of knowledge and skills.

It seems that also in the sphere of education we are neglecting a very relevant fact that each child (person) has its limits of capabilities and therefore each person has to be trained according to his/her abilities for a particular type of job. If this is ignored, the losers are the young persons themselves, as well as the whole public, which has expended certain financial and labour resources and, as a result, has gained minimum returns on these investments or even worse.

This approach in a certain way contradicts the existing education policy approaches both in Latvia and the EU. But real time situation calls for a different attitude in education, so that individuals can retain their competitiveness, and the country can avoid possible social conflicts.

The question arises whether this situation is typical only for Latvia or is more or less common for the new EU member states, irrespective of the specifics of each particular country determined by the demographic and economic situation.

Common trends are the following:
- New EU member states start experiencing deficiency of labour;
- Rather high unemployment rate;
- Labour is moving to old EU member states, as well as to other economically advanced countries.

These trends are caused by external and internal factors. The main external factor is a possibility to earn considerably more for the work done than in the native country. The research also highlights other factors, such as the employers’ attitude towards employees, the desire to get acquainted with another culture etc.

The main internal factors are:
- Essential changes in the structure of national economy, which also determined the changes in the structure of demand for labour force. As a result of these changes the demand for engineers, construction workers, qualified industrial plant workers has reduced; at the same time the demand for specialists in such fields as management, economics, marketing, law and languages has increased;
- The reduction of the demand in these spheres has determined also reorientation of the whole education system to the specialities listed. A characteristic trait in the tertiary education system is a gradual transfer to the provision of this service for payment. For example, in 2005/2006 there were 77.2% students in Latvia, who paid for their studies, at the same time in 1992/1993 the number was only 9.7% [1;161]. The educational system and also people were not really prepared to the new changes in the demand for engineers and natural sciences specialists, as they have partly lost motivation to acquire these complicated or physically hard specialisations:
  - According to research conducted by the IMF, it is also affected by such factors as insufficient regional mobility of labour, their qualification, as well as the inadequate economic incentives to affect labour supply and demand situatuion[2,35].

The main problem the new EU member states are currently facing is how to ensure a rapid and stable growth to approach the level of well-being of the old economically developed states. Labour becomes an essential actor for achieving this objective. Economists suggest several ways how to tackle this problem:
  - By creating conditions to lure back persons who have left the country;
  - By increasing productivity;
  - By attracting labour from third countries.

Despite the concerns that attraction of labour from third countries is creating and could create problems in the country, the exiting trends in the labour market call for the requirement to fill the gap to ensure sufficiently high economic growth rate.

**Literature**
REALIZATION OF ALGORITHMS OF IMITATING MODELING OF TECHNICAL AND ECONOMIC SYSTEMS

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ABSTRACT

Due to rapid and drastic changes in economy and technologies managing directors and heads of departments are forced to make crucial decisions focussing attention on the overall performance of their enterprises. Modeling is frequently used when researching the mechanisms of functioning of economic systems and optimization of their activity. Investigating the economic systems making use of analytical methods of research, the whole process of research of the given systems becomes more complicated and the system modeled collects, the so-called, system’s complexity.

System’s complexity grows by increasing the number of blocks and factors included in the model. By using random inputs $x_1, x_2, \ldots, x_n$ you are essentially turning the deterministic model of the system into a stochastic model (see Figure 1).

Due to rapid and drastic changes in economy and technologies managing directors and heads of departments are forced to make crucial decisions focussing attention on the overall performance of their enterprises. The young experts starting to work at the enterprises are compelled to actively participate in decision-making at their level and are involved in the process of implementing the decisions they are responsible for. The higher educational institutions and universities are responsible for providing their graduates both with professional knowledge in their field and abilities to generate ideas, make decisions and successfully realize these ideas and decisions in practice. Taking all this into consideration the universities and other educational establishments are searching for new approaches in training their graduates and trying to focus on enhancement of the professional skills and qualifications as well as practical skills required in their future careers. Training involves more intensive use of statistical methods of modeling, namely, computer modeling.

Modeling is frequently used when researching the mechanisms of functioning of economic systems and optimization of their activity.

A lot of economic systems researched are systems of mass services connected with services of certain requirements. We constantly collide with such economic systems in our daily life.

Let us consider an opportunity and expediency of use of imitating modeling for investigation of the work of technical and economic systems.
We shall use the method of Monte Carlo (MC) as a method of modeling.

Schemes of MC methods used in the investigation of Basic Science and Technical Economic Systems are presented in Figures 1 and 2.

Figure 1. Scheme of using the method of MC in basic science

Figure 2. Scheme of using the MC method in the investigation of technical and economic systems

With growth of complexity of technical and economic systems being investigated, time of research of the given systems with the help of traditional analytical (deterministic) methods promptly grows.

Investigating the economic systems making use
of analytical methods of research, the whole process of research of the given systems becomes more complicated and the system modeled collects, the so-called, system’s complexity. System’s complexity grows by increasing the number of blocks and factors included in the model.

Modeling of complex technical and economic systems when using statistical methods (the method MC), frequently allows to avoid the increase of the modeling time.

Time of modeling using different methods is presented in Figure 3.

**Figure 3. Time of modeling using different methods**

MC simulation is a method for iteratively evaluating a deterministic model using sets of random numbers as inputs. This method is often used when the model is complex, nonlinear, or involves more than just a couple of uncertain parameters (see Figure 4).

**Figure 4. Parametric deterministic model maps a set of input variables to a set of output variables**

By using random inputs, you are essentially turning the deterministic model into a stochastic model. Before describing the steps of the general MC simulation in detail, some words about uncertainty propagation:

- MC method is just one of the many methods for analyzing uncertainty propagation, where the goal is to determine how random variation, lack of knowledge, or error affects the sensitivity, performance, or reliability of the system that is being modeled.

- MC simulation is categorized as a sampling method because the inputs are randomly generated from probability distributions to simulate the process of sampling from an actual population. So, we try to choose a distribution for the inputs that most closely matches data we already have, or best represents our current state of knowledge. The data generated from the simulation can be represented as probability distributions (or histograms) or converted to error bars, reliability predictions, tolerance zones, and confidence intervals (See Figure 5).

**Figure 5. Scheme showing the principles of stochastic uncertainty propagation**
The steps in MC simulation corresponding to the uncertainty propagation shown in Figure 5 are fairly simple, and can be easily implemented in Excel environment for simple models. All we need to do is to follow the five steps:

Step 1: Create a parametric model, $y = f(x_1, x_2, \ldots, x_q)$.

Step 2: Generate a set of random inputs, $x_{i1}, x_{i2}, \ldots, x_{iq}$.

Step 3: Evaluate the model and store the results as $y_i$.

Step 4: Repeat steps 2 and 3 for $i = 1$ to $n$.

Step 5: Analyze the results using histograms, summary statistics, confidence intervals, sensitivity analysis, etc.

For realization of the Step 2 in MS Excel environment the simplest way is to use the inverse function method.

This method is based on the following finding in mathematics - if $F^{-1}$ is a function inverse to the distribution (integral) function $F$, the random variable $X = F^{-1}(U)$ is the distribution function $F(x)$. The argument $U$ is a random variable that is equally distributed in the interval $(0, 1]$.

Let us assume that it is necessary to generate the values of the random variable $X$ which is continuous and has the distribution integral function $F$, which in its turn is continuous and increasing in case $0 < F(x) < 1$. It follows that in case $x_1 < x_2$ and $0 < F(x_1) \leq F(x_2) < 1$, then $F(x_1) < F(x_2)$.

Thus, the main element in the modeling algorithm $x$ of the random (stochastic) variable $X$ values is its distribution integral function $F(x)$.

The essence of this algorithm is shown graphically (see Figure 6) and in this case the variable $X$ may have both positive and negative values depending on the interval $(0, 1)$ of the specific value of variable $u$. In Figure 6 you can see that the variable $u_1$ makes the value of the random variable $X$ negative which equals $x_1$ but the variable $u_2$ makes the value of the random variable $X$ positive which equals $x_2$.

![Figure 6. Illustration for using the method of inverse function](image)

In MS Excel environment the MS Excel function VLOOKUP may be used to realize the method of inverse functions, in particular, when the number of the possible random values of $X$ is considerable. The function VLOOKUP searches for the adequate value of the random variable $X$ in box 2, making use of the value $u = $RAND() from the Table (Figure 7).

Examinining the problem of modeling the process of service of a technical system we mean, that the technical economic system can be any serving device with constant characteristics of service, for example machine tools, cash dispensers, automatic devices for selling tickets, etc. The basic characteristic of the automatic serving device which will be used in a problem is the servicing time $t_s$. We shall consider an example of modeling the work of a technical system with two automatic devices of service in the system. The scheme of service and the components of the servicing system are shown in Figure 8.

The algorithm of the process of imitating modeling the work of technical systems is presented in Figure 9.

We shall consider separate stages of modeling the functioning of a technical and economic system.
The purposes of modeling (Figure 9 Stage 3) are to model the process of receipt and service of requirements in a system of mass service with two serving devices (automatic devices):

1. Using program MS Excel for modeling k service cycles of requirements in a system with two serving devices.
2. To process files of the received information and to create a solid chronological file of occurrence and the system incoming events in the system modeled.
3. To calculate parameters of the technical and economic system:
   a. \( Q(t) \) - number of the requirements in turn at the moment of time \( t \);
   b. \( B(t) \) - number of the requirements which are taking place in service, at the moment of time \( t \);
   c. \( Z(t) \) - number of the requirements which are taking place in a system (both in service and in turn), at the moment of time \( t \);
   d. \( \delta(n) \) - an expected average delay in turn for each of \( n \) requirements for individual realization of process of modeling;
   e. \( \hat{q}(n) \) - average on time number of requirements in turn for individual realization of process of modeling;
   f. \( \hat{u}(n) \) - parameter of employment of the serving device for each individual process of modeling.
4. To construct schedules:
   - \( - \int_{0}^{T(n)} B(t) \, dt \) - the area under function of employment in \( t \) during the period of time of modeling \( T(n) \);
   - \( - \int_{0}^{T(n)} Q(t) \, dt \) - the area under function \( Q(t) \) during the period of time of modeling \( T(n) \);
   - \( - \int_{0}^{T(n)} Z(t) \, dt \) - the area under function \( Z(t) \) during the period of time of modeling \( T(n) \).
A distinguishing feature of the decision of the given problem will be:
- generating the statistical information describing the process of receipt in the system of requirements of service, using the program MS Excel;
- distribution of a stream of requirements between two serving devices of the system;
- graphically display differences in the system during modeling.

The basic characteristic of the automatic serving device which will be used in the model is the service time $t_s$.

During the time interval $t_s$, the number of the requirements acting in the system and probability of their occurrence are presented in the table (See Table 1).

As a result of generating we receive the file of information describing the process of receipt and service of requirements in a technical system. Results of modeling are submitted as schedules (Figures 10, 11, 12) and are summarized in Table 2.

Analysis of the results of modeling, (Figure 9 Stage 6).

Analyzing the received information (Table 2), we can more precisely describe the behavior of technical and economic systems researched at various values of parameters of its functioning. Imitating modeling is very important in the cases when extreme values of parameters of these systems are investigated. In practice it enables the company heads...
Table 1. Historical data (the information characterizing the input of the requirements into the system)

<table>
<thead>
<tr>
<th>Number of requirements X</th>
<th>Distribution function F(x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>x₁</td>
<td>0</td>
</tr>
<tr>
<td>x₂</td>
<td>p₁</td>
</tr>
<tr>
<td>x₃</td>
<td>p₁+p₂</td>
</tr>
<tr>
<td>x₄</td>
<td>p₁+p₂+p₃</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>xₙ</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 10. Change of the area under Q(t) in a system with two serving devices during the time of modeling

Figure 11. Change of the area under Z(t) in a system with two serving devices during the time of modeling
Realization of algorithms of imitating modeling of …

Figure 12. Change of the area under B(t) in a system with two serving devices during the time of modeling

Table 2. Final information of the modeling of the system

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$\hat{d}(n)$ =</td>
<td>0,10</td>
</tr>
<tr>
<td>$\hat{q}(n)$ =</td>
<td>0,02</td>
</tr>
<tr>
<td>$\hat{u}(n)$ =</td>
<td>0,40</td>
</tr>
</tbody>
</table>

and managers make adequate decisions in critical situations, thereby raising the effectiveness of the performance of enterprises.

The algorithm shown above can be used for modeling similar technical and economic processes or service systems.

References

THE SECOND HIGHER EDUCATION IN THE CONTEXT OF LIFE-LONG LEARNING

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ABSTRACT

The article deals with education in the context of life-long learning. The author focuses on the role of education in the enhancing of the well-being of an individual as well as the society on the whole. The author points to the downsides of the terminology used in Latvia with regard to adult education. The second higher education is analysed based on the experience of the Department of Further Education of the Faculty of Engineering Economics of Riga Technical University.

Key words: education, competitiveness, knowledge, life-long learning, second higher education

Education and knowledge have a relevant role in the development of individuals and the society on the whole, it is an important means for achieving such goals as a developed economic and civil society and involvement of individuals in democratic, social and economic processes. An educated individual gains benefit not only privately, but as such also contributes to the development of the whole society, i.e. creating the so-called synergy effects. Thus education favourably affects the development of the whole state into a knowledge-based society, whose cultural, social and economic development is determined by the level of knowledge of its citizens.

It has to be remembered that knowledge and its application, as well as competences required by the contemporary labour market and everyday life are rapidly changing. Therefore, we have to differentiate between various levels and forms of education. This means that acquisition of education has to be viewed in the context of life-long learning, instead of treating education as a completed stage in a person’s life. Thus education favourably affects the development of the whole state into a knowledge-based society, whose cultural, social and economic development is determined by the level of knowledge of its citizens.

Moreover, social restructuring manifests itself as changes in the speed of life as well as interpretation of social roles. Nowadays it can hardly be expected that the knowledge acquired in the young age will be sufficient for the rest of person’s life. The rapid changes taking place in the world require constant updating of knowledge. In the world, in which knowledge as a resource and a development factor will increasingly dominate over material resources, the role of education will definitely increase. In addition, the rapid development of technologies means that national economy will require higher competence and expertise, which in its turn will call for higher level of studies.

The relevance of knowledge is also demonstrated by the employment rate – the rate of employment among educated/qualified persons is much higher than among persons with insufficient level of education, therefore it is essential to focus on and analyse the current situation in Latvia from the life-long learning perspective.

In Latvia, the same as worldwide, there is a demand for educated personnel having relevant survival skills (incl. communication and decision-making skills, logical thinking, ability to control emotions, defend opinion, demonstrate good foreign language proficiency etc.). The only way how a person can successfully integrate in the contemporary society is to flexibly adapt to changes, to act with due confidence and self-assuredness, and to learn how to efficiently use the information obtained. In the age of the information-based society these social development trends dictate their rules – the requirements individuals have to meet to improve the quality of their lives and to successfully compete in the labour market have become much tougher. At the same time, the information age is transforming into the knowledge-based creativity age, which calls for a more versatile content of education and forms of acquisition of knowledge. Therefore learning and education have to be viewed in their broadest meaning as a process of developing the abilities of each individual, helping to discover and open up every person’s creative potential. This means that education should not be viewed as a tool and process for reaching local goals (particular skills, specific facts etc.), but it is essential to understand that education has to contribute to the development of a versatile personality, since real life is increasingly requiring abilities to resolve new problems and show initiative.

Besides, the contemporary situation calls for a more
profound understanding of human, environmental and economic factors as well as poses new challenges with regard to education. This stimulates the development of new models of demand and supply in education.

Any society is divided into age groups, in which individuals fulfil different social roles based on the age and the experiences amassed with regard to particular social realia. There is a relatively well-established system of relationships among these age groups, which are manifested in the wide scope of social processes. This division is based not only on biological criteria but is conditioned also by cultural and social topicality (e.g., attitude towards education). Unfortunately, the studies of life-long learning in Latvia have disclosed education terminology gaps, which hamper the understanding of the system of classification of education adopted in Latvia. Major problems are connected with the term “adult education”. According to the LR Statistical Board, adult education is a versatile process, which ensures personality development and competitiveness of an individual in the labour market over the whole life span of a person (LR law “On education”, LR Saeima (the Parliament of the Republic of Latvia), 29.10.1998). This definition is far too general, since the LR Statistical Board here refers only to the data on informal education, professional profile education and further education, ignoring formal education.

Figure 1. Division of life-long learning by stages

Figure 1 shows that it is possible to differentiate between various stages of life-long education. However, it has to be remembered that there are no strictly defined borders between them, since it is difficult to draw the line when a person becomes an adult, as this may differ from individual to individual within one culture as well as with regard to representatives from other cultures. According to P. Zimmermann, at the time of social restructuring the speed of life changes and also interpretation of social functions. Nowadays, it is possible to speak about transformation of borders between different stages in a person’s life – with the tendency for the border of young age to be shifted onward, owing to the possibility of life-long learning [4].

At the same time, the need for higher education can be stimulated not only by different external socio-economic and political factors, but also by internal motivation and needs, the main of them being:
- need for self-expression in both general and professional sphere of competence;
- need for increasing self-respect and self-assessment;
- increasing awareness of education as a valuable asset.

Let us turn to the second higher education as one of the forms of adult education. The necessity to acquire the second higher education is determined by a number of factors: interest about the specific field of science, the necessity to upgrade professional competence and raise quality of person’s social life. The factors motivating adults to repeatedly undertake studies in the system of higher education are:
1. private business activities;
2. career growth possibilities;
3. current job responsibilities;
4. special interest.

To flexibly respond to the situation in Latvia at the end of the last century, Latvian tertiary education establishments started to offer special study programmes targeted at persons with a prior higher education. In 2000, the Faculty of Engineering Economics of Riga Technical University offered a possibility to master a second higher education in the area of economics and management of entrepreneurship. At first there were only 11 applicants and only 4 graduates. In the following years the number of applicants for studies to acquire the second higher education notably increased. Therefore, on 24 February 2003, the Department of Further Education (DFE) under the Faculty of Engineering Economics (FEE) was established. The DFE incorporated and implemented all second higher education programmes offered by the FEE. In such a way the RTU FEE ensured a possibility for students without economic education to undertake bachelor studies in economics or entrepreneurship and management. These further education programmes has become very popular (in 2003/2004 there were 54 applicants, in 2004/2005 – 80; in 2005/2006 – 110). The applicants are students with education background in humanities, exact and natural sciences, as well as engineering sciences.

Currently, there are 139 students at the Department of Further Education in two second higher education programmes: “Economics” and “Entrepreneurship and Management”. The mode of studies is part-time correspondence studies with an increased number of contact hours (56% of the scope of full-time studies), studies are organised only on Saturdays, since all students are working and arrive to classes from all regions of Latvia.

The most popular programme is “Entrepreneurship and Management” with 65% of students, the runner up being “Economics” with 35% of students.

When analysing the students age structure, the oldest student is 57, and the youngest – 22. The structure of students is presented in Figure 2 below.

![Figure 2. Students age structure in 2007, %](image)

Figure 2 shows that the biggest number of students (49%) are aged 22 – 30, 3% of students fall within the group of 51 – 60 year-olds. 65% of students are women, 33% – men. At the same time, when analysing the share of women and men by study programmes, 84% of women students and only 16% of men students study in the programme “Economics”. In the programme “Entrepreneurship and Management” the proportion is almost equal – 54% women and 46% men.

The analysis of educational establishments students have come from (see Figure 3) shows that most of students (45.2%) have graduated from various engineering programmes at Riga Technical University.

Figure 3 shows that most students come from largest Latvian universities: University of Latvia (19.3%), Latvia University of Agriculture (19.3%), 18.5% of students are graduates of other (11) smaller Latvian higher schools, 2.2% are graduates of foreign tertiary educational establishments, mostly in the former Soviet Union, e.g., Russia, Belarus etc. The second higher education is undertaken not only by persons already having the bachelor degree, but also by persons having the master degree, mostly in engineering sciences, medicine and pedagogy.

An important indicator is successful academic performance of students, which proves their motivation to study and the willingness to acquire new knowledge. Assessment of students academic performance is rather high – average grade is 7.4. There is a tendency that some students undertaking the second higher education programme fail to settle their academic assignments at the time specified; however, in a month or two these academic debts are settled with a very successful assessment grade
The second higher education in the context of ... 

8 (very good) or 9 (excellent). The assessment grades for most students’ academic papers are very high, since students’ attitude is very responsible and they successfully combine theoretical knowledge with practice. The bachelor theses are qualitative research papers evaluated with very high grades – 8 (very good), 9 (excellent), or even 10 (outstanding). Part of students continue their studies in the master degree programme, which ensures further involvement of students in educational processes, which supports the principle of life-long learning. In 2006/2007, the graduates of second higher education programmes were offered a special master programme “Economics” with a specialisation “International and regional economics”. 37 students joined this programme to further develop their knowledge in the field of in-depth studies of economics.

As for, dropouts, in the beginning the dropout rate was higher, i.e. 19% (now it is 12%). There was also a tendency that, if a person took an academic leave, very frequently he/she did not resume studies anymore. Currently, the desire to obtain knowledge and receive the diploma has become stronger.

Nowadays we are facing rapid changes in the spheres of technology, communications, which in its turn trigger changes in the sphere of skills and knowledge required by personnel. The previously acquired skills become outdated and lose their marketability. Therefore, it is necessary to constantly update knowledge and upgrade qualifications through various education programmes currently offered by tertiary education establishments flexibly responding to the needs of life-long learning.

**Figure 3. Prior tertiary education establishments, %**

<table>
<thead>
<tr>
<th>Tertiary Education</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daugavpils University</td>
<td>18.5%</td>
</tr>
<tr>
<td>Riga Technical University</td>
<td>4.4%</td>
</tr>
<tr>
<td>Latvia University of Agriculture</td>
<td>10.4%</td>
</tr>
<tr>
<td>University of Latvia</td>
<td>19.3%</td>
</tr>
<tr>
<td>Other Latvian higher schools</td>
<td>18.5%</td>
</tr>
<tr>
<td>Foreign Universities</td>
<td>45.2%</td>
</tr>
</tbody>
</table>

Literature

simulations of economic processes using multidimensional distributions

Vladimir Janson, Vitaly Yurenok
Riga Technical University - Latvia

abstract

It is often argued that financial asset returns are the cumulative outcome of a vast number of pieces of information and individual decisions arriving almost continuously in time. As such, they have been modeled by the Gaussian distribution. The strongest statistical argument for it is based on the Central Limit Theorem, which states that the sum of a large number of independent, identically distributed variables from a finite-variance distribution will tend to be normally distributed. However, financial asset returns usually have usually fat tails. Also in practice, models based on multivariate normal assumption (the so-called mean-variance approach) are widely used for their simplicity. An example of its application is the so-called parametric methods. More precisely, basic asset (stock, exchange rate, interest rate) returns are assumed to be jointly normal, i.e.: \( r_i \sim N(0, \Sigma) \), where \( \Sigma \) is the covariance matrix which may be historically estimated over time. As a consequence any portfolio returns \( \omega^T r_i \sim N(0, \sigma) \) is also normally distributed with mean 0 and variance \( \sigma^2 = \omega^T \Sigma \omega \). Thus under this assumption many important risk measures such as Value at Risk (VaR) may have simple analytical expressions.

However, several extreme events (financial collapses, technologic catastrophes, avian ... in the second half of last century have made financial practitioners worried more about the tails of their portfolio returns and the joint normal specification fails to provide a good approximation for the tails in general. Correlation coefficient is a limited measure. In the real world, there is often a non-linear dependence between different variables and correlation cannot be an appropriate measure of co-dependency. Therefore linear Spearman’s correlation coefficient is a limited measure of dependence. It is not surprising that alternative methods (the copula method) for capturing co-dependency have been considered. The concept of copulas comes from Sklar in 1959. A copula is a multivariate distribution function with uniform (0,1) marginals. Copulas are used to combine different marginal distributions. They are unique, if marginal distributions are continuous, and like dependence measures use Kendall’s tau and Spearman’s rho, which are invariant under strictly increasing transformation. Therefore copulas have become a powerful tool for modeling dependence between random variables. Also copula methodology is effective for modeling joint distributions with fat tails. Fat tails in financial return data have been documented in numerous real cases. Joint distribution on financial data returns is very important issue in derivative pricing, risk management and portfolio allocations.

The received theoretical and practical results of work can be used in practical financial activities of the industrial enterprises, using standard programs of modeling.

Normal assumption of asset returns. It is often argued that financial asset returns are the cumulative outcome of a vast number of pieces of information and individual decisions arriving almost continuously in time. As such, they have been modeled by the Gaussian distribution. The strongest statistical argument for it is based on the Central Limit Theorem, which states that the sum of a large number of independent, identically distributed variables from a finite-variance distribution will tend to be normally distributed. However, financial asset returns usually have usually fat tails. Also in practice, models based on multivariate normal assumption (the so-called mean-variance approach) are widely used for their simplicity. An example of its application is the so-called parametric methods. More precisely, basic asset (stock, exchange rate, interest rate) returns are assumed to be jointly normal, i.e.: \( r_i \sim N(0, \Sigma) \), where \( \Sigma \) is the covariance matrix which may be historically estimated over time. As a consequence any portfolio returns \( \omega^T r_i \sim N(0, \sigma) \) is also normally distributed with mean 0 and variance \( \sigma^2 = \omega^T \Sigma \omega \). Thus under this assumption many important risk measures such as Value at Risk (VaR) may have simple analytical expressions.

Expected Returns are assumed to be zero since that it is found to be very hard to predict even the sign of return when horizon is more than 3 months. \( \Sigma \) is assumed to be constant over the period considered under the static hypothesis. In practice often use an exponentially weighted moving average (EWMA) to estimate the volatility \( \sigma_i^2 = \frac{1 - \lambda}{1 - \lambda^m} \sum_{t=0}^{m} \lambda^t r_{t-i}^2 \), or,

\( \sigma_i^2 = \lambda \sigma_i^2 + (1 - \lambda) r_{t-i}^2 \) where \( \lambda \) is the decay factor with an estimated value 0.94 for daily data.

However, several extreme events (financial
dependence, technologic catastrophes, aviaries …) in
the second half of last century have made financial
practitioners worried more about the tails of their
portfolio returns and the joint normal specification
fails to provide a good approximation for the tails in
general.

**Correlation coefficient is a limited measure.**
Recently, a lot of works have devoted to the modeling
of the joint distribution [8], [9] and to see how these
models could be better than the joint normal
specification, for representing the tail behavior. In
the real world, there is often a non-linear dependence
between different variables and correlation cannot
be an appropriate measure of co-dependency.
Therefore linear Spearman’s correlation coefficient
is a limited measure of dependence. It is not surprising
that alternative methods (the copula method) for
capturing co-dependency have been considered. The
rough terms, a copula is a function
\[ C : [0,1]^n \rightarrow [0,1], \]
with certain special properties. Alternatively we can
say that it is a multivariate distribution function
defined on the unit cube \([0,1]^n\). Copula functions are
well studied object in the statistical literature. These
functions have been introduced to model a joint
distribution once the marginal distributions are
known. When multivariate normal distribution is
rejected by data, the copula may be used as an
important alternative to represent the dependence
in joint distributions.

**Copulas.** A copula is a multivariate distribution
function with uniform \((0,1)\) marginals. Copulas are
used to combine different marginal distributions. They
are unique, if marginal distributions are continuous,
and like dependence measures use Kendall’s tau and
Spearman’s rho, which are invariant under strictly
increasing transformation. Therefore copulas have
become a powerful tool for modeling dependence
between random variables. Also copula methodology
is effective for modeling joint distributions with fat
tails. Fat tails in financial return data have been
documented in numerous real cases. Joint distribution
on financial data returns is very important issue in
derivative pricing, risk management and portfolio
allocations.

**Tails dependence meaningful measure of
dependence.** For example, real portfolio examples
clearly show that we must use heavy tailed
alternatives to the Gaussian law in order to obtain
acceptable estimates of market losses. But can we
substitute the Gaussian distribution with other
distributions in Value at Risk (Expected Shortfall)
calculations for whole portfolios of assets? Remember,
that the definition of VaR utilizes the quantiles of the portfolio returns distribution and not
the returns distribution of individual assets in the
portfolio. If all asset return distributions are assumed
to be Gaussian then the portfolio distribution is
multivariate normal and we can apply well known
statistical tool. However, when asset returns are
distributed according to different laws then the
multivariate distribution may not be multivariate
normal. In particular, linear correlation may no longer
be a meaningful measure of dependence.

In such cases multivariate statistics offers the
concept of copulas. The technical definitions of
copulas that can be found in the literature often look
more complicated, but to a financial modeling, this
definition is enough to build an intuition from. What
is important for VaR calculations is that a copula
enables us to construct a multivariate distribution
function from the marginal (possibly different)
distribution functions of \(n\) individual asset returns in
a way that takes their dependence structure into
account. This dependence structure may be no longer
measured by correlation, but by other adequate
functions like rank correlation and, especially, tail
dependence [7]. Moreover, it can be shown that for
every multivariate distribution function there exists
a copula which contains all information on
dependence. For example, if the random variables
are independent, then the independence copula (also
known as the product copula) is just the product of
\(n\) variables \(C(u_1, \ldots, u_n) = u_1 \cdots u_n\).

**Elliptical and Archimedean copulas.** Copula
functions do not impose any restrictions on the
financial model, so in order to reach a model that is
to be useful in a given risk management problem, a
particular specification of the copula must be chosen.
From the wide variety of copulas that exist probably
the elliptical and Archimedean copulas are the ones
most often used in applications. Elliptical copulas
are simply the copulas of elliptically contoured (or
elliptical) distributions, e.g. (multivariate) normal, \(t,\)
symmetric stable.

**Restrictions of elliptical copulas for using in risk
management.** Rank correlation and tail dependence
coefficients can be easily calculated for elliptical
copulas. There are, however, drawbacks - elliptical
copulas do not have closed form expressions, are
restricted to have radial symmetry and have all
marginal distributions of the same type.
The algorithm (MathCad 2001) for calculating density of the bivariate Gaussian distribution with known covariation matrix.

```math
code{\text{Numbers}(N, \mu, \text{Cov}) := \text{cholesky}(%20\text{Cov})} \\
1. \text{A } \leftarrow \mu \\
2. \text{z } \leftarrow \text{rnorm}(2 \cdot N, 0, 1) \\
3. \text{for } i = 1 \ldots N \\
4. \text{Z } \leftarrow \mu + T \cdot z_i \\
5. \text{A } \leftarrow \text{augment}(Z, A)
```

The bivariate Gaussian distribution and density of the bivariate Gaussian copula with the same covariation matrix.

These restrictions may disqualify elliptical copulas from being used in some risk management problems. In particular, there is usually a stronger dependence between big losses (e.g. market crashes) than between big gains. Clearly, such asymmetries cannot be modeled with elliptical copulas. In contrast to elliptical copulas, all commonly encountered Archimedean copulas have closed form expressions. Their popularity also comes from the fact that they allow for a great variety of different dependence structures. Many interesting parametric families of copulas are Archimedean, including the well known Clayton, Frank and Gumbel copulas.

After the marginal distributions of asset returns are estimated and a particular copula type is selected, the copula parameters have to be estimated. The fit can be performed by least squares or maximum likelihood. While analytical methods for the computation of VaR exist for the multivariate normal distribution (i.e. for the Gaussian copula), in most other cases we have to use Monte Carlo simulations.

A general technique for random variable generation from copulas is the conditional distributions method. For explanatory purpose we focus on the two variables (assets) case.

**Definition of a two-dimensional copula.** A two-dimensional copula is a two-dimensional distribution function $C$ with uniformly distributed marginals $U(0, 1)$ on $[0,1]$. Thus a copula is a function $C: [0,1]^2 \to [0,1]$ satisfying the following three properties:

1. For every $u, v \in [0,1]$
   
   \[
   C(u,0) = C(0,v) = 0, \quad C(u,1) = u.
   \]
   
   and $C(1,v) = v$.

2. $C(u,v)$ is increasing in $u$ and $v$.

3. For every $u_1, u_2, v_1, v_2 \in [0,1]$ with $u_1 \leq u_2$ and $v_1 \leq v_2$ we have:

   \[
   C(u_2,v_2) - C(u_2,v_1) - C(u_1,v_2) + C(u_1,v_1) \geq 0.
   \]

Condition 1 provides the restriction for the support of the variables and the marginal uniform distribution. Conditions 2 and 3 correspond to the existence of a nonnegative “density” function.

The most useful results of copula theory are
Sklar’s theorem and Fréchet bounds [6].

Sklar’s theorem - copula’s first definition. Let $F$ be a joint multivariate distribution with marginals $F_1$ and $F_2$. Then, for any $x_1$, $x_2$ there exists a copula $C$ such that

$$F(x_1, x_2) = C(F_1(x_1), F_2(x_2))$$

(1)

Furthermore, if marginals $F_1$ and $F_2$ are continuous, the copula $C$ is unique. Conversely, if $F_1$ and $F_2$ are marginal distributions and $C$ is a copula, then the function $F$ defined by $C(F_1(x_1), F_2(x_2))$ is a joint distribution function with marginals $F_1$ and $F_2$. If we have a random vector $X = (X_1, X_2)$ the copula of their joint distribution function may be extracted from equation (1):

$$C(u_1, u_2) = F(F_1^{-1}(u_1), F_2^{-1}(u_2)),$$

where the $F_1^{-1}, F_2^{-1}$ are the quantile functions of the margins.

Sklar’s theorem provides a decomposition of the joint distribution into marginal features (that are $F_1$ and $F_2$) and dependence features (represented by copula $C$). The two variables $X$ and $Y$ are independent if and only if $F(X)$ and $G(Y)$ are independent. The independence condition can be written in terms of copula as $C(u, v) = uv$. When $C(u, v) \neq uv$, the variables $X$ and $Y$ (or $F(X), G(Y)$) are dependent and the dependence summarized in the copula depends on the variables up to (nonlinear) increasing transformation of the variables. It is important to see if they are more or less dependent, and the “sign” of the dependence. The comparison of dependence can be based on the usual first order dominance stochastic ordering applied to copula. The Fréchet bounds provide the minimal and maximal elements in this comparison.

In most financial cases we can effectively use Archimedean copulas. The Archimedean copulas provide analytical tractability and a large spectrum of different dependence measure. These copulas can be used in a wide range of applications for the following reasons:

- the simplicity with which they can be constructed;
- the many parametric families of copulas belonging to this class;
- the great variety of different dependence structures.

An Archimedean copula can be denoted as follows:

Definition of Archimedean copula’s generator.

Let us consider a function $\varphi : [0;1] \to [0;1]$ which is continuous, strictly decreasing, convex and for which $\varphi(0) = \infty$ and $\varphi(1) = 0$. We then define the pseudo inverse of $\varphi^{-1}$: $\varphi^{-1} : [0;1] \to [0;\infty]$ such that:

$$\varphi^{-1}(t) = \begin{cases} \varphi^{-1}(\varepsilon) & 0 \leq t \leq \varphi(0) \\ 0 & \varphi(0) \leq t \leq \infty \end{cases}.$$

As $\varphi$ is convex, the function $C : [0;1]^n \to [0;1]$ defined as $C(u, v) = \varphi^{-1}(\varphi(u) + \varphi(v))$ is an Archimedean copula and $\varphi$ is called the generator of the copula [9].

In case of the multivariate extension for all $n \geq 2$, the function $C : [0;1]^n \to [0;1]$ defined as $C(u_1, ..., u_n) = \varphi^{-1}(\varphi(u_1) + ... + \varphi(u_n))$, is an $n$-dimensional Archimedean copula if and only if $\varphi^{-1}$ is completely monotone on $[0, \infty)$.

<table>
<thead>
<tr>
<th>Picture (examples)</th>
<th>Formula for Archimedean copula</th>
<th>Kendall’s Tau</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="example_image1.png" alt="Clayton copula" /></td>
<td>$C(u_1, u_2) = \left( u_1^{-\theta} + u_2^{-\theta} - 1 \right)^{\theta}$</td>
<td>$\tau(\theta) = \frac{\theta}{2 + \theta}$</td>
</tr>
<tr>
<td><img src="example_image2.png" alt="Frank copula" /></td>
<td>$g(z) = e^{-z} - 1, \varphi(t) = -\ln g(t), g(1)$</td>
<td>$\tau(\theta) = 1 - \frac{1}{\theta}$</td>
</tr>
<tr>
<td><img src="example_image3.png" alt="Gumbel copula" /></td>
<td>$C(u_1, u_2) = \exp \left{ - \left[ (\ln u_1)^{\theta} + (\ln u_2)^{\theta} \right] / \theta \right}$</td>
<td>$\tau(\theta) = 1 - \frac{4}{\theta} + \frac{4}{\theta^2} \int_0^1 t \frac{e^t - 1}{e^t - e^{-1}} dt$</td>
</tr>
</tbody>
</table>
Dependence

Since copulas are used to represent the dependence structure among the variables when margins are known or well estimated, it is useful to describe the basic dependence measures, which can be used to interpret the parameters appearing in parametric copula families.

Pearson’s linear correlation. Pearson’s linear correlation coefficient is the most frequently used measure of dependence. It is defined by:

\[ \text{cor}(X,Y) = \frac{\text{Cov}(X,Y)}{\sqrt{\text{Var}(X)\text{Var}(Y)}}. \]

This measure can be applied to the basic variables X, Y themselves. In this case, it depends on both the marginal distributions and the copula. Since the copula of a multivariate distribution describes its dependence structure, it might be appropriate to use measures of dependence which are copula-based. The bivariate concordance measure Kendall’s tau (\(\tau\)) and Spearman’s rho (\(\rho\)), as well as the coefficient of tail dependence, can, as opposed to the linear correlation coefficient, be expressed in terms of the underlying copula alone.

Kendall’s tau – dependency measure. Kendall’s tau of two variables X and Y is (in terms of copulas functions):

\[ \tau(X,Y) = 4\int_{[0,1]^2} C(u,v)\,dC(u,v) - 1, \]

where C(u, v) is the copula of the bivariate distribution function of X and Y. For the Gaussian and Student’s t-copulas and also all other elliptical copulas, the relationship between the linear correlation coefficient and Kendall’s tau is given by

\[ \text{cor}(X,Y) = \sin\left(\frac{\pi}{2} \tau\right). \]  

(2)

For an Archimedean copula \(\phi(X,Y)\) can be evaluated directly from the generator of the copula:

\[ \tau(X,Y) = 1 + 4\int_0^1 \frac{\phi(t)}{\phi'(t)} \,dt. \]

Also for Archimedean copulas, Kendall’s tau can be related to the dependence parameter. For the Clayton copula it is given by

\[ \tau(X,Y) = \frac{\delta}{\delta + 2}, \]

and for the Gumbel copula it is

\[ \tau(X,Y) = 1 - \frac{1}{\delta}. \]

For the Gaussian and Student’s t-copulas, Kendall’s tau must be estimated empirically.

Spearman’s correlation. The concept of linear correlation can also be applied to transformation of the basic variables. For instance, we can consider the correlation between the ranking associated with X and Y, that are U = F(X), V = G(Y). The correlation between the ranks, so-called Spearman’s rho, is

\[ S_{\rho} = \text{Cor}(U,V) = \text{Cor}(F(X),G(Y)). \]

It depends on the copula only and is given by:

\[ S_{\rho}(X,Y) = 12\int_{[0,1]^2} C(u,v)\,dudv - 3 \]

where C(u, v) is the copula of the bivariate distribution function of X and Y. Let X and Y have distribution functions F and G, respectively. Then, we have the following relationship between Spearman’s rho and the linear correlation coefficient

\[ S_{\rho}(X,Y) = \text{cor}(F(X),F(Y)). \]

For the Gaussian and Student’s t-copulas, we have that the relationship between the linear correlation coefficient and Spearman’s rho is

\[ \text{cor}(X,Y) = \sin\left(\frac{\pi}{6} S_{\rho}\right). \]

Tail dependence. There is saying in finance that in times of stress, correlations will increase. Bivariate tail dependence measures the amount of dependence in the upper and lower quadrant tail of a bivariate distribution. This is of great for risk manager trying to guard against concurrent bad events. Let X\(\sim\)\(F_X\) and Y\(\sim\)\(F_Y\). By definition, the upper tail dependence coefficient is [7],

\[ \lambda_{\alpha}(X,Y) = \lim_{\alpha \to 1} P(Y > F_Y^{-1}(\alpha) | X > F_X^{-1}(\alpha)) \]

and quantifies the probability to observe a large Y, assuming that X is large. Analogously, the coefficient of lower tail dependence is

\[ \lambda_{\alpha}(X,Y) = \lim_{\alpha \to 0} P(Y \leq F_Y^{-1}(\alpha) | X \leq F_X^{-1}(\alpha)). \]

These measures are independent of the marginal distributions of the asset returns. Moreover, they are invariant under strictly increasing transformations of the X and Y. For elliptical distributions, \(\lambda_{\alpha}(X,Y) = \lambda_{\alpha}(X,Y)\). If \(\lambda_{\alpha}(X,Y) > 0\), large events tend to occur simultaneously. On the contrary, when \(\lambda_{\alpha}(X,Y) = 0\), the distribution has no tail.
dependence, and the variables X and Y are said to be asymptotically independent. It is important to note that while independence of X and Y implies \( \lambda_u(X, Y) = \lambda_l(X, Y) = 0 \), the converse is not true in general. That is \( \lambda_u(X, Y) = \lambda_l(X, Y) = 0 \), does not necessarily imply that X and Y are statistically independent. Thus asymptotic independent should be considered as the “weakest dependence which can be quantified by the coefficient of the tail dependence” [7].

Gaussian copula. For the Gaussian copula, the coefficients of lower tail and upper tail dependence are
\[
\lambda_l(X, Y) = \lambda_u(X, Y) = \frac{1}{2} \left( 1 - \Phi\left( \frac{\sqrt{2} \rho}{\sqrt{1 + \rho}} \right) \right).
\]

Where \( \Phi \) is Laplace function. This means, that regardless of high correlation \( r \) we choose, if we go far enough into the tail, extreme events appear to occur independently in X and Y.

The Student’s t-copula. For the Student’s t-copula, the coefficients of lower tail and upper tail dependence are
\[
\lambda_l(X, Y) = \lambda_u(X, Y) = 2 \left( 1 - \frac{1}{\nu + 1} t_{\nu + 1}^{-1} \right),
\]
where \( t_{\nu + 1}^{-1} \) denotes the distribution function of a univariate Student’s t-distribution with \( \nu + 1 \) degrees of freedom. The stronger the linear correlation \( r \) and the lower the degrees of freedom \( \nu \), the stronger is the tail dependence.

The Clayton copula. The Clayton copula is lower tail dependent. That is, the coefficient of the upper tail dependence \( \lambda_u(X, Y) = 0 \), and the coefficient of the lower tail dependence is \( \lambda_l(X, Y) = 2^{-\delta} \).

The Gambel copula. The Gambel copula is upper tail dependence. That is, the coefficient of the lower tail dependence \( \lambda_l(X, Y) = 0 \) and the coefficient of the upper tail dependence is \( \lambda_u(X, Y) = 2^{-\delta/\gamma} \).

The coefficient of tail dependence seems to provide a useful measure of the extreme dependence between two random variables. However, a difficult problem remains unsolved, namely to estimate the tail dependence for an empirical data. One alternative is to use a parametric approach. For instance, choose to model dependence with the Gambel copula and determine the associated tail dependence.

In most cases

Example of copula (Gaussian) modeling (using program MathCad 2001).

The first step is empirical estimation of Kendall’s tau using formula:
\[
\hat{\tau}(X, Y) = \left( \frac{n}{2} \right) - \sum_{i<j} \text{sign}(X_i - X_j) \cdot (Y_i - Y_j).
\]

For Gaussian copula from known linear correlation coefficient \( \hat{\tau} \), we can define linear correlation between X and Y from equation (2):
\[
\text{cor}(X, Y) = \sin\left( \frac{\pi}{2} \cdot \hat{\tau} \right).
\]

After then we can construct covariance matrix Cov and algorithm for Gaussian copula modeling is:

- Generate two independent uniform \((0,1)\) variables \( s \) and \( q \);
- Set \( t = K_C^{-1}(q) \)
  - where \( K_C^{-1}(q) \) denotes the quasi-inverse of the distribution function \( K_C \);
- Set \( u = \varphi^{-1}(s \cdot \varphi(t)) \)
  - and \( v = \varphi^{-1}[(1 - s) \cdot \varphi(t)] \);
- The desired pair is \((u,v)\).

In this algorithm \( K_C(t) = t - \frac{\varphi(t)}{\varphi'(t)} \).

For example see this algorithm realization for Gambel copula (for \( n \) pairs \((u,v)\) and copula’s parameter \( q \)) in programm MathCad 2001:

\[
\text{Gambel}(n, q) = \begin{cases} 
\text{for } i \in 1..n \\
\text{set } s \leftarrow \text{md}(1) \\
\text{set } q \leftarrow \text{md}(1) \\
\text{set } t \leftarrow 0.5 \\
\text{set } t_{1,2} \leftarrow \text{root} \left( t - \frac{\varphi(t)}{\varphi'(t)} - q \cdot t \right) \\
\text{set } u_{1,2} \leftarrow \left[ \frac{1}{t_{1,2}} \right]^{-\delta} \\
\text{set } v_{1,2} \leftarrow \left[ \frac{1}{t_{1,2}} \right]^{(1-\delta)} \\
\text{set } M \leftarrow \text{augment}(u, v)
\end{cases}
\]

Fragments of the algorithm for Gambel copula in MathCad.
The modern economic analysis basing on the using of information technologies, shows that in the real systems the parameters describing the economic objects, not always have the Gauss distribution. The unlinear dependence exists between various factors. In this cases it is impossible to use the linear correlation coefficient for evaluation of measure of dependences between factors. It requires to use another methods for evaluation the measure of dependences between factors.

In our days, designing real economic systems [8], [9], very much popular is becoming the use of copulas, which fully characterizes the unlinear connection between main factors of the model and allows to unite margin functions into multivariate distribution function.

References
MODERN APPROACHES TO FOREST POLICY EDUCATION IN EUROPE

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ABSTRACT

The framework for forest policy education at European universities has been changing considerably during recent years. These changes are resulting from new paradigms in educational policy as well as modified roles of forests and forestry in many countries. The contribution presents shortcomings and needs in forest policy education and shows several approaches how these challenges can be met. Taking a look at the ongoing developments, the author argues that a modern forest policy education can contribute substantially to strengthen the efforts towards sustainable development.

Key words: forest policy; curriculum development; university education; Bologna Principles; Europe

Introduction

Forest policy occurs at the interface between forests, forestry and society. It can be described as „purposive course of action or inaction followed by an individual or group in dealing with a matter of concern regarding the use of forest resources” (Cubbage et al. 1993). It is also a „social bargaining process which regulates conflicts caused by interests in the utilization and protection of forests according to the programs of the forestry sector (Krott 2005). Forest policy courses are included in many European forestry curricula. However, their scope and content varies from country to country according to the position of the forest sector in the respective domestic economy and society (Krott 2005). There are enormous differences in the significance of forest policy even between syllabi of universities in the same country. In many cases forest policy is not regarded as a separate teaching subject and instead integrated in courses on economics or law. Other universities have recognized the necessity and advantages of a sound forest policy education for their graduates (FAO 2006).

The new framework for forestry education at European universities

Taking a look at the forestry sector, it is obvious that the teaching object of forestry universities has undergone fundamental changes. These changes can be characterized by catchwords like globalization, decentralization, devolution, cross-sectoral policies, public-private partnerships, new public management. In countries with economies in transition, forest policy formulation and implementation have evolved quickly (FAO 2006); processes of privatization and restitution have to be depicted and analyzed. All these developments have resulted in a changing role of forests, forestry and foresters in society (cf. Kennedy et al. 1998). Besides others, the reduction of personnel in state forest administrations has direct consequences for job opportunities of the graduates. The increasing use of cross-sectoral linkages (e.g. rural development) necessitates the ability to think beyond borders of the respective disciplines. New actors (e.g. Non-governmental Organizations, Transnational Corporations) and new processes (e.g. National Forest Programmes, Forest Sector Technology Platform) have to be analyzed. Complex models of policy science provide improved possibilities for explanation (e.g. advocacy coalition approach, multiple stream framework).

Parallel to alterations in the forestry sector, the framework for teaching forestry at universities has been changing considerably. On a worldwide scale, Education for Sustainable Development (ESD) is an accepted paradigm (UNESCO 2007) that favours all initiatives to instruct students in sustainable management of natural resources. On the level of European Union, the Lisbon goal of making Europe the most competitive region in the world necessitates vigorous efforts to improve education on every level. By promoting BSc/MSc degrees and accreditation procedures, the Bologna process leads to a streamlining and internationalization of higher education in many subjects, including forestry. In addition to knowledge, skills are in the focus. Virtual education and web-based courses are gaining in importance. The Lecturer’s autonomous decision of what to teach is being replaced by so-called learning outcomes, i.e. statements of what a learner is expected to know, understand and/or be able to demonstrate after a completion of a process of learning (EU 2004).

The modified framework conditions for the forest sector and the European initiatives in the policy of education have been resulting in fast and far-reaching modifications of forest curricula in many countries. Bachelor and Master courses are replacing traditional forestry degrees (e.g. Diploma, Specialist). Both for efficiency and didactic reasons, many universities offer integrated courses of several
faculties on one campus. Sometimes cross-university courses are being built on national level. Several locations have introduced modern teaching principles (e.g. constructive alignment 1) and forms (thematic modules, project work, virtual education, buzz groups, panel discussions, roleplays, simulations etc.). With regard to forest policy, it also can be observed that some lecturers are broadening their scope of teaching towards other subjects like environmental policy or environmental law. Indeed, the most important change is taking place in the form of internationalization: (i) courses are to an increasing extent offered in a foreign language, mostly English; (ii) foreign lecturers are integrated into the courses (iii), the share of students and course participants from foreign countries is rising and (iv) more and more international coherences are integrated into the syllabi.

**Examples for cross-border initiatives to improve forest policy education**

Based on the gap between identified shortcomings in existing courses and the rising demand for forest policy knowledge, several cross-border initiatives have been launched to improve forest policy education. They comprise very different forms, ranging from short courses at universities to student initiatives in the World Wide Web. In the following, the intended learning outcomes of four examples are depicted.

The *MSc Programme Euroforester* has been developed as a joint project of 13 forest faculties in Europe (Estonia, Latvia, Lithuania, Poland, Germany, Denmark, Russia, Ukraine and Sweden). Within this study course on forestry in the Baltic Sea region, forest policy is addressed in an own sub-unit regarding forest policies at national, regional and global levels. Besides, comparative analyses between forest policies of countries in the Baltic Sea region are accomplished. The learning outcomes comprise the ability of students to
- recognise regional, European and global forestry structures, including resources, actors and processes
- carry out comparative analyses of national and international forest policies and economic systems
- apply political and economic theories to analyse national, supranational and global forest policy issues and processes
- debate forest policy and economic issues in an international setting, advocate own viewpoints
- write reflective and creative essays in English

- generate and implement ideas for forest policy and economics within an international context (Euroforester 2006; http://www.euroforester.org/index.html).

The *NOVA-BOVA network* consists of Northern and Baltic universities and has offered a one-week postgraduate course „Forest Policy“. This course delivers an overview of modern policy science; it helps identifying and considering the key elements of forest policy. Another aim is exchanging information on the current state of knowledge and experience in forest policy formulation. Analytic skills of young forestry researchers are improved. Contacts between people who are involved in forest policy research, studies and implementation are encouraged. The course emphasises the interdisciplinary nature of modern forest policy science, integrating economics, sociology, political and administrative sciences with forest sciences.

After completing this forest policy module, students should be able to
- engage into a competent discussion on key forest policy issues in the Baltic Sea region and worldwide;
- evaluate policy performance using adequate strategies and criteria;
- apply adequate theories, methods and models to explain and predict national, supranational and global forest policy issues and processes;
- apply a system view on the forestry as a part of society, identifying policy drivers and seeing the underlying relationships;
- analyse forest topics in mass media using established scientific methodology;
- search for relevant literature sources and evaluate them critically;
- prepare reports using structure and requirements for a scientific paper;
- write reflective essays in English (http://www.bova-university.org/index.php?list=forestry)

The initiative *“Forest Policy and Economics Education and Research” (FOPER)* was developed as a cooperation between the Ministry of Foreign Affairs in Finland with the European Forest Institute to strengthen the capacities in the Western Balkan region. It includes a master program on forest policy and economics. Regarding forest policy, it aims at improving several core competencies. Graduate students should be able to (i) explain a forest political issue (problem) by using appropriate theories and hypotheses; (ii) specify the interests, values and power endowment of the participating political actors.

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1 Constructive alignment means the tuning of learning and teaching activities as well as assessment methods with the intention to optimize the intended learning outcomes.
and their relationships; (iii) assess the appropriateness of various policy instruments to resolve the problem, based on politically agreed objectives like sustainable forest management (FOPER 2005).

These core competencies are elaborated in more detailed sub-competencies. It is intended that the graduate students
- have knowledge of and insight into the actual and expected political developments and the socio-economic consequences of these for forests
- have knowledge about polity, politics and policies affecting forest
- have knowledge about national, European, and international legislation (incl. Soft law) affecting forest
- understand the process of the policy-making system
- are familiar with the level of conflict arising from competing interests, values and ideologies referring to the use of forests
- assess the impact of different forest policy instruments (regulatory, economic, informational, procedural, institutional) to SFM
- are able to formulate a clear and understandable policy and to create societal acceptance for it (FOPER 2005).

The Forest Policy Education Network (FPEN) is an initiative of the International Forestry Students’ Association (IFSA) to raise the awareness on forest policy among forestry students. It is encouraged by several institutions, e.g. EU Youth Programme, European Forest Institute, European Tropical Forest Research Network and national institutions in several countries. FPEN network consists of 3 main elements: seminars on forest policy, student participation in decision-making processes and an internet platform serving as a channel to communicate current information on forest policy to students. Based on the WIKI technology, the knowledge base is filled collaboratively by active readers. Student participation is especially promoted because, besides others, it makes policy a living experience, provides good contacts and supports key qualifications (www.forestpolicy.net).

Remaining shortcomings and needs in forest policy education

General lack of forest policy education. In spite of the increasing meaning of forest policy, especially in developing countries and countries in transition there are a lot of universities where forest policy is not recognized as a discipline as such and no classes on forest policy are given. Deficits are also obvious in a second group of universities where forest policy issues are integrated in the framework of management or legislation education. In a third group, only a small amount of hours is available for teaching forest policy (FAO 2006).

Lack of international orientation. It has been observed that curricula of forestry schools rarely focus on the issues discussed at the international level. This could be a result of missing knowledge about global issues, international debates and the needs of international organizations for certain knowledge and skills. It could also stem from a low interest on the part of students and faculty, a shortage of resources and uncertainty about future employment for graduates. However, “[U]niversities, as leaders of society, can no longer ignore global forestry problems and concentrate only on producing graduates well trained to deal with local and national issues. Global issues are too serious to be left to diplomats and politicians” (El-Lakany 2004).

Lack of knowledge how to influence decisions. Based on insufficient knowledge in forest policy affairs, forest policy actors are often not enough involved in the established institutional structures of horizontal decision making processes. Later, at the implementation stage, they are obliged to apply the decisions taken by these general political networks without having the opportunity to provide their forestry expertise at an early stage (Birot et al. 2002).

Need for adaptation of teaching contents. In recent decades, global, national and local influences have changed the forestry sector fundamentally in every part of the world. Forestry education has to be adjusted to these changes. Graduates have to be equipped with the respective skills and tools to meet the new reality. They have to be able to meet the expectations of an expanded stakeholder pool. In modern forestry curricula, many issues with a forest policy core have to be included, e.g.
- public sector and community joint management of forest resources;
- forestry and its role in biodiversity conservation and protection;
- forests as recreation sites including eco-tourism;
- partnerships with the private sector for research, management, and timber processing.
- forests as carbon sinks and the international implications of trading in carbon sink credits;
- civil society information delivery relating to forest and forestry issues;
- forest policy formulation and implementation;
- forestry education and training for non-traditional target groups;
- inter-relationship with other sectors such as agriculture, natural resources management, education, tourism, infrastructure, and trade (Gasperini 2001).
Increasing demand for “meta-competencies”. Graduates of forest policy courses need to be equipped with several capabilities going beyond the traditional forestry education. They should be able to (i) recognize patterns of policy making, (ii) develop an analytic view, (iii) deal with increasing complexity, (iv) question popular concepts and (v) apply creativity for problem solution. For example, recognizing patterns can be promoted by asking the following questions: Who enters the political arena? When? Why? Who will be affected? How do the affected persons/groups react? Which consequences does it have?

Specialists educated in forest policy are in demand. In contrast to the actual role of forest policy in many syllabi at universities, there is an increasing need for specialists disposing of enhanced and sound knowledge in forest policy affairs. Those graduates can be engaged in the field of interest representation (e.g. forest owners, forest industries, environmental protection), forest policy making (e.g. forest policy speaker of political parties), forest and environmental public administration (e.g. international/European/EU forest policy, national forest programme formulation), management in state forest enterprises, management of national parks, other protected areas and urban forests, forest extension service, as advisors (e.g. natural resource management) or project managers (cf. FOPER 2005). Taking into account the long-term orientation of forestry, graduates with knowledge and skills in forest policy are predestined for dealing with all aspects of sustainable development.

Conclusions

Taking into account the above mentioned developments in the forestry sector and the changes in the pedagogic paradigms, the following conclusions can be drawn. First, the increasing complexity of forest policy making increases importance for adequate forest policy teaching. Forest policy should be integrated in forest syllabi as an independent subject and equipped with the necessary amount of hours. Second, in spite of some promising approaches, there are still many deficits in education in international forest policy and multi-level governance. Third, a sound education in national and international forest policy will be indispensable in the respective job market of the future. Fourth, learning outcomes and competencies have moved into the focus of curriculum development and replace former teacher-oriented approaches. Fifth, permanent evaluation of relevance and quality of teaching will be necessary to improve forest policy education.

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DECISION MAKING BASED ON MARKET KNOWLEDGE

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ABSTRACT

The rapid development of information and communication technologies, specifically during the last few decades of the twentieth century, has inevitably changed the landscape of the business world and its competing markets. Because of the dynamic trail that was blazed during that timeframe, which has naturally aided in the ongoing vanishing of political and cultural borders, contemporary market participants conduct business in dynamic environments characterized by seemingly unlimited amounts of lightning-fast information flow, all without hindering information transparency. This information intensifying and dynamic globalization has led to both exciting and challenging market conditions for businesses, organizations, regulation institutions, and last but not least, for consumers.

Today’s consumers have evolved into being light years more educated and informed than in the past, and therefore, are more sophisticated than their counterparts of yesteryear. This has caused them to be hugely diverse in their wants and needs. This new type of consumer has high requirements, expects and demands to be put first, and requires customized products and services. Today, when customers feel misunderstood or mistreated, or sometimes without an apparent reason, they tend to take their business elsewhere, and they find that their options to do so are more plentiful than ever before. Furthermore, due to the declining of entry barriers on most markets, in addition to quick imitation of any aspect of the marketing mix, companies are exposed to increasingly vigorous competition.

Marketing managers are confronted with the task to reach the fickle public with the right message, to successfully vie for business, and to keep customers loyal for as long as possible. Under such competitive conditions, the implementation of market orientation is bound to be the correct strategy. Market orientation implies that companies focus on maximizing the organizational learning processes and strive for flexibility and effective relationship management. In order to achieve this, companies need a permanently up-to-date idea of both market participants and environment. The information acquired by tentative monitoring and proactive searches is used to generate valuable market knowledge, which in turn is utilized for adequate market responses and activities, forecasting and planning, and hopefully in shaping the market and finding successful niches along the way.

The purpose of this paper is to provide an introduction into the well-established, yet burgeoning, field of market knowledge management using relevant research papers in English published in leading journals. To begin, an observation of the importance of knowledge as the basis for competitiveness is briefly discussed. An important distinction among data, information, organizational knowledge, market and marketing knowledge is then made, followed by comprehensive typology of market knowledge as it is to be found in business and academics. A brief overview of the relevant theoretical background is then made. The core of this paper, which follows, is structured around a comprehensive overview of the marketing decision making process and the key implications of market knowledge management. To conclude, this paper proposes additional materials for further research.

Key words: market knowledge, market knowledge typology, market knowledge management, marketing decision making, market orientation, organizational learning, competitive advantage

Introduction

The last couple of decades were marked by an increasing interest of researchers and managers regarding all immaterial resources, including knowledge. This is a natural evolution resulting from the transformation from labor- and capital-intensive business to information- and knowledge-intensive society and business (North, 2002, p. 16). The power of knowledge has been largely discussed in the academic circles and advocated by business pioneers and top achievers. There is certainly little doubt that knowledge plays a crucial role for the company’s success (Blackler et al., 1993, p. 851f.), although often the impact of knowledge is not easy to directly relate to the company’s performance and overall health.

Knowledge is value generating, often imperishable, and is difficult to imitate and transfer, and this makes it unique when compared to other company resources (Riesenberger, 1998, p. 96). However, just like any other resource, knowledge demands proper management in order to turn it into a competitive advantage, so that the investments concerning its overhead are justified to top management, stakeholders, and shareholders. Generally, investments that do not correspond to the direct function of the business itself are considered riskier than investments that are done within the company core (Sveiby, 1997, p. 11).

There is no knowledge that is more valuable and difficult to acquire than knowledge about customers, competitors, and market conditions in general (Andreasen et al., 2005, p. 50). Marketing managers, while facing a turbulent environment, are obliged to
make increasingly quicker decisions with permanently ascending complexity and risk (Wierenga/Bruggen, 1997, p. 21; Raju/Roy, 2000, p. 1075). While making decisions, they often consider ample amounts of various types of information and knowledge, acquired through a variety of sources.

Since knowledge is so often the crux for success, for the company to be prosperous today, it must understand the market and successfully manage marketing relevant knowledge. This is also a largely supported view in academics circles (Sinkula, 1994, Hunt/Morgan, 1995, Li/Calantone, 1998, Wright/Ashill, 1998 and Achrol/Kotler, 1999). Providing the right environmental context that supports the management process often leads to discovering efficient ways of managing market knowledge, for example, discovering and transferring best practices in order to increase efficiency under certain conditions (Glazer/Weiss, 1993, p. 520, Pfeffer/Sutton, 1999, p. 93) and at the same time avoiding being too transparent for competitors.

As a first step to achieving successful knowledge management, one should understand the nature of market knowledge and how marketing decisions based on it are being made. This also includes research on which factors facilitate the process, what knowledge is being considered for decision-making, and what determines knowledge usage or lack thereof. There is prolific research on knowledge management, both conceptual and empirical in nature. However, explicit scientific work on market knowledge management, especially in non-profit organizations and service companies, is still scarce and incomplete. There are few papers with evidence about the impact of market knowledge management on company performance.

This paper aims to contribute to existing academic research on market knowledge management with practical relevance in two important directions: 1. to provide a comprehensive typology of market knowledge and sketch the scientific background of this research domain, as well as the relevance for marketing, and 2. to dissect how marketing managers use market knowledge to make their decisions.

1. Definitions

There is no ubiquitous definition of knowledge because it is characterized through dynamic, contextual, and personal relevance (Krogh/Venzin, 1995, p. 418; Nonaka/Takeuchi, 1997, Chapter 2). This paper and its underlying research adhere to the following distinction: information is utilized data that has been embedded in a certain context to acquire a meaning, and knowledge can be generated by networking and interpreting different pieces of information. Knowledge is used as a foundation for reaching action proposals (Bozeman/Rogers, 2002, p. 773) and it is crucial both for strategic and operative decisions. Organizational knowledge can be metaphorically described as the genome of a company. If someone gets hold of the entire genetic code, they are able to simply clone the organization, or by using reengineering and targeted DNA modifications, to build a new and improved version of the company (Kanevsky quoted in Stewart, 1994, p. 34). Knowledge in the company is versatile in its nature; it can include, for example patents, working experience, expertise of any kind, creativity, managerial competences, and customer knowledge.

Sveiby (1997) points out three types of knowledge capital: individual competences, internal, and external structure. The first two types are interesting for managers, while the third is more geared towards marketers. The individual competences and the internal structure comprise employees’ competences and organizational models, concepts, and systems. The third type of intellectual capital comprises relationships to customers, providers, partners, as well as trademarks and company image. To the external structure belong market and marketing knowledge; the first is declarative in nature, while marketing knowledge is procedural in its nature (Andreasen et al., 2005, p. 50). Market knowledge, naturally, is used as a foundation for marketing decisions, and this knowledge can be acquired in many different ways. Knowledge about buyers is mostly acquired by the sales force, knowledge about customers through market research, knowledge about markets through knowledge suppliers, and knowledge about competitors through shadow teams (Shaw et al., 2001, p. 131f.; Rothberg/Erickson, 2005, p.20). The ultimate target is to build up a market basis that integrates knowledge from all of these sources. Marketing knowledge, on the other hand, comprises a set of concepts and instruments that can aid in the understanding and manipulation of customers and other market participants. Market knowledge alone cannot guarantee the successful implementation of marketing strategies, unless the relevant marketing knowledge is both present and utilized (Andreasen et al., 2005, p. 50). Marketing departments are always intensive suppliers and inquirers of marketing knowledge (Schlegelmilch/Penz, 2002, p. 6). Both market and marketing knowledge are considered crucial organizational assets (Glazer, 1991) and as the bedrock for a successful marketing strategy (Simonin, 1999, p. 65) and marketing activities (Wright/Ashill, 1998, p. 125).

Several endeavors have been made to systemize organizational knowledge. Market knowledge
is widely considered a subcategory of organizational knowledge, whereas most of the characteristics of organizational knowledge have certain marketing relevance. The most common differentiation is between explicit and tacit knowledge (Nonaka/Tacheuchi, 1997), and is relevant for the marketing domain, as well. Explicit knowledge can be formalized and presented in a systematic language and saved in form of technical specifications, media, market, benchmarking or customers’ reports, market concepts, logos, etc. On the contrary, tacit knowledge is very difficult to formalize and acquire by observation, simply because it is context- and person-dependent. Some examples of tacit knowledge are values, intuition, experience, and competences and skills that are gained through everyday work (Nonaka et al. 1994, p. 338). This type of knowledge is usually generated over extended periods of time and housed within the confines of the company’s files or networks. This is precisely the reason why the management and implementation of such knowledge is a challenge for marketers (Swap et al., 2001, p. 96). Menon/Varadarajan (1992) differentiate among conceptual, instrumental and symbolic knowledge. Day/Wensley (1988) take a different approach and divide market knowledge into knowledge about competitors and about customers. Table 1 below presents a comprehensive overview of these and further knowledge types that are highly prevalent in the marketing domain and found in contemporary research.

### Table 1. Typology of market knowledge

<table>
<thead>
<tr>
<th>Type of market knowledge</th>
<th>Author(s) (Year) Description</th>
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<tbody>
<tr>
<td><strong>encoded/explicit</strong></td>
<td>Beaumont (1988), Burke et al. (1990), Bloom et al. (1994), Coates et al. (1994), Wierenda/van Bruggen (1997), Leverick et al. (1998)</td>
</tr>
<tr>
<td><strong>tacit</strong></td>
<td>McAuley (1997), Ballantyne (2000), Chen (2005)</td>
</tr>
<tr>
<td><strong>conceptual</strong></td>
<td>Deshpande/Zaltman (1982), Menon/Varadarajan (1992), Moorman (1995), Souchon et al. (2003), Toften/Olsen (2004)</td>
</tr>
<tr>
<td><strong>symbolic</strong></td>
<td>Feldman/March (1981), Deshpande/Zaltman (1982), (1987), Lee et al. (1987), Menon/Varadarajan (1992), Goodman (1993)</td>
</tr>
<tr>
<td><strong>competitor</strong></td>
<td>Day/Wensley (1988), Gilad (1989), Taylor (1992), Greve (2000)</td>
</tr>
</tbody>
</table>
The intellectual assets, and more precisely, knowledge about customers, competitors, and environments, enable companies to build up expectations about the evolving of the market. For example, marketers can form expectations about what reactions will a substitute product trigger after being introduced to the market, or how certain marketing activities (such as promotions) are being accepted by the market (Glazer, 1991, S.9).

2. Scientific Background

The idea that the success and growth of a business depends strictly on the management of immaterial resources is nothing new to the business and research community (Deshpande, 1982, p. 91). Knowledge has been considered the most important production factor since the early 1980’s (Drucker, 1993; Romer, 1986). A turning point that marked the emergence of knowledge as a critical success factor is the change of the business paradigm from industrial economics to resource-based theory. The older paradigm considered industrial structures as the main factor for the competitive advantage (Bamberger/Wrona, 1996, p.130, Roos/Roos, 1997, p. 414). The newer paradigm the resource-based theory claims that different competitive positions result from the fact that different companies have different sets of resources and utilization thereof, especially regarding knowledge (Wernerfelt, 1984; Dierickx/Cool, 1989; Prahalad/Hamel, 1990; Barney, 1991; Grant, 1991; Amit/Schoemaker, 1993; Bamberger/Wrona, 1996). In other words, successful companies are able to use their knowledge in a way that allows them to supply better products than their competitors, or equally good products for a lower price (Conner, 1991, p. 132). Thus, companies’ raison d’être is no longer the saving of transactional costs. They are regarded as knowledge generating units (Foss, 1996, p. 471) whose main purpose is to build up competences while keeping their flexibility in utmost order to be able to react to market signals as quickly and adequately as possible (Leonard-Barton, et al., 1994, p. 121). Naturally, the acquiring and defending of a leading market position requires an ongoing building up and maintenance of market competences and skills, as well as growing barriers against imitation (Foss, 1996, p. 471f.).

The disadvantage of the resource-based theory is that it presents a static point of view that doesn’t answer the questions of how (core) competences are being built or adjusted. The theory of the learning organization, however, is capable of answering just these sorts of questions. The idea that organizations go through various evolutionary processes, similar in fact to how humans learn, actually served as a trigger point for the development of the learning organization theory (Zander/Kogut, 1995; Schneider, 1996; Barthelme at al., 1998; Nothhelfer, 1999). This theory deals with learning as a process and its efficient organization. Morgan (2004) depicts the link between marketing and organizational learning and proposes a concept for the market-based organizational learning. Cunnington (1996) shares Morgan’s opinion that this new understanding of marketing can be supported as the best by the theory of the learning organization.

There is a slight difference between organizational learning and market-orientated learning that requires clarification. The later is focused on the skill to learn by monitoring the surrounding environment and the other market participants. However, there cannot be any efficient internal learning without the presence of the competence of the external learning (Day, 1991, p. 3). This kind of learning is more difficult to track and control as the learning processes within the organizations. It is surely more difficult to reach market knowledge that resides in the organizational memory, partially, but not solely, because this type of knowledge is open for interpretation (Sinkula, 1994, p. 37). Not only that, but also instrumental knowledge, such as customer satisfaction analyses, is more difficult to acquire compared to financial reports. From the point of view of the organizational learning theory, it is essential for companies to permanently develop their competences to learn form the market, as well as to learn how they learn (Sinkula, 1994, p. 36) and to forget outdated knowledge. The skill to learn faster than the competitors can be the only competitive advantage that a given company possesses and builds the leading market position upon (DeGeus, 1988, p. 71; Slater/Narver, 1995, p. 63).

An interesting and instructive way to view companies within the context of the modern marketplace is that companies are in no way isolated islands in the proverbial Market Ocean. They are, rather, open learning systems that either adjust to the environment or actively shape it (Brownlie, 1994, p. 703f.). This idea is the basis for not only the theory of the organizational learning, but also for the theory of market orientation. For Jaworski/Kohli (1990), who delivered the first thorough research on this field, market orientation is merely equal to the true implementation of the marketing concept of today. Most of the research on the field of strategic marketing supports this stand. However, market orientation is not the only kind of orientation that can be followed, but rather it coexists with production or sales orientation. Market orientation is focused on the generation of customer value using all available cross-functional resources (Narver/Slater, 1990, p.
The real market orientated company is characterized by systematic and extensive market research about customers, competitors, and market trends and conditions (Kheir-el-Din, 1990, p. 26). Market orientated organizations possess capabilities that allow them to better understand the market and to form long lasting relationships to both customers and partners. Indeed, market research is a central element of these organizations, and supplies the foundation for the development of market intelligence and market orientation.

Market orientation must be viewed as much more than market research. It also comprises customer service orientation, as well as the commitment of the management and the sales force, as founding principles. Furthermore, protocols regarding the setting up of the interaction between the firm and the other market actors are proposed, while special care is taken to coordinate and synchronize the market relevant actions. Profitability, or generally defined success, is the ultimate target for market orientation for both profit and non-profit organizations (Kohli/Jaworski, 1990, p. 3; Gonzalez et al., 2002, p. 56f.). The link between market orientation and various aspects of company’s success is already manifested in a wide variety of research (Kohli/Jaworski, 1990; Narver/Slater, 1990; Slater/Narver, 1994; Greenley, 1995; Armstrong/Collopi, 1996; Han et al., 1998; Li et al., 1999; Homburg/Pflesser, 2000; Pelham, 2000; Grewal/Tansuhaj, 2001; McNaughton et al., 2001; Matsuno et al., 2002; Noble et al., 2002; Wei/Morgan, 2004). High-quality market information is used to generate critical knowledge, some competitive advantage usually manifests (Glazer, 1991, p. 12; Day, 1994a, p. 9f.).

3. Decision Making in Marketing

Today’s society is knowledge intensive. Knowledge driven companies act on a market with knowledgeable customers and intelligent competitors, in an environment dominated by knowledge intensive products and services (Porter/Miller, 1985, Starbuck, 1992, Edvinsson/Sullivan, 1996, Sveiby, 1997, Stewart, 1998). Of course this prevalence of knowledge in the environment has had an impact on the organizational structure and the decision making process of the marketing managers, because marketing is situated exactly and precipitously on the border of the company to the outer world (Glazer, 1991, p. 13).

Contemporary marketing is much more than pure sales and distribution; it is principally about customer relationship management, as well as being used as a receptor for changes in the company’s surrounding and internal climate. Knowledge management is relevant for the marketing decision making, because on the contrary to information management, knowledge management focuses not only on the transfer, but also on the utilization of the market knowledge and the benefits for the user. Market knowledge management is also interposing with strategic management, behavioral science, organizational science, HR management, and computer sciences. This is more evidence of the influence of market knowledge all over the company and on nearly each crucial process that takes place.

Kotler (1966), while researching on management of market information management, has already defined market knowledge management as a process that goes through several steps. Kotler’s view was taken over for the process orientated definition of the market knowledge management: a process that goes through market knowledge acquisition, market knowledge transfer and market knowledge saving (such as a decision). There is no strict sequence of actions to follow when a marketing decision is made, as all knowledge activities are overlapping in nature and are characterized by numerous interactions (Holsapple/Jones, 2005, p. 6).

Market knowledge generation and utilization have been research topics for over 20 years now. The market information management from the decision makers’ point of view has been discussed, for example, in connection to their communication patterns (Deshpande/Zaltman, 1982), organizational structure (Deshpande/Zaltman, 1982, Kohli/Jaworski, 1990; Moorman, 1995), and cultural context (Moorman, 1995). Furthermore, determinates of the information management have been appointed (Szymanski et al., 1993). The acquisition and utilization of market information is dependent on environmental dynamics, tasks diversity, organizational centralization, and information quality and availability, as well as the cognitive abilities of the decision makers (Szymanski et al., 1993, p. 14).

Market knowledge acquisition is described as the process of acquiring primary and secondary knowledge from formal market research, benchmarking reports, and customer satisfaction analyses, as well as industry fora and personal networks (Moorman, 1995, p. 319). Such knowledge is to be found both within and outside of the organization. External knowledge is usually more highly estimated in a dynamic environment because it is more difficult and costly to acquire on a highly dynamic and competitive market (Menon/Pfeiffer, 2003, p. 505ff.). With the term “acquisition,” what is being emphasized is that knowledge is being provided for
further utilization. Thus the differentiation between market knowledge acquisition and usage is easy (Choudhury/Sampler, 1997, p. 27). However, there is a difference between targeted searches for unavailable information and environmental scanning that is being done without a prior defined aim (Kotler, 1966, p. 72), or in other words, reactive searches with prior defined problems and proactive screening and monitoring (Choudhury/Sampler, 1997, p. 27). There is also a possibility to buy into the needed knowledge from specialized knowledge suppliers (Iyaer/Soberman, 2004, p. 204).

Market research activities are objective, concrete, formalized, and hold a strong practical relevance and aim for decreasing the uncertainty by providing reliable results (Ganeshasundaram/Henley, 2006, S. 540). On the contrary, market intelligence activities are mostly informal and ongoing as well as more general (Diamantopoulos et al., 1993, S. 7). It is very important that marketers don’t focus solely on the already known sources, but rather to always keep an eye out for new opportunities and actively seek new acquisition sources (Day, 1994a, p. 13). There are three major knowledge acquisition sources for exporting companies (or companies that want to take advantage of the globalization processes to develop their products and services abroad). They can use 1. export relevant market research (test markets, analyses, reports), 2. export assistance (chambers of commerce, conferences, economic departments of the embassy) as well as 3. market intelligence activities (aimed at vertical partners and salespeople). All these possibilities exist independently from each other and are considered during the decision making process, depending upon the development phase in which the company is entering the foreign market (Souchon/Diamantopoulos, 1999, p. 146ff.). Difficulties usually occur when managers seek tacit knowledge and need to develop or sell a product pallet with customizable products (Pedersen/Petersen, 2004).

The revolutionary development of information and communication technologies brought with itself information overloading and increased pressure to organize the knowledge acquisition process in the most efficient way possible (Sarvary/Parker, 1997, p. 25). However, the colossal progress in IT led to some crucial positive developments in the knowledge acquisition process. One such breakthrough was the launching of the Universal Product Code systems (casually called UPC today) on point-of-sale that made real-time customer data available both for retailers and producers (Deshpande, 1982, p. 91). Another cheap and timely source of marketing relevant knowledge are online research and information sources. Also, new developments in technology has allowed a very close approach to reality experimental environments for testing marketing concepts, which allows marketing strategies and products to be tested without producing expensive prototypes and launching on test markets, both of which are associated with often prohibitively high costs (Chatterjee et al., 1988, p. 363).

Sometimes knowledge acquisition is connected with a huge effort, which is why from the efficiently point of view it is important that knowledge that has been supplied is also being used, or conversely, that only relevant knowledge relevant should be supplied. Decision makers often gather more information than they actually use during the decision process. However, at the same time, they grumble that the available information is not enough or it is not the right information (Feldman/March, 1981, p. 174). One possible explanation of this phenomenon is that the marketers cannot properly evaluate the information because of their restricted cognitive capabilities or that they are systematically being exposed to incomplete and incorrect information (Kotler, 1966, p. 63). Sometimes available knowledge is omitted to be taken into consideration on purpose, solely because it doesn’t support the manager’s point of view (Souchon/Diamantopoulos, 1997, p. 136). A further problem that might occur is that market research results cannot be used because the definition of the problem doesn’t correspond to the research itself, or because the knowledge is not effectively used to make a decision (Hamlin, 2000, p. 1038). This naturally leads to the statement that instead market knowledge acquisition, market knowledge usage is what actually matters at the end (Zaltman/ Moorman, 1988, p. 16; Hart/Diamantopoulos, 1993, p. 57; Brown/Ennew, 1995, p. 341; Andreasen et al., 2005, p. 50).

Market knowledge usage comprises numerous aspects that are relevant for the decision making process. This can be roughly categorized in three main groups: market knowledge generation, transfer, and implementation.

The two main dimensions of market knowledge generation are also relevant for the marketing domain. The epistemological dimension is the ongoing transformation process between tacit and explicit knowledge that is crucial for the birth of concepts and ideas. The ontological dimension describes the social interaction between the decision-making units (Nonaka, 1994, p. 16ff.). The SECI Matrix (Nonaka, 1991) and its transformation quadrants can be used to depict the decision making process in marketing. Socialization, for example, corresponds to the communication between marketers and other market
participants or other units within their own organization. Internalization occurs when marketers enrich their expertise by understanding the contents of a market report. Externalization takes place when a marketing plan is being drafted, and the putting together of several reports into one single data set is a representation of the combination quadrant.

There is empirical evidence (Blattberg/Hoch 1990) that illustrates the combination of IT power and the managers’ intuition is the key to good decision-making. Generally, experienced marketers use more resources and weigh those resources differently during the decision making process than their inexperienced peers, whereas their decisions are more conservative when the problems are not of routine nature, such as during new product development (Perkins/Rao, 1990, p. 8). Market knowledge diffusion or transfer enables that a member of the organization use knowledge that has been acquired by someone else, or meandered its way into the organizational memory in another way (Argote/Ingram, 2000, p. 150). The market knowledge transfer can be conveyed directly (by intermediate communication) or indirectly (using a medium) (Sveiby, 1996, p. 379). Furthermore, formal (training programs) or informal (correspondence in informal communities of practice) ways can be used for the transfer (Krogh/Kühne, 1998, p. 241f.). The transfer of explicit market knowledge is easier compared to the transfer of tacit market knowledge, because the latter is context dependent and independent from the cognitive abilities of the decision makers (Kogut/Zander, 1992, p. 388f.).

With the usage of market knowledge, various objectives can be pursued: to develop, explore marketing outcomes, prove hypothesis, or evaluate marketing activities (Moorman, 1995, p. 320). Evaluation research is being used more so by advertising decisions in order to state positive or negative outcomes of promotional campaigns, whereas the potential value of the explorative research is underestimated (Zaltman/Moorman, 1989, p. 12). Market knowledge is also used to support decisions of strategic and operational nature, or can be used merely to support or praise certain organizational climate or culture (Feldman/March 1981; Deshpande/Zaltman 1982, 1987; Lee et al. 1987; Menon/Varadarajan 1992). To what extent market knowledge is being utilized in the decision making process depends on to how much its potential is being recognized, and if it corresponds to the company’s policy. In addition, important determinants of market knowledge utilization are the organizational structure, quality and reliability, as well as the overlapping of this knowledge with prior expectations (Deshpande/Zaltman, 1982, p. 24). Decision makers, however, tend to use a restricted set of information and knowledge while making decisions (Montgomery et al., 2005, p. 148). Industrial marketing managers use more explorative and formal research than their colleagues from the consumer goods industry (Deshpande/Zaltman, 1987). In general, knowledge acquired by networking is considered as highly valuable, although it is likely to be used when it is of formal and high-technical quality (Deshpande/Zaltman, 1984, p. 36). Marketers from decentralized organizations rely more on market knowledge that is derived by market research (Deshpande, 1992, p. 99). As expected, the decision making process is influenced by cognitive biases, predispositions, restrained rationality, and the personal interest of the marketing managers and the organizational culture (Brownlie, 1994, p. 704).

Four out of five top managers regard quick answers to customer wishes and needs, higher innovation ability, better decision making, and flexibility as the main advantages that result from successful marketing management (Riesenberger, 1998, p. 94f.). A survey among the top 1000 Fortune companies, cited in Riesenberger (1998), shows that market knowledge is considered a very important element in decision making. 96% of the managers report high estimates on customer knowledge, while 83% consider knowledge about upcoming marketing trends important, and 81% regard information about competitors as essential. All marketing decisions are tuned up with the events that take place in the market and its dynamics. For this purpose, often a network within the company among market partners is being cultivated, so that knowledge transfer and acquisition is facilitated. This network should assure that all decisions relevant to information and knowledge, as well as shared mental models, lead to correct interpretations of data (Fraser/Hite, 1988, p. 96). This network for knowledge diffusion and transfer can be used as organizational memory, a fact that assures that the accumulated knowledge can be also be used in the future (Day, 1994a, p. 10).

If a strategic analysis is performed within a company, marketers approach the analysis from a self-centered or customer focused point of view, and seldom from a competitor or customer/competitor point of view (Day/Nedundagi, 1994). A recent study conducted by Montgomery et al. (2005) shows that marketers use different types of knowledge to different extents, depending on which part of marketing the decision can be related to. For example, for price decisions, knowledge about competitors is being used, and for product decisions, knowledge about
customers is primarily used, or even customers are being attracted as co-developers of the new products. Remarkably few marketers consider the reaction of the competitor to their own actions. They falsely think that this type of knowledge is very difficult to assimilate, and even if considered, wouldn’t bring much benefit. There are still plenty of open questions regarding the conditions under which using the various types of knowledge will prevail. These questions will be answered with the natural evolution of business, and the results will surely be interesting and beneficial for both the academic and business communities.

Conclusion
Market knowledge management plays a vital role for successful decision-making in the business world today. In order to justify the high overhead that results from market research and other market knowledge management activities, marketing managers should possess thorough understanding of and present evidence of linkages among marketing knowledge management, decision-making processes, and the company’s performance, and ultimately, the bottom line (Smith/McKeen, 2004, p. 517f.).

Because of the often-underscored criticality that characterizes market knowledge management, further research in this field would be invaluable to both academic and business circles. Further research should focus on obtaining a more focused understanding of the processes that occur while decisions are made and the factors that influence the utilization of certain type of market knowledge. The connection between using different types of market knowledge and the company’s performance, and aspects thereof, also deserve a more robust investigation.

References


ДУАЛИСТИЧНОСТЬ УПРАВЛЕНИЯ В ГЛОБАЛЬНОМ МИРЕ
(НА ПРИМЕРЕ СЕРВИСА И ТУРИЗМА): ФИЛОСОФСКО-ТЕОРЕТИЧЕСКИЙ АСПЕКТ

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В статье описаны основные свойства развития современного управленческого знания и практики. Исследованы вопросы дуализма теории и практики управления в условиях глобального общества. Дан классификация помогающих альтруистических и утилитарно-потребительских знаний и практик в условиях глобального потребительского общества. Проанализированы основные свойства общества потребления. Описан бифуркационный тип личности как доминирующий тип общества потребления. Дан анализ глобализации как проявлений растущего потребительского общества. На примере сферы услуг (сервис и туризм) проанализирован дуализм современной теории и практики управления, как с одной стороны тенденция удовлетворения растущих утилитарных потребностей, а с другой оказания социальной помощи человеку в странах глобализации. Показана связь развития дуалистического управления и национальной безопасности всего общества в глобальном мире.

Ключевые понятия: глобализация, управление, дуализм управления, общество потребления, бифуркация, бифуркационный тип человека, постмодернизм, помогающие и утилитарно-потребительские практики управления, синергетика, дуализм управления в развитии сервиса и туризма.

На фоне происходящих с современным обществом глобализационных сдвигов, заключенных в противоречивой тенденции, с одной стороны – роста уязвимости, кризисности, конфликтности бытия человека, а с другой стороны – роста его индивидуализма, потребительства, управленческая наука и практика, являясь инструментами общественной самоорганизации, не могут не претерпевать соответствующие изменения. Эти изменения и метаморфозы, фиксируются в понятиях неклассического, постнеклассического знания и практики, отрицающих предыдущие классические ценности и подходы в понимании и организации системы управленческой деятельности. В соответствии с произошедшими в Новейшее время процессами, современное управленческое знание и практика, не могли не пойти по пути следующих основных тенденций развития:

1. Это управленческое знание и практика становятся во всей большей степени человекоориентированы, и если еще более точно сказать, приобретает характер индивидуально-личностных ориентаций. Такова дан растущей индивидуализации нашего общества, являющаяся следствием влияния западного образа мышления и стиля жизни, их тиражирования на находящиеся с ним в связях и отношениях незападные культуры и цивилизации. Собственно именно это тиражирование западных образцов жизни и является сущностью того, что мы называем сегодня глобализацией, по сути своей являющейся процессом западофикирования мира, на основе общих унифицированных культурных представлений, ценностей, потребностей и образцов, лежащих в основе стиля мышления и поведения. Героем этой формируемой массовой культуры повсеместно выступает индивидуализированный и унифицированный человек. Этот отдельный человек как генеральный потребитель становится объектом пристального внимания всех большинств и напряжений научного управленческого знания и практики, что проявляется, например, в бурном росте многоплановой сферы услуг во всех странах внешних в процессе глобализации.

В системе управленческого знания и практики появились и интенсивно развиваются знания и практики помогающие-альтруистического позитивного характера, представленные психологией управления, педагогической, социальным научным, социальной экономикой, социальной медициной, социальной политикой т. д.

2. Эти науки и практики развиваются дуальным образом. В соответствии с противоречивым характером глобализации в системе управленческого научного знания и практики появились и интенсивно развиваются, с одной стороны направления и практики, связанные именно со сферой социальной помощи человеку в сфере врачевания его социальных проблем (социально-управленческие науки и практики), а с другой стороны в сфере развлечений, ориентированные на удовлетворение растущих утилитарных потребностей человека, как представителя потребительской, гедонистической, индивидуализированной формы культуры и цивилизации (сервисно-потребительские науки и практики). Здесь мы тем самым и говорим о дуализме новых наук и управленческих практик, на...
щедрем отражение с одной стороны в помогающем блоке (социальная медицина, социальное право, социальная экономика, социальная политика, социальная психология, социальная работа и т.д.), связанным с социальной помощью страждающему человеку и сервисно-потребительском блоке (с салонов красоты до ресторанов, шоу-бизнеса, туризма и т.д.), связанном с разнообразным развлечением, утилитарными потребностями и отдыхом.

3. Эти науки и социальные практики во все большей степени индивидуальны и проблемно ориентированы, в особенности в бурно развивающейся сфере разнообразных услуг. Проблемная ориентированность заключается в необходимости развития все более тонких технологий работы с наследием по формированию и удовлетворению потребностей современного человека, несящих проблемный характер. В этом смысле социальная сфера и сфера услуг потребительского сервиса становятся своеобразным социальным покарником, врачевателем, деятельность которого выполняет социальный заказ общества по социальной реабилитации различных групп населения, составляющих ядро глобализирующегося общества.

4. Естественным образом, все эти науки и практики становятся во все большей степени междисциплинарными, образуя научные предметные поля, составленные, как правило, из понятий, законов, принципов, образов, используемых в самых различных секторах управленческого знания и практики. К ним можно отнести все управленческие сектора социально-гуманитарных наук и практики помогающе-альtruистического характера (например, в сфере социальной медицины, социального права, психологического консультирования, социальной работы) и сервисно-потребительского характера (различные формы социкультуры – от салонов красоты до новых форм киноиндустрии, музеев, театров, общепита, туризма, шоу-бизнеса и т.д.) И если первые имеют ярко выраженный социально-помощающей, реабилитирующий характер, то вторые, несут на себе ответственную функцию – социального развлечения и сохранения достойного человека, отдавая дань генеральному свойству современно го общества, как общества потребления и потребительской формы реабилитации его индивидов.

Таковы две стороны медали (дуализм) современной нам бурно развивающейся глобальной цивилизации. С одной стороны растущая беззащитность и уязвимость людей, с другой – новый рост их потребностей в различного рода развлечениях и утилитарных ценностях. Обе стороны глобальной цивилизации, непосредственным образом связанны с ее сущностью. Одной рукой, глобализация разрушает сложившиеся до нее традиционные формы хозяйствования и культуры, являющиеся основой традиционных цивилизаций и выступающих прелатовствием на пути трансформации западной системы и образов общества местного жителя народов, и в сфере производства и в сфере потребления. A другую пытается переключать активность индивидов по другим направлениям их жизнедеятельности (формируя утилитарные потребности и ценности).

Разрушают традиционные формы культуры и хозяйствования, глобализация превращает миллионы людей, носителей традиционных культур и ценностей (национальных культур), в интеркультурных индивидов, маргиналов, выступающих основой базовой сохранения, восстановления и расширения трудовых ресурсов своего победного шествия в мире. В этих процессах, например индустрия сервиса и туризма и система управления им проявляют себя как инициация запада. Эта сфера, являясьсимволом потребительского, развлекательного образа жизни, выступает в качестве механизма универсальной социальной реабилитации необходимого ей маргинального трудового ресурса, носителем которого выступают, прежде всего, лица трудоспособного возраста в структуре населения любой, внятной в этих процессы страны. Этим и можно определить, например индустрию сервиса и туризма в качестве модуса, или неотъемлемой составной части, одной из сущностных форм общества потребления, проявивших себя в эпоху глобализации в качестве его сущности.

Дальнейший рост потребления в экономике развитых стран запада был поставлен в центре XX столетия под угрозу, самим фактом возникшего дефицита человеческого и природного ресурса, необходимого для производства этого потребления. Но этот рост потребления оказался под угрозой и из-за должной оперативной реабилитации и привлечения трудового ресурса (интеллектуального и физического), в приватизированной для человека форме. Этой формой стали ценности потребительского общества – более и качественное потреблять, получая удовольствие. Поэтому мы и говорим, что с философской точки зрения глобализация есть механизм потребительского общества, а сохранение и распространение ценностью потребительского общества, есть условие его сохранения в качестве условия глобализации. Такова диалектика этого процесса. Но направленность его развития, его то время воплощена совсем в другой системе ценностей, скрытой от постороннего взгляда.

Эта система ценностей заключается в превращенной форме западного общества, тайна которого - в получении большей прибыли правящего...
ми сословиями общества, в создании условий стабильного роста потребления в своих странах как смысла жизни человека понимаемого в западных странах в форме утилитарной философии прагматизма и позитивизма — ядра всей современной западной культуры. Но, в конечном счете, с философской точки зрения, все упирается в противоречивую сущность самого человека — в вечной борьбе его телесных и духовных потребностей и мотивов. Сегодня побеждает телесность. Человечество устремлено к чувственной форме культуры, выступающей в качестве главного мотива развития человека и общества нашей эпохи. Это влияние на себя не может не испытывать управленческая наука и практика.

Все этим сервис и туризм может быть определен в качестве сущностной формы общества потребления, являющейся необходимой и объективной составной частью той системы организации общественной жизни народов, без которой сам процесс глобализации или тиражирования западных образцов жизни на пространстве мира, становится невозможен, в силу недостаточности его трудовых ресурсов (и интеллектуальных и физических в равной мере).

Создаваемое обществом потребления глобальное сообщество, является, как мы установили, условием сохранения и развития общества потребления, условие его собственного существования, во главе с экономически лидирующей группой западных стран мира. Именно поэтому развитая форма сервиса и туризма есть условие доминирования западных стран и условие получения ими ренты со стран остального мира, в качестве их трудового (интеллектуального и физического) ресурса, без которого благополучие испытывающих старение и дефицит трудовой силы и природных ресурсов стан западного мира и его населения становится далее, невозможен.

Итак, круг замыкается. Потребительское общество рождает глобализацию, глобализация, как тиражированный западной образ жизни во всемирном масштабе, есть условие сохранения и развития потребительского общества, за счет потребления все новых и все большем масштабе ресурсов мира. Но, в конечном счете, все упирается в сущность самого человека, которому «ничто человеческое не чуждо», и которому на данном этапе его развития подался в сторону доминирования своих телесных потребностей и связанных с ними телесных, гедонистических ценностей жизни. Если пользоваться определением русского философа и социолога П.Сорокина, такова судьба человеческой истории. Человек в своей общественной жизни обречен, переживать и проживать, бросаясь из крайности в крайность, попеременно чувственные и идео-эмоциональные ценности. Мытищн удовлетворения человеческих сущностных потребностей есть внутренний скрытый механизм смены культурных форм общества, выступающих в качестве основы создаваемой им цивилизации.

В этом смысле индустрии сервиса и туризма является естественной составляющей жизни современного общества потребления в его глобализационной форме. Цели и задачи этой индустрии определяются не ею самой, но ее заказчиком — обществом потребления, и, по-видимому, еще на долгие годы, измеряемые жизнью не одного поколения. Мы свидетели, и, в общем-то, обреченные свидетели долгих десятилетий торжества эпохи потребления. Но с другой стороны и сама система сервиса и туризма, несет на себе печать дуалистичности. Кроме направлений связанных с удовлетворением, формирующих ею утилитарных потребностей, она развивает и направления социального сервиса и туризма, воплощенные в помогающем, социально-реабилитирующем направлении. К нему можно относить деятельность, направленную на организацию социальной помощи бедным, медицинскую и культурную реабилитацию людей с ограниченными возможностями, пожилых, людей испытывающих проблемы одиночества, наркомании, суицидального поведения и т.д. Здесь мы имеем пример создания сферы сервиса и туризма со сферой медицины, права, культуры и т.д.

На онтологическом уровне, с позиций философского знания объективность воспробованности индустрии сервиса и туризма в ближайший исторический период времени, основана на той исторической необходимости, которая сложилась сегодня и воплощена с одной стороны в понятии маргинального образа жизни, порождаемого современной социальной цивилизацией в качестве массового типа глобализации. А с другой стороны в понятии роста социальных рисков жизнедеятельности людей в обществе, ростом социальных проблем, числа социально-незащищенных и уязвимых людей. И в качестве ее творца и в качестве ее продукта, одновременно. Безусловно доминирующим направлением сегодня является утилизацией ориентированная сфера услуг, объективным образом направленная на сохранение и восстановление трудовых ресурсов глобализации. Но при этом и сего социально-ориентированной сферы сервиса и туризма набирает сильу, как условие сохранение стабильного социального мира и стабильности в обществе, как, прежде всего вынужденной и ответственной мера государства в деле сохранения этого мира.

Одним из первых мыслителей в европейской философии и социологии, кто зафиксировал этот
новый феномен в понятиях массовой культуры и массового типа человека на заре XX века, безусловно, был испанский философ X.O. и Гассет. Открытым ин вектору массы в значительной степени свойствены все те культурные ценностности и установки жизни, что были в нем на протяжении всей его истории как существа служителя (обслуживателя) аристократии. Ему свойственны в гораздо большей степени эмоциональность, но не рациональность, подражание, но не истинное служение ценостям, это больше человек насыщения, удовлетворения телесных потребностей, нежели человек аскезы и служения духовному. Таков тип буржуазной культуры, претворенный в смену аристократии и воину.

Пришедший к власти в эпоху смены ценностей аристократических, традиционных на демократические, новационные, маленький человек, человек массы, осознал себя движителем, целью и центром, нового, создаваемого им цивилизационного и культурного мира. Став на вершине власти, он не мог не создать и служащую ему, соответствующую его пониманию либеральную культуру, том числе культуру массового производства и массового потребления, как раз и воплощенную в многообразных формах индустрии сферы услуг.

Важно отметить, что понятие массового человека не связано с классовыми свойствами, как, например, их понимал К.Маркс. Это скорее мироощущение, социально-психологическая характеристика личности, непосредственным образом не связанная с отношением к средствам производства. Массовый человек, к какой бы он профессиональной или классовой группе не принадлежал, это человек уверенный в том, что в сложившихся условиях развития цивилизации и культуры, он есть человек доминирующий по своим ценностям, названных им демократическими, то есть служащими на благо народа, широких масс.

Наступление этой новой массовой культуры, (начиная с либеральных реформ в западных странах мира, особенно сильно, примерно с 70-х годов), мы сегодня фиксируем в новом, соответствующем духу глобализации понятии – постмодерна. Постмодерн, изначально как феномен протестного искусства (против классических канонов творчества), проявившийся в экспериментировании материалами, образами и целями искусства, к нашему времени уже давно перерос свои начальные формы и инстоки, стал достоянием всех сфер культурной жизни современных народов.

Постмодерн, как смещение понятий, ценностей, установок, стилей мышления и деятельности, в форме всеохватывающей творческой игры, эксперимента, проник в науку, образование, в политику, в экономику, юриспруденцию, архитектуру, в религию, во все сектора социокультурной жизни народов, объективным образом выступив дополнением, культурным обрамлением современной технической, технологической цивилизации.

Дело в том, что, в конечном счете, постмодерн привил себя как дополнительный инструмент цивилизационной экономической глобализации мира, подчинившей себе сферу сознания и сферу мировоззрения народов. В сфере сознания получили бурное развитие процессы смещения или мирификации понятий, установок, ценностей, стилей поведения, стилей жизни людей, стремящихся адаптироваться в новых социокультурных, цивилизационных условиях. В значительной степени этому способствует именно массовая культура, со свойственной ей микрологизацией, мистификацией, натурализацией и абстрагированием от реальной истории, от реальных социокультурных явлений и процессов, рождающая наряду с феноменом всеенства, которому содействует, например, и ИНТЕРНЕТ, как феномен мирификации самых невероятных и в самых невероятных соотношениях знаний, установок и ценностей. Постмодерн дал течь к созданию самой невероятной из лабораторий социокультурного "скрещивания", экспериментирование, и селекции, объектом которого стали самые различные социокультурные субстанции, до сих пор не ведавшие о существовании друг друга. Наступила эпоха всеобщего "социокультурного кровосмещения", свидетелями которой мы сегодня стали, прежде всего, как потребители благ. Это и невиданные формы искусства и невиданные формы пищи, одежды, обуви, бытовой техники, строительных материалов, и конструкций и т.д.

При этом мы становимся носителями мирификаированного сознания, в том смысле, что в сознании этом при достаточно большом и разнообразном объеме информации, нет четких организующих структур, нет иначально введенного правила экспертизации и проверки информации на классических основах (научных критериях). Например, в ИНТЕРНЕТ господствует совершенно другой принцип - допустимо все и сама личность выбирает те знания, что ей потребны! Основанное на этом личностном фундаменте общество не может не счиаться массовым, а его мировоззрение и мирифированым, как и проявляющаяся в нем политика право, экономика, искусство, мораль и т.д. Именно в этом смысле современный нам человек это человек супермаркета и Интернета, выступающих фактором приближения к человеку потребляемых ценностей, но дистанцирующих его от их проверки на качественное и влияния на это качество.

Какофония научных, философских, религиоз-
ных, этнокультурных, экономических, политических, технических, изотерических и других знаний и ценностей, в виде многообразной по своим формам информации, не может не способствовать та- кому же поверхностному, какофоничному, микированному и некритичному их освоению потребителями, с формированием у них соответствую- щих микированных представлений о мире, обществе, человеке, своем предназначении в мире. Все это с неизбежностью содействует формированию в сознании широких кругов населения образа ирреального мира, своеобразной мифологизированной картины мира, вытесняющих из сознания людей связь с религиозной историей и событиями.

С этим новым сознанием к нам приходит и совершенно новая реальность - жизнь в погра- ничном, нестабильном мире. Люди в складываю- щейся ситуации не сознают себя уже больше но- сителями традиционных социальных институтов - этноса, нации, общества, языка, какой либо конк- ретной культурной формы. Они во все большей степені стабильности нарашиваемого (созданного) новой культурной, новыми культурными средстами иллюзорного мира, за которым просматри- вается диктующее новую объективность влияние глобальной цивилизации. В своем сознании и граждане этого нового глобального мира – это люди нового мира ценностей – мира постмодерна.

Складывающаяся ситуация постмодерна в сознании, необычным образом соответствует тому, что в современном обществе и философии принято называть маргинальным типом личности. Чрезвычайно адекватным в этом случае оказыва- ется опыт социальной синергетики органической понятием биорактивации - особого состояния систем, отличительным свойством которого явля- ется в высшей степени нестабильность и неустой- чивость, а также крайняя степень чувствительнос- ти к внешним и внутренним воздействиям, малым флуктуациям, способных изменить общую направленность развития системы в сложившейся среде существования.

Применительно к сознанию человека и общес- тва это означает, что биорактивационным является сознание, находящееся к первой, в ситуации крайней степени неустойчивости, нестабильности. Во-вторых, оно принципиально определено в пу- тях своего дальнейшего развития. В-третьих, такое сознание чрезвычайно чувствительно к внешним, идущим от общества и внутренним, идущим от чувств и эмоций, малым воздействиям. Тем са- мым, объективно, в этом состоянии сознание оказывается игрой в руках внешнего, пусть малого, но организованного воздействия.

Человек с этим сознанием - чрезвычайно уп- равляемый человек, в значительной степени под- верженный внешним манипуляциям над своим созна- нанием и поведением в обществе. Этой повышен- ной управляемостью и манипулированием, че- ловек с биорактивационным сознанием обязан, прежде всего, своему смешанному, микированному сознанию. У него развита культура потребления, направленная на самоудовлетворение, насыщение самых простых потребностей и инстинктов, на фо- не неустойчивой системы знаний и ценностей жизни, с сопутствующими им беспринципностью, индивидуализмом, прагматизмом, профессионально ориентированного индустриально-информационного общества.

Высшей ценностью этого общества стала не этика и этическая система ценностей, а професси- ональная принадлежность, способность быть ква- лифицированной рабочей силой в условиях глоба- лизирующегося сообщества, в наибольшей степени воспрепятствующего из всех многообразной сово- купности человеческих качеств именно профессионализм и способность быть рабочей силой, тру- довыми ресурсами. Сознание индивида этого общества, впитавшее идеи массовой культуры, не имеет четких политических, экономических, этиче- ских ценностей и установок. Для него высшей ценностью и установкой жизни стало привилегированное чувство собственной исключительности, жажды самоутверждения и насыщения отдельного индивида, независимого от других индивиду, со- единенного с устремленностью к финансовому ус- пеху и благополучию, становящегося его главной ценностью.

Такой тип человека готов для сохранения дос- тигнутого уровня удовлетворения своих сформиро- ванных потребностей, поддержать любую идею, систему ценностей, даже антиморальную, но га- рантирующую ему стабильное существование. Т.е. это в некотором смысле эгоистичный, беспринципный, но цивилизованный в своих потреб- ностях человек. Это тем самым больше человек цивилизации, чем культуры, если под цивилизацией понимать больше социальные достижения человечества (промышленность, городской образ жизни, высокий уровень потребления и т.д.), а под культу- рой понимать этические ценности и их практико- вание. Первая служит, преимущественно, удовлетворению отдельно взятого человека как индивида, и по преимуществу охватывает материальную сис- тему ценностей, а вторая, служит удовлетворению отдельно взятого человека как семейного, родового, общественного существа, по преимуществу как че- ловека духовного.

Биорактивационный человек это тем самым че-
ловек с пластичным индивидуально ориентированным, эгистическим сознанием, человек потребитель и прагматик в своих отношениях с окружающим обществом и людьми. Именно этот человек и стал главным субъектом идущей сегодня глобализации, главным строительным материалом и одновременно инструментом экономической цивилизации общепланетарного масштаба.

Для глобализации в ее нынешнем экономическом ориентированном исполнении, такой человек есть ее главный субъект. Здесь цели человека и цивилизации совпали. Не национальная, а интернациональная экономика, не культура, а интеркультурная общность, не общество, а глобальное сообщество, в котором теряются рамки национальной культуры и традиции, это не этніка, а потребление. Чтобы строить такую цивилизацию, необходим совершенный новый тип человека, человека вне своей традиции, вне своей культуры, необходим наднациональный человек.

То, что происходит с миром сегодня, вооружено теле-радио-коммуникациями, ИНТЕРНЕТ системами связи, мобильным автожелезнодорожным-автомобильным транспортом, супермаркетами и всей совокупностью сферы услуг, в целом и подкреплено мощным экономическим, политическим и техническим влиянием западной цивилизации, начавшей свою очередной, со временем крестоносцев, цивилизационный, техно-технологический, политико-экономический, но отнюдь не культурный поход на страны и народы мира. Мотиваций такого похода отнюдь не является стремление к равноправию, справедливости, гармонии стран и народов мира, но к равноправию, справедливости, гармонии как она понимается в западной системе организации общественной жизни, в системе производства и потребления как движущей силы этой цивилизации, через дифференциацию, специализацию и иерархизацию этой общественной жизни.

Показателем этой иерархизации является не только присваиваемая западными народами система культурно-цивилизационных статусов прочим народам (например, в понятиях запад-восток, север-юг, страны развитые и развивающиеся, страны победившей демократии и тоталитарные, страны безопасные и небезопасные для проживания и деятельности, страны с прозрачной и с непрозрачной экономикой, страны со стабильной и нестабильной политической и экономической системами, страны сырьевые и промышленно развитые и т.д.). Во всех этих понятиях звучит ярко выраженный запад-центральный стиль оценки отношений.

Человек, осознавший свои интеллектуальные и духовные силы, не способен остановиться в своем развитии, не дойдя до крайности своего мышления и поведения. Этот абсурд, хорошо представленный в мифе о Сизифе, отразил в динамическом виде сущность самого человека, как обреченного корыстей борца за свою самореализацию, как борьбы за себя на уровне вопроса «я есть или меня нет?»? Быть человеком это не только быть обреченным на сомнения во всем, но и быть обреченным на познание и развитие во всем, в сущности. Глобализация и постмодернистское отрицание и как декаданс классической культуры и основанной на ней классической цивилизации, культуры цивилизации, чьи основные понятия были о развитии общества как условии развития личности, чьи основные усилия были направлены именно на развитие общественных условий жизни народов, как главных целей человечества. Человек становящийся в системе этой новой эпохи, понимаемый как биофурационный человек, это та плата классической духовной культуры и общественно-ориентированной цивилизации, за тот прессинг, который она при меняла в своей истории против этого обычного, маленького человека, который никогда не переставал быть личностью, стремящимся к самореализации, по определению человеческой сизифовой сущности. Маленький человек, осознавший себя в пору высшей стадии развития классической духовной культуры и общественно-ориентированной цивилизации как личность свободная, получившая на основе этой классической культуры и цивилизации условия своей самореализации (в период буржуазной демократии). Эта личность не могла не выступить в качестве повсеместного интеллектуально-духовного бунтаря за свое самоосуществление, в форме экзистенциализма, персонализма, психоанализа, фетишизма, постмодернизма и т.д. Но в том числе и бунтаря в форме массового производства и потребления, реализованного таким образом свои колоссальные ожидали, скипившиеся во весь предшествующий период классической культуры и цивилизации, с ее разделяем на аристократов и служителей. Господство маленького человека, стоящего в истоках “восстания масс” (Х.О. и Гассет), это тем самым плата за многовековой прессинг личности со стороны классической формы культуры и цивилизации. Это реализация застоявшихся простейших потребностей человека, в их массовом (по разнообразию и количеству) потреблении благ.

Глобализация, и ее мировоззренческое основание постмодернизм, могут считаться двумя необходимыми условиями построения нового мирового общества потребления, как одновременно и более сложной (по организации) и более простой, по сути (в своих ценностях) материально приземленной цивилизации, освобожденной от скрижалей духовности и человеческой морали.
В этих условиях индустрия сервиса и туризма (индустрия туризма и гостеприимства), являясь акциденцией глобального общества потребления, получает колоссальные возможности для своего развития. Растущая потребность общества, основанного на бифуркационном типе личности, такова, что роль индустрии сферы услуг будет только расти. В пользу этой тенденции говорит и непрерывно меняющаяся пропорция числа занятых в профессиональной сфере людей, в сторону сферы услуг, развивающуюся сегодня семимильными шагами. Пока будет доминировать бифуркационный тип личности, а он будет доминировать пока господствует тенденция мира пойти за западом по сценарию глобализационного развития, а значит по сценарию роста сферы потребления, до тех пор будет успех и у сферы услуг, важнейшей составной частью которой является индустрия туризма и гостеприимства, охватывающая сферу ресторанного, гостиничного, курортного, анимационного, шоу-бизнеса, туризма.

Жаждущий своей психофизической, духовно-культурной реабилитации (средствами масскультуры) тип личности, являющийся главным производителем (главным эксплуатируемым субъектом, как рабочая сила), и, одновременно главным потребителем этих благ, всегда будет заказчиком этих услуг. В этом смысле всегда будет в фаворе, всегда будет востребован и управленец в сфере потребительского утилитарного сервиса и туризма.

Цель теории управления индустрией туризма и гостеприимства, тем самым заключается не только в том, чтобы определиться сущность этой индустрии в системе общества, но и в том, чтобы помочь этой индустрии организовать свою деятельность на принципах адекватности обществу, в которых она возникла. С нашей точки зрения, на основе проведенного философско-теоретического анализа сущности этой сферы, наиболее перспективными вложениями в индустрию туризма и гостеприимства в ближайшие десятилетия станут сферы, связанные, с болевыми местами общества массового производства и потребления.

С одной стороны это сфера, связанная с психофизической, культурной реабилитацией основной части наиболее трудоспособного населения стран, находящихся в километре процессов глобализации и включенных в процессы чрезмерной трудовой деятельности и, следовательно, повышенной эксплуатации, стремящегося заработать на свое место под материальным солнцем (в особенности в сферах бизнес-управления, тяжелых физических и интеллектуально емких видов деятельности). И здесь речь может идти о реабилитирующем издержки труда туризме и гостеприимстве, развлекательном характере, в особенности для жителей крупных индустриальных городов. А с другой стороны, эти перспективы можно увидеть в сферах непрерывно нарастающих социальных проблем человека (сфе- ра социальной работы, психофизической реабилитации детей, инвалидов, пожилых людей и др.). С этим может быть связан набирающий силу социальный сервис, туризм и гостеприимство, выполняющие функцию социальной реабилитации слабо защищенных категорий населения.

Оба направления в двойне важны для современных государств мира, в том смысле, что оба они связаны с вопросами национальной безопасности этих стран. Сохранение, устойчивое воспроизводство и реабилитация человеческих трудовых ресурсов которого, становится главной целью предстоящих десятилетий конкурентной борьбы стран и народов на фоне беднеющей ресурсами жизни планеты, в том числе со странами-экономически- ми лидерами современного мира. В эти процессы, сегодня включены практически все страны Европы. Восстановление трудовых ресурсов общества и одновременно создание стабильной социальной ситуации, вот те два генеральных направления с которыми связаны индустрия сервиса, и в частности туризма и гостеприимства в современной Европе, страны которой находятся сегодня в поиске своих национальных приоритетов. Сфера услуг, объективным образом, во все болеешой степени становится полем, на котором с необходимостью сходятся интересы государства и его граждан. С этим полем неминуемо должны быть связаны и актуальные цели и задачи управления (государственного и бизнеса, все равно), носящие ярко выраженный дуалистичный характер. Этот дуализм управления, в том, что к науке и практике управления глобальная ситуация предъявляют жесткое требование—не только зарабатывать, но и помогать человеку выжить и полноценное в новом мире.

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THE DUALISTIC MANAGEMENT IN THE GLOBAL SOCIETY (BASED ON AN EXAMPLE OF THE SPHERE OF SERVICE AND TOURISM): THE PHILOSOPHICAL-THEORETICAL ASPECT

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ABSTRACT

The basic properties of the development of contemporary administrative knowledge and practice are described in the article. The issues of the dualism of theory and practice of management under the conditions of global society are investigated. The classification of the helping altruistic and utilitarian-consumer knowledge and practice under the conditions of global consumer society is given. The basic properties of the society of consumption are analyzed. There’s a description of the bifurcational type of personality as the prevailing type of the society of consumption in this article. The analysis of globalization as a manifestation of the growing society of consumption is given. The dualism of contemporary theory and practice of management as a tendency of the satisfaction of the growing utilitarian needs on the one hand, and as a rendering of social aid to humans in the countries of globalization on the other hand is analyzed (based on an example of the sphere of services (service and tourism)). The connection between the development of dualistic management and the national security of any society in the global world is shown.
FDI INFLOWS TO RUSSIA: IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

Since the 1990s the world economy was defined by the accelerating pace of globalization that is characterized by increasing volumes of international trade and capital flows, volatility of currency and equity markets, rapid technological change and homogenization of cultures. Globalization and sustainable development can, at least in some instances, be interconnected. In some cases, the factors that drive globalization can be forces for sustainable development which refers to a development process that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The main drivers of globalization are TNCs that use different instruments, first of all, foreign direct investment (FDI) to build-up international production. Is FDI a lever for sustainable development in Russia or a threat? The starting point of the article is the idea that international production to a larger extent is transforming into production along regional and global value-added chains. Traditionally, management requirements along the value-added chain have been strongly related to quality and effectiveness issues. Only recently TNCs have started to work on environmental value-added chain management, including inflow of environment-favorable technologies, equipment and environment management methods through FDI to host countries. From this point of view FDI can play the role of a strong engine in Russia’s economic development. Some foreign-invested projects have become good examples of sustainable development. But FDI can also exert negative impacts on sustainable development. It depends on the type of inward FDI. About 60% of the value of FDI inflows to Russia is resource-seeking investment that is especially sensitive to higher environmental costs. Moreover the larger part of them goes to petroleum extracting that is a very pollution-intensive industry. Sustainable development in the era of globalization is an extremely complicated, contradictory and even conflicting process. It includes not only mentioned above economic growth, social justice and environmental sustainability, but also political matter, balance of interests between national governments and foreign TNCs, as well as legislation issues. Taking into account a bright and instructive example of Sakhalin II project, a paper concludes that the environmental policy of Russian Federation has to be a top-priority mechanism for regulation of TNCs activity in the country.

Key words: TNCs, FDI inflows, sustainable development, Russia, environmental value-added (supply) chain management, pollution-intensive industries, environmental policy.

Introduction: Globalization and sustainable development

Since the 1980s the world economy was defined by the accelerating pace of globalization – the process of growing economic and financial interdependence of countries, regions and firms. Globalization is characterized by increasing volumes of international trade and capital flows, volatility of currency and equity markets, rapid technological change and homogenization of cultures. This became possible due to gradual liberalization of trans-border trade and decreasing of transport, communication and information costs. Now we can observe one of the important consequences of these shifts – the changing behavior of national firms. To a greater extent the increasing numbers of companies do not limit their activities by home country and consider regional and even global markets as a major field for their business. There is an evidence of firms’ business strategy changes [1]. TNCs are the main drivers of globalization and foreign direct investment (FDI) is at the same time the main instrument they use to achieve business strategic targets and to build-up the system of integrated international production.

Along with advance of globalization the question of sustainable development was put on the agenda, especially for developing and later for transitive countries [2]. A widely-used and accepted international definition of sustainable development is “development process that meets the needs of the present generation without compromising the ability of future generations to meet their own needs”. This general definition came from the Brundtland Report [3] in 1987, and was further defined in the Rio Declaration [4] in 1992. Since that conference, most definitions of sustainability have emphasized the need to balance three central components: productive economic growth, social justice and environmental sustainability. Nevertheless the precise criteria of sustainable development are still highly controversial, as there are many different interpretations of this definition of sustainability, ranging from “weak” to “strong” sustainability.

What is the interaction between globalization and sustainable development? Globalization and sustainable development can, at least in some
instances, be interlinked. In some cases, the factors that drive globalization can be forces for sustainable development; in some cases they cannot. The debate on the environmental consequences of FDI is one of the central issues in more wider discussion about globalization and sustainable development. In general FDI might have both positive and negative impacts on sustainable development. Some scholars are concerned that countries will continually lower their environmental standards to attract FDI, creating so-called “pollution havens”, and that a “race to the bottom” will ensue. As a result foreign investors transfer pollution-intensive industries (PIIs), hazardous wastes, technology and equipment to host countries through FDI. Others argue that foreign investment brings more environmentally friendly technologies and FDI is the best way to disseminate new and cleaner technologies. Some investors have made contributions to environmental protection of the host countries through transfer of cleaner technology and equipment, carrying out advanced environmental management systems and measures, and adopting higher environmental standard in the process of production. Moreover, a slow but steady increase in environmental standards might result [5].

So, is FDI a lever for sustainable development or a threat? What is the impact of host country environmental standards on TNCs’ investment decisions? And how to resolve the dilemma: whether FDI and sustainable development could be made compatible? This paper attempts to answer these questions in case of Russia.

Global value-added chains and environmental management

The starting point of the paper is the idea that production of goods and services to a larger extent is transforming into production along regional and global value-added chains. Its main features include growing international character, fragmentation in different geographical locations, and coordination of trans-boundary inter-firm relations along the whole global/regional value chains. The availability of this coordination makes it possible to exercise value chain management, including environmental one.

Before looking at the value chain management in more detail, let’s consider the system of interrelations within the global value-added chain formed basically by FDI (and to a lesser extent contractual agreements). Authors usually define two forms of investment, and correspondingly value chain systems:

- *horizontal investment*, oriented in building-up in foreign markets business production models already existing in home countries, i.e. in the countries of origin of FDI;
- *vertical investment*, oriented in geographical location of separate pieces of production chain, which are considered as interlinked elements of the integrated system of international production.

The results of recent economic research on FDI and international production emphasized the fact that during the 1990s TNCs have moved to the policy of creation of vertical chain systems [6]. TNCs are the main actors in managing these chains; moreover the coordination of subsidiaries’ activity is exercised from global or regional headquarters through the system of joint ownership of corporation. The more the firm is vertically integrated, the less it has a necessity to coordinate and cooperate with other firms (as contractors) and other firms’ value chains. Moreover, vertical integration creates opportunities to manage the whole system of value-added chain. Traditionally, management requirements along the value-added chain have been strongly related to quality and effectiveness issues. All TNCs have ongoing training and auditing processes inside the firms and for their suppliers. Especially in sectors where the final product is subject to high technical requirements, the quality of the supplied goods is extremely important.

Only recently TNCs have started to work on environmental value-added chain management, including inflow of environment-favorable technologies, equipment and environment management methods through FDI to host countries. TNCs agree that environmental supply-chain management is an important trend, and a challenge that could have an enormous impact. A critical factor for the successful integration of environmental requirements into specifications for suppliers will be whether this will lead to cost reductions and/or whether the market will show its approval of the improved overall environmental efficiency. There is an enormous potential for improving environmental performance along the value-added chain, making full use of the purchasing power of consumers, businesses and the public sector – the latter often being the biggest, and sometimes the only, customer of TNCs. “Supply chain management” makes suppliers part of what can be called the “environmental footprint” of firms. In this case, it is not the ownership that matters, but the creation of “green” business and consumer networks across national borders. There are encouraging signs of TNCs offering their suppliers in developing and transitive countries training courses and supporting them in the implementation of environmental management systems. Expanding this practice could greatly improve the environmental impact of FDI.

**FDI types and sustainable development**

We examined the possibility of positive FDI impact on national sustainable development through TNCs environmental management along global/
regional value-added chain. But this is only one side of the medal. FDI can also exert negative impacts on sustainable development. It might depend on the type of inward FDI. Having different assets and investing abroad, a firm has special motivations for building-up international production. Dunning [7] based on Behrman work [8], suggests classification for FDI motives:

- market-seeking FDI;
- resource-seeking FDI;
- efficiency-seeking FDI;
- strategic asset-seeking FDI.

Market-seeking FDI may be undertaken to get access to new markets or to sustain and protect existing markets. Many foreign investors seeking opportunities to sell in overseas markets are likely to be attracted by their size and potential for sales. Markets that are large and growing and have opportunities for gaining markets in adjacent countries will therefore be the most attractive. FDI that is seeking new access to local markets is not likely to be especially sensitive to higher environmental costs.

Some investors’ overseas activities are aimed at obtaining access to critical resources not available in their own markets. In other cases, although the materials might be available at home, investors are driven by the prospect of lower prices in setting up a facility abroad. Low-priced natural resources continue to attract a significant number of foreign investors of this type. For many resource-seeking FDI, outputs are relatively undifferentiated, thus small price differences can translate into large changes in market share. Resource-seeking FDI are usually concerned with extractive industries such as mining, oil production, etc. Investment flows towards these industries may therefore be particularly susceptible to high environmental costs.

The motivation of efficiency-seeking FDI is to rationalize the structure of established resource-based or market-seeking investment in such a way that the investing company can gain from the common governance of geographically dispersed activities. Such benefits are essentially those of the economies of scale and scope and of risk diversification. Strategic asset-seeking investment – this is FDI, oriented in acquiring the assets of foreign corporations. These kinds of FDI have long-term strategic objectives, first of all, sustaining or advancing their international competitiveness. By and large this investment is closely connected with trans-border mergers and acquisitions. Increasingly efficiency-seeking FDI and strategic asset-seeking FDI are going hand in hand as firms restructure their assets to meet their objectives. They are mostly concentrated in high technology and capital-intensive sectors with wide usage of information technologies. As well as market-seeking FDI they are not very susceptible to high environmental costs.

So, resource-seeking investment is especially sensitive to higher environmental costs and that’s why it is often bring serious pollution effects in the process of production in host countries.

Resource-seeking FDI in pollution-intensive industries in Russia

Which type of investment is dominated in FDI inflows to Russia? We propose to use one the possible classifications of sectoral inflows of FDI to Russia (from the point of view of motivations of firms-investors) to analyze the impact of FDI on sustainable development in Russia. As follows from the data of Table 1, overwhelming part of FDI inflows to Russia is resource-seeking investment; moreover it is oriented in oil and gas production. Their share in total FDI inflows grew from 14,8% to 53,6% for five-year period 2000-2004. The main cause of this shift is undoubtedly connected with the rise in oil demand and buoyant trends in world oil prices.

Market-seeking investment could be the bulk in FDI inflows taking into account the scope and potential of Russian market. However its share in annual FDI inflows never exceeded 50%, and during last five years even declined from c 43,1% in 2000 to 24,1% in 2004. Though market-seeking investment undoubtedly is an engine for Russian economic development and contributes to country’ long-term integration into the world economy. Unfortunately, efficiency-seeking FDI and closely related with them strategic asset-seeking investment are very small. Its share in total FDI inflows in Russia accounts for 1,5% taking into consideration only sectors of transport and telecommunications. If we add here appropriate types of machinery, chemistry and services (unspecified in Russian statistics), the share of this type of investment (due to our estimate) averages 10% in the middle of 2000s.

So, with the beginning of high oil prices era we observe gradual re-orientation of FDI in Russia towards increase of resource-seeking investment at the expense of squeezing of market-seeking and efficiency-seeking investment. About 60% of the value of FDI inflows to Russia is resource-seeking one. Moreover the larger part of them goes to petroleum extracting and gas production. We evaluate this medium-term (at least) trend as unfavorable from the point of view of FDI impact on sustainable development, because this type of investment is very susceptible to environmental costs and at the same time is closely connected with pollution-intensive industries. The continuing growth of resource-seeking investment may have negative impact and unfavorable pressure on forming foundations for
sustainable development in Russian regions. In this case the situation with Sakhalin II Project is very significant and enlightening.

**Sakhalin II Project: a threat to sustainable development of Sakhalin region?**

Sakhalin is an island in the Russian Far East (North Pacific) richly endowed with oil and gas (with estimated resources of some 45 billion barrels oil equivalent). Sakhalin II is a project in the framework of which Piltun-Astokhskoye and Lunskoye oil and gas fields are being developed. It is one of the most ambitious energy projects ever undertaken. It involves drilling for oil and gas 16 km out into the Pacific Ocean, transporting it in 800 km-long pipelines along the island, before turning the gas into liquid at a giant Liquefied Natural Gas (LNG) plant – the first of its kind in Russia. Sakhalin II also includes Sakhalin island infrastructure upgrades, such as roads, bridges, rail, port, airport, and medical facility upgrades. Sakhalin II today has production capacity of 80,000 barrels oil equivalent per day. The next phase of the development will take the project capacity to 340,000 barrels oil equivalent per day, including 9.6 million tones per year of LNG production. The second phase of the project is over 80% complete [12].

Until recently Sakhalin II has been considered as the largest FDI in Russia and an example of mutually beneficial energy co-operation with the West. Russia needs foreign capital combined with expertise, equipment and technology to develop offshore fields such as Sakhalin, while foreign companies are striving for Russian energy resources. The project has a strong socio-economic components and impacts positively on island’s development. It was obliged to use 70% Russian “content”. As a result, Russian companies have been awarded $5.3bn worth of contracts. Over 17,000 people are currently employed in the construction of the project, of which around 70% are Russian nationals. At the local level, living standards in the Sakhalin region are growing and the island’s internal revenues increased by more than 500% between 2002 and 2005, demonstrating that Sakhalin is the most economically dynamic of all the districts of the Russian Far East [13].

Sakhalin II project is managing by Sakhalin Energy Investment Company Ltd. (Sakhalin Energy). Until December 2006 the shareowners of the Sakhalin Energy Company were Royal Dutch/Shell (55%), Japanese Mitsui (25%) and Mitsubishi (20%) with Shell as the leading operator of the project. Japan, Korea and the USA are to be supplied with liquid gas from the plant, the first deliveries are planned to start in 2008.

Sakhalin II has become the first project in Russia brought into play on the basis of Production Sharing Agreement (PSA), whereby the project partners finance the construction costs of the project, take on the development risk, and recover these costs from sales of oil and gas. Sakhalin II PSA was signed on June 22, 1994. Russian government and the administration of the Sakhalin region spoke in the name of the country. Since then an estimated $20

### Table 1. Sectoral structure of FDI inflows to Russian economy (million dollars, and %)

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<thead>
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<tr>
<td></td>
<td>Mn. dol</td>
<td>%</td>
<td>Mn. dol</td>
<td>%</td>
<td>Mn. dol</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2020</td>
<td>100</td>
<td>4429</td>
<td>100</td>
<td>4002</td>
</tr>
<tr>
<td><strong>Including:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Industries</strong></td>
<td>915</td>
<td>45.3</td>
<td>1844</td>
<td>41.6</td>
<td>1932</td>
</tr>
<tr>
<td>Fuel</td>
<td>262</td>
<td>12.9</td>
<td>442</td>
<td>10.0</td>
<td>667</td>
</tr>
<tr>
<td>Manufactures</td>
<td>597</td>
<td>29.6</td>
<td>1342</td>
<td>30.3</td>
<td>1088</td>
</tr>
<tr>
<td>Ferrous metallurgy</td>
<td>26</td>
<td>1.3</td>
<td>39</td>
<td>0.9</td>
<td>20</td>
</tr>
<tr>
<td>Engineering and metal-working</td>
<td>102</td>
<td>5.1</td>
<td>228</td>
<td>5.1</td>
<td>262</td>
</tr>
<tr>
<td>Timber, pulp and paper</td>
<td>84</td>
<td>4.2</td>
<td>141</td>
<td>3.2</td>
<td>133</td>
</tr>
<tr>
<td>Food, beverages and tobacco</td>
<td>250</td>
<td>12.4</td>
<td>821</td>
<td>18.5</td>
<td>439</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3</td>
<td>0.1</td>
<td>31</td>
<td>0.7</td>
<td>22</td>
</tr>
<tr>
<td>Services</td>
<td>1002</td>
<td>49.6</td>
<td>2032</td>
<td>45.9</td>
<td>1561</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>11</td>
<td>0.5</td>
<td>948</td>
<td>21.4</td>
<td>112</td>
</tr>
<tr>
<td>Retail, food and restaurants</td>
<td>497</td>
<td>24.6</td>
<td>865</td>
<td>19.5</td>
<td>1006</td>
</tr>
<tr>
<td>Others (non-specified)</td>
<td>100</td>
<td>4.9</td>
<td>522</td>
<td>12.2</td>
<td>487</td>
</tr>
</tbody>
</table>

Author’s calculations based on: [9, 10, 11].

1 Resource-seeking FDI: oil and gas production, iron and steel, timber industry, and agriculture.

2 Market-seeking FDI: machinery and equipment (including automobile production), metal and metal products, food, beverages and tobacco, retail, fast food and restaurants.

3 Efficiency seeking FDI and strategic asset-seeking FDI: transport and communications, especially telecommunications, and other services, except for retail, fast food and restaurants.
billion investment was made by project partners and first returns are expected in 2008. So far, some $600 million of royalty, bonuses and taxes have been paid to the Russian government by the end of 2006.

In 2004-2005 Sakhalin II has come under fire from environmental groups, namely Sakhalin Environment Watch, for dumping dredging material in Aniva Bay. The groups were also worried about the offshore pipelines interfering with the migration of whales off the island. The consortium has (as of Jan 2006) re-routed the pipeline to avoid the whale migration. But it was the beginning of environmental conflict apropos of Sakhalin II project. Since 2006 Sakhalin II has come under pressure from Russian authorities for environmental violations and cost overruns.

Shortly after July’s 2006 summit of the Group of Eight industrial nations in St. Petersburg, where Russia declared itself a guarantor of energy security, Oleg Mitvol, an official from the State environmental agency, threatened to cancel an environmental permit for Sakhalin II for alleged violations of ecology law. Menacing statements from prosecutors and from the Ministry of natural resources followed. Russian natural resources Minister Yury Trutnev warned that the Shell-led Sakhalin II project would be halted unless Shell corrected environmental damage done to the site [14].

In September 2006 the Natural resources ministry withdrew a key environmental permit for the Sakhalin II project on the grounds that it is polluting Sakhalin’s rivers and seas. It was a signal that work should be halted. While the energy companies concerned have expressed dismay at the action on Sakhalin by Russian authorities, international environmental groups including Greenpeace and the Worldwide Fund for Nature have applauded the moves. They have protested that the project damages the natural habitat of the endangered Western grey whales and harms fishing, a key industry for the people of Sakhalin. Shortly after that the Natural resources ministry said it had ordered a new round of environmental inspections of Sakhalin project. Trutnev said, however, that the new inspections had only environmental motivations. “We don’t have the goal of influencing the project’s economic terms,” he said. “We are worried about information from international and Russian environmental organizations ... about environmental problems that have appeared in the course of Sakhalin II’s development” [15].

Environmental worries about Sakhalin II are real: both Western and Russian non-governmental organizations have been vocal opponents. But senior ministers readily conceded that factual causes had little to do with the environment. German Gref, minister of trade and economic development, has described the main factor as rising costs. In 2005 Sakhalin Energy announced that these would be double the $10bn it estimated in 2001[2]. This cost overrun will have a direct effect on Russia’s state finances because the PSA, the legal basis of the project, allows foreign companies fully to recoup their outlay and receive a real rate of return of 17.5 per cent before they have to share revenues with Russia. Rising costs would delay the moment Russia saw any money from the project.

But Russia’s natural resources ministry has also argued that Sakhalin II, and similar agreements signed with ExxonMobil and Total in the mid-1990s, are too generous to the western oil companies. The cost overruns (at least partly due to Shell’s response to environmental concerns), are reducing the share of profits flowing to the Russian treasury. After a doubling in the projected cost, the Russian government threatened to halt the project for environmental reasons.

There are two planks to Moscow’s argument. First, since PSAs bring to the Russian budget nothing beyond modest royalties until investments have been recouped, they give investors an obvious interest in inflating their costs; and Shell and Exxon have claimed cost overruns totaling nearly $18 billion. Secondly, these agreements exempted foreign firms from Russian tax laws, which have been reformed beyond recognition in the past decade.

The West’s oil giants are not environmental angels, but nor are Russia’s. This flurry of state-sponsored ecological concern disguises a dirtier strategic reality; the PSAs were drawn up when inflation, political chaos and President Yeltsin’s poor health had brought Russia to its knees. Soaring oil prices have since enabled it to pay off foreign debts, fund its own modernization of the energy sector, and demand, with some justification, membership of the World Trade Organization (WTO). The Kremlin, dependent on Western firms for expertise, but not, for the time being, for capital, is also demanding more from its investors, The Times writes [16].

But some observers say the problems faced by Sakhalin II have even deeper roots. There have been suggestions that the Russian government is using the environmental issues as a pretext for obtaining a greater share of revenues from the project and/or forcing involvement by the state-controlled Gazprom. Gazprom agreed to buy into the project in 2005, shortly before Shell announced the rise in costs. Later on Gazprom seek better terms. And after the environmental scandal with Sakhalin II it got it.

On December 21, 2006 OAO Gazprom, Royal Dutch Shell plc (Shell), Mitsui &Co., Ltd (Mitsui) and Mitsubishi Corporation (Mitsubishi) have signed a protocol to bring Gazprom into the Sakhalin Energy
Investment Company Ltd. (SEIC) as a leading shareholder. Under the terms of the protocol, Gazprom will acquire a 50% stake plus one share in SEIC for a total cash purchase price of $7.45 billion. The current SEIC partners will each dilute their stakes by 50% to accommodate this transaction, with a proportionate share of the purchase price. Shell will retain a 27.5% stake, with Mitsui and Mitsubishi holding 12.5% and 10% stakes, respectively [12].

This is the end and at the same time is a continuation of the story. Sakhalin Energy will remain the operator of the Sakhalin II project. Gazprom will play a leading role as majority shareholder while Shell will continue to significantly contribute to SEIC management and remain as Technical Advisor. Moving forwards, the key focus for Sakhalin Energy is to complete the project on schedule allowing LNG to be delivered to existing customers in Japan, Korea and the North American West Coast. All existing LNG sales contracts will remain in force and will be honored [12].

Conclusion: What should be done?

In the concluding remarks we would like to stress that sustainable development in the era of globalization is an extremely complicated, contradictory and even conflicting process. It includes not only mentioned above economic growth, social justice and environmental sustainability, but also political matters, balance of interests between national governments and foreign TNCs, as well as legislation issues.

At the same time the main obstacle to sustainable development in Russia remains ineffective resource-intensive structure of national economy. That’s why the bulk of FDI inflows go to extractive industries that are very susceptible to environmental hazards. Some investors regard Russia as pollution-haven by transferring “dirty” industries through FDI.

That is why the environmental policy of Russian Federation becomes the top-priority mechanism for regulation of TNCs activity in the country. A coordinating between FDI and sustainable development should be reached through adopting appropriate measures, that have to be clear, open, transparent, free of double standards and equal for all agents. TNCs and other foreign and local companies should be asked to use advanced environmental technology and equipment, establish advanced environmental management systems, adopt clean technology and production, adopt the environmental standards of parent companies (that might be higher than ones in host countries), make training to the workers and staffs in the field of environmental protection to protect their safety and health, publish annual environmental reports for supervision of the public. TNCs should be asked to help their subsidiaries and their cooperated units, such as suppliers, contractors, carriers, distributors increase capability of environmental protection through effective transfer of environmental technology, training and establishment of modern environmental management system, therefore, the whole integrated network of TNCs can serve for sustainable development.

It is also very important to make up international investment rules concerning sustainable development. It is necessary to strengthen common efforts to ensure a coherent global and ecologically responsive framework of environmental agreements and institutions, in order to guarantee that globalization will support sustainable development.

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ECONOMIC AND SOCIAL ASPECTS OF THE SUSTAINABLE DEVELOPMENT STRATEGY FOR POLAND UP TO 2025

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ABSTRACT

In recent years the term of sustainable development has gained additional importance. The concept of sustainable development assumes the approach to planning and decision making process focused on attaining a real and lasting reduction of the economic and social differences but also protection of the natural environment.

The Sustainable Development Strategy for Poland up to 2025 should recommend the adjustment of already developed qualitative indicators to Polish conditions and development of research work towards creating an optimal system for various decision-making options basing on well recognized state of natural resources and capabilities of the society (ecological space) and on qualitative indicators of progress and efficiency of development activities.

Key words: sustainable development, economic aspects, social dimension

Introduction

The meaning of economic and social dimension of sustainable development has been properly highlighted by “The Sustainable Development Strategy for Poland up to 2025”. Developing this strategy was forced by the resolution of Polish Parliament (Sejm) of 2 March 1999, which obliged the Government to prepare by 30 June 1999 a suitable document determining the direction of the country development until 2025. The resolution underlined the fact that “Sustainable development is perceived as the model of development where fulfilling the current social needs and needs of future generations will be treated in the same way…” and expressed the expectations of Polish Parliament (Sejm) that the Strategy “will harmoniously combine the care for conservation of natural and cultural heritage of the nation with civilizational and economic progress with participation of all social groups”. At the same time it is obvious that the “The Sustainable Development Strategy for Poland up to 2025”, like the other socio-economic strategies, policies or sector programmes must also consider the current state of Polish economy, requirements resulting from Polish legislation and the definitions they contain, but also social expectations concerning the direction of the country development in the following years of the 21st century.

1. Aim and scope of “The Sustainable Development Strategy for Poland up to 2025”.

Prepared Sustainable Development Strategy for Poland should primarily support creating conditions for the stimulation of development processes, which would pose the least possible hazards for the natural environment. Therefore, it is necessary to successively eliminate the processes and economic activities harmful for the environment and human health, promoting “environment friendly” management system and accelerating processes leading to the environment rehabilitation, everywhere where the natural balance has been disturbed. However, these postulates cannot at the same time lead to unwanted slowdown of the economic growth or widen the poverty margin, i.e. aggravating or creating new tensions in the society. At the same time the strategy should consider the needs in the following areas:

- territorial and ecological security of the country
- maintaining the state sovereignty
- health safety and social security of each citizen
- a necessity of Poland’s fulfilling the obligations resulting from the signed international contracts in force and international declarations made by Polish Government.

It is obvious that due to its international commitments and integration process with the European Union, but primarily because of health and natural environment protection in the whole country and all its regions, Poland had to base its environmental policy on the principles of sustainable development, where integration and coherence of economic, ecological and social aspects in the process of the country development are the most important.

2. Social dimension

The first principle of sustainable development in the Rio Declaration stated that “human beings are at the center of concerns for sustainable development and entitled to healthy and productive life in harmony with nature”. It is obvious that poverty and poverty accompanying low level of education do not favour either development or appreciative life in harmony with nature. Poor people are disposed to meet their basic needs passively, they are more susceptible to
diseases and social pathologies, incapable of actively participating in decision making process which influence their conditions for development. Therefore, the fifth principle of sustainable development determines the necessity to counteract the poverty and its outcomes in all possible forms.

The social dimension of sustainable development in Polish conditions must therefore comprise:
- guaranty to fulfill the basic needs of the society, particularly concerning suitable housing standards, adequate biological minimum including potable water and sanitary needs in adequate amount and of satisfactory quality, as well as healthy food to meet the dietary needs;
- guaranty of protection against any hazards for health and life, primarily toxic effects of pollution caused by economic activities, protection against noise and vibrations, ionizing and non-ionizing radiation, as well as against the results of applied genetically modified organisms, but also crime prevention
- guaranty of access to education, at least on the primary level and assistance in acquiring knowledge for the most talented persons on higher levels of education;
- guaranty of active health protection through prophylaxy, proper conditions of medical treatment and prevention of social diseases;
- guaranteed social security for old, infirm and disabled people, to ensure the pre-determined social minimum and possibility of life in the society;
- ensured fair distribution of incomes and social securities, to reduce social differences, preventing the forming of significant poverty areas and marginalization of single persons or social groups
- ensured access to employment, in the first place by creating new jobs, supporting small and medium sized enterprises, access to trainings and courses upgrading qualifications or changing qualifications, access to cheap credits;
- equal access to the natural environment and its resources, recreation in the healthy and unpolluted environment.

Implementation of The Sustainable Development Strategy for Poland up to 2025 must be supported by the integrated policies and sector programmes, primarily social policy, financial and fiscal policy, health protection policy, ecological policy, educational policy, labour and wages policy, policy of science and technology development, policy for agriculture and rural development, policy of cities and urbanized areas development, policy of cultural development, policy of development of physical culture and tourism, crime prevention policy, immigration policy but also inter-sector plans and programmes, proper administrative, institutional and legal solutions. Responsibility for creating conditions for social development cannot lie solely on social security department, it must be distributed proportionately to planned tasks on all 28 departments of state administration mentioned in the Law on state administration of 4 September 1997, but also on self-government authorities and economy managers.

4. Economic dimension

Economic dimension of sustainable development must base on the assumption that the other two dimensions of this development, i.e. social and ecological dimensions are not nor will be the inhibitors of progress, on the contrary, they are and will be its stimulants through technological progress forced by these dimension, raising the education level of the society, its bigger share in decision-making process and responsibility for these decisions, creating new jobs, development of activeness and entrepreneurship, more effective utilization of raw materials, materials and human labour and finally improvement of safety.

Poland is still in the transformation process, therefore it may avoid the mistakes which other countries made. In specific conditions in Poland the economic dimension of sustainable development must comprise:
- inviolability of private property,
- guaranteed political and economic support for individual entrepreneurship, primarily the development of small and medium-sized enterprises,
- state support for scientific research, technological progress and implementation of research results aiming at more efficient utilization of energy, raw materials and mineral fuels, as well as supporting manufacturing processes based on renewable materials,
- continuity and stability of state financial, fiscal and investment policy ensuring competitiveness of cleaner ecological products and manufactured by more modern technologies on domestic and foreign markets,
- guaranteed progressive withdrawal of state subsidies, including also indirect ones, for enterprises and support for economically and ecologically unjustified production,
- assurance of political, administrative and financial support for cleaner production, waste recycling and recover of raw materials,
- improvement of information and communication technologies, basing decision making processes on proper information and analysis of gains and losses, including ecological and social costs, socialization of decision making processes.

Considering the above mentioned tasks the
Sustainable Development Strategy for Poland up to 2025 must be supplemented by properly developed policies and sector programmes including the policy of economic development, energy and fuel policy, transport policy, policy of the country and region spatial management, social policy, ecological policy, financial and fiscal policy, public purchases policy, as well as plans of development prepared for various branches, plan of activities for administration, and various legislative and institutional solutions.

Responsibility for the realization of tasks mentioned above lies primarily on the sector of economy. However, its must be shared by budgetary sector, public finance sector, marine economy and water economy sector, but also by institutions of finance, research bodies, agriculture, State Treasury, legal institutions, higher education institutions, transport, environmental institutions and social security and health agencies.

Decisions concerning economic, social and ecological development should be taken on the basis of thorough assessment of the current state and confirmed scientific prognosis on the economic results and ecological and social outcomes. Such decisions should be corrected according to needs, i.e. depending on changes of initial parameters for individual decision model revealed by monitoring.

Such decision model requires suitable indicators of the form to which initial data will be processed, on the basis of which progress will be monitored and limits of individual stages of development and its sustainability will be established, as well as corrections of policies, programmes and planning of sector development.

Such indicators have been worked out for many years by the United Nations Division for Sustainable Development, Committee for Ecological Policy OECD (EPOC) and by the European Commission.

So far none of these indicators have been implemented in decision-making practice, primarily because of considerably conservative character of national and international statistical systems (e.g. EUROSTAT), which are particularly resistant to any changes in the scope, procedures or methods of collection, processing and distribution of information.

Another element delaying practical implementation of these indicators is the fact that people in charge are used to existing routines and most unwilling to use other than traditional information packages. This applies even to relatively modern management systems used by the European Commission and in the most economically developed countries in the world, e.g. by the governments of the US, Germany, the United Kingdom or Japan. So far only simulated reports of sustainable development have been created which comprise only a part of problems of this development.

Two kinds of these indicators should be used in order to properly plan development activities, monitor their effectiveness or possibly correct directions of these activities:

- quantitative indicators of the state of resources, production, consumption, increase or decrease in incomes, demographic indices, currency position and inflation level and finally GNP,
- qualitative indicators, such as energy, water and raw material consumption per GDP unit, per capita national income, level of growth or decrease in purchasing power, degree of raw materials consumption and other non-renewable materials, quality of the natural environment elements and pressure on the environment resulting from economic activity, development of technologies owing to research results implementation and effectiveness and finally the influence of external conditions.

The first type of indicators provides orientation about the initial state and local potential, whereas the second type considers the interrelations between the three pillars of sustainable development, i.e. economy, environment and society, allowing for an assessment and prediction of the results and a correction of activity.

The Sustainable Development Strategy for Poland up to 2025 should recommend the adjustment of already developed qualitative indicators to Polish conditions and development of research work towards creating an optimal system for various decision-making options basing on well recognized state of natural resources and capabilities of the society (ecological space) and on qualitative indicators of progress and efficiency of development activities.

**Conclusion**

The above presented reflections and assumptions unanimously lead to a conclusion that sustainable development is an ongoing process and balancing its three basic dimensions: economic, ecological and social is a condition crucial for such development. Any weakening or reinforcing of one dimension must in result lead to crisis in all three dimensions. It also results that this kind of development will undergo the influence of unknown and impossible to predict changes of both internal and external conditions. Therefore the main task for the authors of the Strategy and resulting policies, programmes and sector plans, as well as for the main actors of the sustainable development process will be construing and constant improving of mechanisms, which almost automatically will allow to even off simultaneously the levels of all dimensions. The Sustainable
Development Strategy for Poland up to 2025 must remain the same in the area of programme assumptions, whereas it will be a document susceptible to changes of its instruments, open to corrections resulting from an objective assessment of internal and external conditions and predicting their changes.

Thus a constant balance of the three dimensions of sustainable development, i.e. economic development, social development and rational utilization of environmental resources (ecological space) combined with a stable mechanism of correcting the levels of these dimensions development will be an ideal solution.

References

УПРАВЛЕНИЕ ЧЕЛОВЕЧЕСКИМ КАПИТАЛОМ В УСЛОВИЯХ ВНУТРЕННЕГО РЫНКА ТРУДА

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Проблема внутреннего рынка труда и процессов, происходящих в его институциональной форме, является новой и малоизученной для экономической науки. Актуальность изучения внутреннего рынка труда связана с расширением развития рыночных отношений на микро уровне и с переносом специфика этих отношений на уровень макро рынка труда. Основная цель статьи состоит в выявлении объективного содержания внутреннего рынка труда, и в определении роли и места на нем человеческого капитала. Определен механизм управления человеческим капиталом на внутреннем рынке труда организации.

Ключевые думы: внутренний рынок труда, человеческий капитал, управление человеческим капиталом, инвестирование человеческим капиталом, модели управления человеческим капиталом.

Key words: internal labour market, to manage of human capital, to invest of human capital, the model of management human capital

Категория “внутренний рынок труда” научно оформляется в начале 1970-х годов в концепции П.Доринджера и М.Пайора. В целом, Доринджер и Пайор определили, что наряду с неким внешним рынком труда, подобным рассматриваемому экономической теорией конкурентному рынку, крупные предприятия создают свои внутренние рынки труда. Последние в значительной степени отторжены от внешнего конкурентного рынка и не подвержены его спонтанным колебаниям [1].

Внутренний рынок труда (ВРТ) следует рассматривать как систему социально-трудовых отношений, ограниченных рамками одного предприятия, внутри которого назначение цены рабочей силы (заработная плата) и ее размещение определяется административными правилами и процедурами. Внутренний рынок труда определяется наличием и составом человеческого капитала на предприятии, его движением внутри предприятия, причинами перемещения, уровнем занятости, степенью использования оборудования, наличием свободных, вновь создаваемых и ликвидируемых рабочих мест.

С учетом изложенного анализа дискуссионных формулировок, представляется возможным разработка концепции взаимодействия внутреннего рынка труда и человеческого капитала, основанной на изучении трансформации рыночного паритета отношений между работником и работодателем, которые строятся по принципу “снизу-вверх”, и когда государству не принадлежит ключевая роль в формировании идеологии данных отношений. Рыночное взаимодействие между работником и работодателем должно формироваться на внутрифирменном уровне – в структурных подразделениях предприятия и на отдельных рабочих местах (определяющих внутренний рынок труда) с целью полного и рационального использования человеческого капитала.

В рыночной экономике человек-работник выступает как, с одной стороны, производительная сила, и обладает объективными качествами и свойствами, совокупностью разнообразных потребностей и способностей, с другой - как творческий субъект, нуждающийся в постоянном совершенствовании материальных и духовных ценностей для реализации своих качеств. Данные характеристики человека-работника концептуально оформлены в теории человеческого капитала.

Концептуально теория “человеческого капитала” была сформулирована такими экономистами, как Г. Беккер и Т. Шульц и др. К концу XX в. теория “человеческого капитала” получает свое признание присуждением Нобелевской премии по экономике Теодору В. Шульцу – в 1979 г. и Гэри Беккеру – в 1992 г. Общей характеристикой научных теорий этих экономистов является то, что дан анализ проявляется в структуре производительных сил в эпоху научно-технической революции и определен фактор экономического роста - непосредственно сам работник и эффективность использования основных ресурсов все больше зависит от того, насколько работники могут и материально и непосредственно заинтересованы в достижении высоких конечных результатов [2; 3].

Общий обзор, сложившихся научных взглядов, на категорию “человеческий капитал” позволяет ее рассматривать с позиций ВРТ как в узком, так и широком смысле. В узком смысле человека как его называют потом, что эта форма становится частью человека, а капиталом является вследствие того, что представляется собой источник будущих удовлетворений или будущих заработков, либо того и другого вместе”. В широком смысле человеческий капитал формируется путем инвестиций (долгосрочных вложений капитала) в человека в рамках ВРТ в виде затрат на образование и подготовку рабочей силы на производстве, на охрану здоровья. Именно так раскрывает это понятие Г. Беккер.

Иначе, человеческий капитал является формой выражения качественного уровня рабочей силы,
который, в свою очередь, определяет будущий размер прибыли (работодателя) и доходов (работник). Следовательно, человеческий капитал может быть представлен как капитализированная стоимость рабочей силы.

По нашему мнению, реализация человеческого капитала в форме капитализируемой стоимости рабочей силы может осуществляться только в определенных производственно-организационных условиях, которые определены такой институциональной формой как внутренний рынок труда. Данное заключение аргументировано следующими положениями.

1. Человеческий капитал – это совокупность физических, личностных и профессионально-квалификационных качеств работника, попадающих под влияние социально-организационных сил в результате, которых происходит взаимодействие работника и работодателя. Такого рода взаимодействие имеет место на уровне организации и ее ВРТ.

2. Человеческий капитал (работник) — субъект всякого социально-экономического действия, но его субъектность зависит от степени активности, осознанности целей этой активности, от принципов построения человеком стратегии жизни, в которой присутствует диалектика внешних и внутренних условий и результатов. М. Маккуллох указывал, что: "Удовлетворение потребности или желания - это лишь шаг на пути к какому-либо занятию. На каждой ступени своего развития человеку суждено придумывать и изобретать, браться за новые дела, а завершив их, со свежими силами приниматься за другое" [4, с.63]. Данные обстоятельства определяют сущность и существование человека (человеческого капитала). Это с одной стороны. С другой стороны, хозяйственная система будет развиваться, и функционировать соответственно имеющемуся человеческому капиталу. При этом социальная политика и институты, ее осуществляющие (внутренний рынок труда), создают лишь организационные (управленческие) условия для эффективной реализации человеческого капитала.

3. Трудовая деятельность работников, в основе которой лежит труд, представляющий собой не только источник всякого богатства, но и первопричину развития человеческого капитала. Производственный процесс по своей природе органически сочетает две стороны: физические действия человека и деятельность его сознания, проявляющиеся в неразрывном единстве, в постоянном диалектическом взаимодействии. И в этом своем качестве, единства проявления физических сил и духовного потенциала, труд объективно представляет для работника интерес не только как средство существования, но и как сознательная деятельность, форма реализации и развития его человеческого капитала.

Понятно, что реализация трудовой функции человека происходит в процессе производства, где социально-трудовые отношения оформлены в институциональную систему ВРТ.

4. Реализации и развития человеческого капитала происходит в процессе труда, который опосредован ВРТ. Развитые качества человеческого капитала работника (ширина профессиональных знаний, кругозор, умение приспосабливаться к любой производственной обстановке, различной социальной среде и т.п.) обеспечивают быстрое включение его в конкретные условия организации и ее ВРТ. И наоборот, накопленные в трудовом процессе знания и навыки, синтезируются работником в новые качественные характеристики человеческого капитала, и поднимают его на качественно более высокий уровень, требующий более высококачественных условий реализации этого человеческого капитала. Поэтому развитие человеческого капитала как объективно необходимое, целенаправленное движение по качественному изменению свойств человеческого капитала возможно только в условиях ВРТ. Кроме этого, качественное изменение свойств человеческого капитала, характеризующиеся двумя направлениями, так же указывает, что их реализация возможна в условиях конкретной организации, в рамках ее ВРТ.

Первое направление — это развитие специфических качеств человеческого капитала, которые формируются за счет опыта работы в конкретной организации: знание особенностей протекания технологического процесса в организации; знание "слабых мест" технологического процесса и "точок" возможного роста производительности труда; знание организационной культуры предприятия в целом и особенностей организации труда на данном рабочем месте, в конкретном структурном подразделении; знание способностей и особенностей личностных качеств своих коллег, начальника.

Второе направление — это развитие универсальных качеств человеческого капитала, которые формируются, главным образом, за счет трудового опыта в целом, а также за счет повышения образовательные, квалификации и т.п. Структурно универсальные качества человеческого капитала представляют собой набор следующих характеристик, которые совершенствуются в условиях ВРТ: образовательные характеристики (познавательные способности); психологические характеристики (работоспособность); квалификационные характеристики (профессиональные знания, умения, навыки); творческие характеристики (кreatивные и интеллектуальные способности); коммуникативные характеристики (способности к сотрудничеству, способности к коллективной организации и взаимодействию); нравственные характеристики (жизненные ценности...
и мотивация).

Таким образом, на внутреннем рынке труда имеют место два взаимосвязанных процесса: про-
цесс реализации человеческого капитала и, как следствие, процесс развития человеческого капитал.
А эти процессы обуславливают наличие кон-
кретных правил и процедур на ВРТ, которые, в свою очередь, определяют отношения между работо-
dателем и работником по поводу организации дан-
ных процессов.

Механизм управления человеческим капита-
лом на ВРТ, по нашему мнению, представляет собой совокупность трех типов моделей, имеющих либо рыночный, либо внерыночный, либо смешан-
ный характер, которые основываются на специфи-
ческом инструментарии воздействия на процессы, происходящие в рамках ВРТ. К инструментарии воздействия на процессы ВРТ следует относить приемы, используемые со стороны субъектов, для обеспечения пропорциональности в функциони-
ровании данного рынка труда. Именно эти приемы обусловливают специфику характера модели управления человеческим капиталом на ВРТ.

Модель механизма управления человеческим капиталом на ВРТ, имеющая рыночный харак-
тер, представляет собой совокупность стихийных регуляторов спроса и предложения на человеческий капитал.

Рыночная модель является приоритетной для регулирования процессов на первичном ВРТ. Это поясняется рядом обстоятельств:
1) первичный ВРТ основан на рыночной моде-
ли трудовых отношений;
2) между высококвалифицированными работ-
никами сегментов А и Б существуют элементы конкуренции, влияющие на производительность их труда, что, в свою очередь, определяет их роль и место в данных сегментах;
3) работодатель ориентирован на рыночные принципы в управлении человеческим капиталом работников на первичном ВРТ (рыночные условия найма, увольнения, адаптации, планирования, стимулирования, мотивации и т.п.).

Модель механизма управления человеческим капиталом на ВРТ, имеющая внерыночный харак-
тер, представляет собой систему регулирующих мер, имеющая в своей основе социальные приори-
tеты и выраженная в форме социального парт-
нерства. Данная модель лежит в основе регулиро-
вания вторичного ВРТ, так как, данный сегмент представлен работниками с невысокими качествен-
ными уровнем (со слабыми конкурентными ка-
чествами) человеческого капитала, что обуславли-
вает необходимость их социальной поддержки в рамках ВРТ.

Модель механизма управления человеческим капиталом на ВРТ, основанная на смешении рыноч-
ной и внерыночной (социальной) направленности представляют собой систему государственного регу-
лирования всей совокупностью внутренних рынков труда в экономике страны. Модель государствен-
ного регулирования ВРТ организаций является пер-
менной и воздействует как на процессы первич-
ного, так и вторичного ВРТ.

В качестве общей цели механизма управления человеческим капиталом на ВРТ может быть представлено создание системы организационных структур и механизмов (методов, средств) регулирования, обеспечивающих эффективное функцио-
нирование данного рынка труда и его человеческого капита.

Общие функции механизма управления человеческим капиталом на ВРТ следуют свести к сле-
дующим:
- защитные функции, предполагающие ограни-
чения управляющих воздействий, которые ведут к незащищенности различных групп работников ВРТ;
- поощрительные функции, направленные на создание условий для полной и эффективной реализа-
ции человеческого капитала в условиях конкрет-
ного ВРТ;
- ограничительные функции, реализующиеся для ликвидации преимуществ в трудовой деятель-
ности для отдельных лиц или групп лиц;
- директивные функции, предполагающие воз-
действие законодательных и исполнительных орга-
нов на функционирование ВРТ с учетом интересов определенных групп работников (например, инва-
лидов);
- финансово-экономические функции, спо-
собствующие росту предложений человеческого капитала на ВРТ (налоги, субсидии).

Однако, каждая из моделей управления человеческим капиталом на ВРТ имеет свои особенные функции, обусловленные спецификой функцио-
нирования сегментов, которые их определяют.

Следует выделить основные технологии (алго-
ритмы, стандарт деятельности, фиксирующий после-
dавательность, содержание операций и логику решения определенной задачи) механизма управ-
ления человеческим капиталом на ВРТ, которые характерны как для рыночной, так и внерыночной и смешанной моделей:
- технологии правового обеспечения (законо-
дательные и другие нормативные акты, реглан-
тировующие заключение трудовых договоров, продол-
жительность рабочего времени, пенсионный воз-
раст, отчисления в государственный фонд занятос-
ти);
- организационные технологии (информацион-
ные системы, системы профориентации, подготов-
ки и переподготовки кадров);
- технологии социальных гарантий (пособия по безработице, квоты на трудоустройство граждан, нуждающихся в социальной поддержке);
- экономические технологии (бюджетная политика, налоговая система, ставки за кредит, финансирование определенных приоритетных отраслей и предприятий, государственный заказ).

Таким образом, механизм управления человеческим капиталом на ВРТ оказывает влияние на все этапы формирования, движения и функционирования человеческого капитала в условиях организации с целью наиболее полного и эффективного включения его в производственно-экономический процесс. Механизм управления человеческим капиталом на ВРТ – это форма реализации кадровой стратегии предприятия, совокупность сознательных целенаправленных действий, с помощью которых она осуществляется.

На первичном ВРТ рыночная модель механизма управления человеческим капиталом на предприятии имеет место:

1) для реализации и движения человеческого капитала наемных работников на ВРТ;

2) для обеспечения эффективной сбалансированности на ВРТ человеческого капитала, как по объему, так и по структуре (сбалансированность понимается в данном случае как динамичный процесс: в пределах определенного периода допустимы отклонения в сторону, как дефицита, так и избыточности человеческого капитала).

Реализации и движения человеческого капитала наемных работников на внутреннем рынке труда происходит в процессах социально-трудовых отношений. Наиболее значимый из них – внутрифирменная конкуренция между наемными работниками – сотрудниками одного должностного уровня в рамках конкретных структурных подразделений. Мотивом такой конкуренции служит либо квалификационный (получение более высокого разряда), либо экономический (получение высокого должностного оклада, премии), либо карьерный рост (получение более высокой должности).

Так как, постоянное взаимодействие субъектов внутреннего рынка труда происходит посредством реализации социально-трудовых отношений, появляется необходимость в обосновании регулирования внутрифирменных трудовых отношений. По нашему мнению, регулирование социально-трудовых отношений между субъектами ВРТ должно определяться обеспечением относительного паритета интересов: структурных подразделений предприятия в процессе распределения и последующего перемещения между ними человеческого капитала; наемных работников и администрации соответствующих подразделений. Регулирование таких отношений должно осуществляться на двух уровнях – корпоративном (с участием дирекции и штабных служб) и внутрихозяйственном (субъектами регулирования здесь выступают руководители соответствующих структурных подразделений). При этом основными инструментами регулирования социально-трудовых отношений субъектов ВРТ могут являться четыре группы методов:

- административные, включающие распоряжения руководителей соответствующего уровня о любых перемещениях работника внутри предприятия и применении к нему мер дисциплинарного воздействия;
- экономические, связанные с применением тех или иных форм основной и дополнительной оплаты труда, а также материальных санкций;
- социальные, в основе которых лежит использоваемая на конкретном предприятии номенклатура социальных льгот индивидуального и группового (но не распространяемого автоматически на всех работников) характера;
- психологические, под которыми следует понимать, с одной стороны, специальные процедуры и приемы психодинамического воздействия на работника, а с другой - номенклатура форм морального поощрения на предприятии.

В целом, решение задач связанных с реализацией и движением человеческого капитала наемных работников на ВРТ лежит в плоскости межнаучных и междисциплинарных связей, в частности: экономики труда, социологии труда, психологии, конфликтологии, социального управления, кадрового менеджмента и др.

Обеспечение эффективной сбалансированности объема и структуры человеческого капитала на ВРТ происходит путем полномасштабного механизма развития качественных составляющих этого капитала. Механизм развития человеческого капитала в рамках ВРТ представляет собой комплекс мероприятий по созданию новых и совершенствованию уже имеющихся общих и специфических характеристик человеческого капитала. Данный механизм позволяет удовлетворить потребности работодателя в определенном качественном уровне человеческого капитала, как в краткосрочной, так и в долгосрочной перспективе, с одной стороны. С другой, позволяет наемным работникам совершенствовать характеристики своего человеческого капитала, и тем самым быть постоянно востребованными на конкретном ВРТ организации. Кроме, этого основная функционально-производственная роль механизма развития человеческого капитала на ВРТ заключается в обеспечении качества функционирования человеческого капитала работников, направленного на осуществление долгосрочных структурных сдвигов в различных элементах человеческого капитала, что обусловливает будущую профессионально-квалификационную структуру организации. Чем масштабнее действия
механизма развития человеческого капитала в условиях ВРП, тем шире использование качественных и количественных характеристик человеческого капитала, тем полнее они воплощаются в профессионально-квалификационной структуре уже занятых работников. В качестве основных функций механизма развития человеческого капитала следует выделить следующие:

- расширение производственных возможностей за счет полного и эффективного использования качественных характеристик уже имеющегося человеческого капитала, без привлечения дополнительного количества работников;

- предотвращение морального и физического износа человеческого капитала организации и минимизации его влияния на технический уровень производства;

- повышение качества продукции предприятия за счет использования оптимального количества работников с требуемыми профессионально-квалификационными характеристиками;

- создание благоприятных социальных и производственных условий для профессионально-квалификационного роста работников и реализации их человеческого капитала.

Главным инструментом данного механизма развития является инвестиционное использование человеческого капитала.

В современной экономической науке существует множество концепций и моделей инвестирования человеческого капитала, что позволяет методологически определить сущность данного инвестиционного процесса. В основе данного процесса лежит понимание термина "инвестиции в человеческий капитал". Экономические концепции человеческого капитала (Т. Шульц, Г. Беккер, Дж. Кондрик, Дж. Минцер и др.) [1; 2; 5; 6] достаточно полно и широко трактуют данное понятие и в целом определяют его как, с одной стороны, затраты, которые преобразуют навыки и способности человека и позволяют ему достичь определенных экономических результатов: получать более высокий денежный доход, производить продукцию в большем объеме и с высоким качеством. С другой стороны – это реальные хозяйственные вложения предпринимателя (работодателя), приносящие ему экономическую выгоду, выраженную в росте прибыли и конкурентоспособности его предприятия.

Инвестирование как инструментарий развития человеческого капитала в условиях внутреннего рынка труда - это система методических и технических приемов осуществления данного процесса, которая воплощена в соответствующих операциях и процедурах. Методологическую основу данной системы составляет совокупность закономерных связей и отношений, обуславливающих инвестиционные мероприятия (операции и процедуры) в сфере развития человеческого капитала на ВРП. Анализ, существующих концепций и моделей инвестирования человеческого капитала позволяет определить структуру данного процесса: взаимодействие субъекта и объекта данного процесса; совокупность методов и средств инвестиционного воздействия на развитие человеческого капитала; характеристика видов и форм инвестирования человеческого капитала; характеристика и методика анализа оценки эффективности вложения инвестиционных ресурсов.

**Литература**

**THE HUMAN CAPITAL ARE MANAGE IN CONDITIONS OF INTERNAL LABOUR MARKET**

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**ABSTRACT**

The problem of internal labour market and the processes taking place in its institutional form is a new and insufficiently well explored issue in economic science. The urgency of the exploration of internal labour market is founded on the expansion and development of market relations at a micro-level and the transfer of the peculiarity of these relations to a macro-level of the labour market.

The main goal of the article is to expose the objective contents of internal labour market on the basis of scientific analysis of its characteristic features in the process of its historical formation and evolution.
SUSTAINABLE RURAL DEVELOPMENT IN ESTONIA*

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Introduction
After accession to the European Union the main goal of Estonian rural politics has been to maintain and develop nature-friendly farming based on natural culture, and through it also active and sustainable rural life. Agriculture has been an important sphere of activity and source of income for the Estonian inhabitants throughout history. By now, the importance of agriculture has decreased in the whole world economy, but a bearing role has remained in supplying the people with main foodstuffs, and in the business of rural areas and in formation of the cultural landscape.

Taking into account the fact that more than half the residents of the European Union live in rural areas that cover 90% of the whole territory, the development of rural life is of vital importance. In rural areas, land is mainly used for farming and forestry, which therefore play an important role in the life of rural communities, being a basis for a vital social structure and economy and a good administration of the nature and landscape.

Today, there are fewer farmers than there used to be and they are not working alone. They need the services of several companies to produce and sell their products. Farm families and people living and working in the countryside are also consumers who wish to get the same profit from the rural environment as does the rest of the society. For these reasons, the development policy of rural life is much more wide-stretching than on the fields of the traditional agricultural activity, including measures for the protection and improvement of the environment, plans for supporting rural communities and developing rural economy as a whole.

The aim of the article is to reflect the sustainable development of the Estonian rural life by increasing business, supporting rural life and the competitiveness of the production of agricultural products.

The author has set as their goal to study and given an overview of:
- The economic situation and employment of the rural population of Estonia
- Strategy for the development of rural life
- Rural economic business
- The importance of forestry in the sustainable development of rural life
- The competitiveness of the Estonian agriculture

Economic structure and employment
The constant growth of employment is not infinitely possible due to the profile and qualification of people, and there are always certain people who do not want to enter labour market for certain reasons. Estonia does not have very big resources left for increasing employment, but the productivity of labour is an indicator where Estonia has ample resources for development and which may turn out very effective in alleviating the problem of labour supply. The growth of labour productivity through improvement of qualification would enable the enterprises to produce more effectively and increase added value created by an employee. According to the data of 2005 the productivity of labour force in Estonia made up only 55.9% of the average of the European Union, which is one of the biggest lags from the average indicators in Europe.

The average economic growth of the last 10 years in Estonia has been 6.1%, and from the European Union Member States, only Ireland has witnessed a bigger growth (7.8%). As the average economic growth in the European Union at the same time has been 2.3%, the per capita GDP in purchasing power parities has increased from the initial one-third to about a half (50.4%) of the EU average [5].

In 1996-1999 there was a constant decrease in creating new registered jobs. The ratio of unemployment to vacant jobs characteristic of structural unemployment grew during this period from 19.9 to 30.3. This ratio was highest among skilled workers in agriculture and fishing sector, growing from 42.4 to 91.0. In other words, at the beginning of 1999 there was one vacant job for 91 registered job seekers in these sectors [4] The actual rate is probably even higher because not everyone registers at the employment agency.

During the years 1989-2003, the economic situation of the rural population changed significantly. Unemployment and non-activeness became a problem. At the beginning of the 1990s there was almost no unemployment, but in 2000, there were

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28,500 unemployed persons (13.8%) in the country and 144,300 non-active persons, i.e. 41.2% of the labour force. In the rural areas, the number of employed people has decreased since 1989 from 246.3 thousand to 169.1 thousand in 2004 (-31.3%). The importance of the primary sector (agriculture, hunting, forestry and fishing) in employment has decreased by more than three times since 1989 (from 55.9% to 17.3%). 4.3% of all employees were engaged in the agriculture of the European Union. In Lithuania, Latvia and Finland, the agricultural employment rates were 19.6%, 13.5% and 6.2%, respectively. In countries with old agricultural traditions, such as Denmark and Germany, only 3.7% and 2.6% of the workforce of the whole country is engaged in agriculture, respectively [9].

The economic growth that continued in 2005 brought about positive changes on the labour force market. The main sources of the increase in employment are still the processing industry, rural tourism, increase in joint activity, but also the transport and construction sectors. In addition to big farms and enterprises, the European Union also favours the diversity of the activities of small farmers, the development of less favourable areas and activities of alternative areas of production. Thanks to the support measures of the EU the decrease of employment in agriculture slowed down in 2004.

In Estonian rural areas the percentage of unemployed people from the whole working population increased to 11.7% by 1999. Former collective farm centres, which operated as service centres, were closed. A high structural unemployment rate and a low level of servicing caused the departing of the younger and more active population to towns, making the local social environment considerably poorer. By the year 2005, the unemployment rate in the rural areas had decreased to 7.7%. The rate of unemployment in 2004 was higher among people with basic education – 15.5%, followed by people with secondary and vocational education – 9.5%, secondary vocational education – 7.9% and people with higher education or a degree – 3.5% [5]. According to the data of the labour market survey, 40% of rural population does not actively seek for a job.

**Rural Development Strategy**

In recent years positive changes have taken place in the rural life of Estonia, nevertheless, attempts to create values that would balance the uneven development in rural areas have not been successful. The population of borderlands is constantly decreasing. The Estonian rural development policy has been considerably influenced since the beginning of the 21st century by the accession to the European Union.

Before the accession to the European Union Estonia had the opportunity to benefit from the pre-accession agricultural and rural development programme SAPARD (applications for support were accepted during 2001-2003), the finances of which Estonia implemented very successfully. The essential working out of the Estonian Rural Development Plan and Rural Development Strategy started in September 2004 together with the representatives of producers and rural organisations. Estonian National Development Plan for the years 2004-2006 (RAK) and Estonian Rural Development Plan 2004-2006 were worked out and approved. Various means are used to direct rural development, e.g. market organisation measures and structural measures. [3]. In July 2006 the Government approved Estonian Rural Development Strategy for 2007-2013, on the basis of which rural life will be supported during the next seven years with almost 14 billion kroons [10].

In 2000 the trade conditions for agricultural products with the EU became more favourable for Estonia, because the EU gave up export subsidies to basic products on entering Estonian market. At the same time Estonia imposed import duty on the import of foodstuffs with states with which no free trade agreements had been made. The share of agricultural products in total exports in 2001 grew by up to 8% [8].

Within the framework of the programme for the years 2007-2013 the member states of the EU receive supports through the European Agricultural Fund for Rural Development (EAFRD), from which the relevant budget funds of Estonia will be co-financed. In connection with the new programme period also the rules for the distribution and implementation of structural means are renewed.

The financial support to rural life is divided into three areas:

- Competitiveness of agriculture;
- Environment protection and land management;
- Non-agricultural business and village life in the rural area.

The aim of the strategy is to enhance the competitiveness of Estonian agriculture and forestry, agricultural land management and environmental sustainability, the improvement of the quality of life in rural areas and the diversification of rural business, taking into consideration the corresponding aims of the EU. The principal priorities of the strategy proceeding from this include:

- enhancing the competitiveness of agriculture to the level that agricultural enterprisers could obtain a livelihood under diminishing support;
- agricultural production methods applied should ensure healthy environmental state; agricultural land
use should sustain in areas where it has an important role;
  - the diversification of rural business primarily in less favourable areas and the improvement of the quality of life in rural areas [6].

**Rural economic business**

Farmers and private undertakers located in the country are the central layer of the society forming and determining the organisation and sustainability of the rural life inherent in Estonia. The preserving of smaller households is very important from the viewpoint of the vitality of rural life: these provide rural inhabitants with jobs, help to maintain inhabitance and the local cultural environment. Small households can develop into vital production units mainly via specialising or by alternative rural business. In the tough economic competition, farm families can hold on by developing joint activity.

Local self-initiative has grown fast in rural areas and the possibilities of local inhabitants to participate in the development of the region have increased. The number of non-profit organizations has grown fast in Estonia. One of the leaders of self-initiative of rural inhabitants has been the Estonian Village and Small-town Movement Neighbourhood. Within the framework of the cooperation of villagers village elders have been elected and village development plans have been worked out. A development plan is the agreement between the inhabitants of a village on how the village might develop.

According to the data of the Centre of Registers, the number of companies located in rural areas has still been rather stable over the past years (26,000 – 27,000 companies). The farmers that are economically active (operating) made up about 68-70% of these. The critical years of operation in the life cycle of rural companies are 3-5 years. The survival percentage of companies is rather small (54%) and the ability to make additional investments at the expense of equity capital is small. The farmers engaged in agriculture terminate their activities more often than other companies. The less competitive salary fund has an effect on those companies, too, who have difficulties hiring and keeping skilled workers. The fact must also be taken into account that according to the rules of the farm accountancy data network (FADN), there are only about 7,000 so-called professional commercial enterprises who receive most of their income from agricultural production. The greater centres and the municipalities surrounding them are more vital [7]. In the municipalities that are on the outskirts of rural areas and away from larger transport roads, the number of areas of activity is small and limited only to public services and a few companies.

It is very important to find an ancillary activity. Of the approximately 37,000 farmers in Estonia, 2,746 households gain their income from non-agricultural activities, which makes up 7.5% of all the farmers. Thus, it is very important to pay more attention to the diversification than so far, thus improving the opportunities of the farmers withdrawing from agricultural production to reorientate, and creating more non-agricultural job positions. As the secondary and tertiary sector are engaged 94.2% in the rural area (94.9% in the EU), these sectors have a greater potential from the viewpoint of creating new job positions. By improving the tertiary sector, it is also possible to slow down the problem of services moving out of the rural areas. Even now, 66% of value added is created in the service sector [5].

The increasing of the competitiveness of the whole foodstuffs production chain – from the agricultural producer to the processor – by supporting respective investments is in the central position. Next to the modernisation of traditional agriculture, the diversification of agricultural production, increasing of the quality of products, recovery and development of villages and the creation of new non-agricultural companies and job positions in the country need to be contributed to. Through non-agricultural business, the potential of the local natural environment is exploited. The main criterion at developing economic activities alternative to the agriculture is the creation of job positions to provide employment opportunities for workforce freed or freeing from agriculture [3].

In the past few years, small agricultural companies have terminated their activity, but at the same time, larger agricultural companies have expanded their business. The importance of leased lands in areas under cultivation has also increased. In 2005, agricultural companies leased 48% of agricultural land on the average.

**Forestry as a field of the sustainable development of rural life**

Forest is one of the most important recoverable natural resources, which covers more than half of the land of Estonia (2.28 million hectares). More than half of the forest land is administered by the state. Compared to other countries of the European Union, Estonia is on the fourth place for the proportion of forest [11].

A great part of the former farmlands of Estonia has become covered with wood in the recent fifty years. According to the data of the Land Registry and Land Board, more than 300,000 hectares of forest land on former farmlands is owned by private forest owners as legal persons and companies, which makes up over 30 times more than the area of forest
lands owned by companies before WW II. From the economic viewpoint the continuous concentration of forest ownership to private forest owners as legal persons (especially foreigners) reduces the number of jobs in rural areas and the opportunities of earning an income for rural inhabitants.

In the course of the returning and privatisation of forest lands the owners have received approximately 55,000 registered immovable properties that make up approximately 700,000 hectares of forestland. The average area of a forestland property is about 12 hectares. Cadastral units smaller than 5 hectares make up 61% of the overall number of the total of cadastral units, but they take up only 19% of the area of private forests. The area of State owned forests growing on former private lands is ca 600,000 hectares [2].

From the viewpoint of regional employment the forestry based industry has a significant role as an employer. The share of employees in industries based on forestry is up to 9% of total employment. From timber products the leading export article in monetary value is saw timber. In former years the main export article was raw timber, whereas in recent years the share of saw timber has grown. The main part of saw timber goes to Great Britain and Germany. The majority of exported raw timber is pulpwood, with main export markets in Sweden and Finland. Approximately 60% of Estonian timber products is sold to these export markets. Although the number of jobs in agriculture decreases, it is balanced by the rise in employment in timber processing and fishing sectors.

The main developers of rural life are family farms. So, the Estonian rural life mainly depends on the vitality and sustainability of a family farm. The forest has always been a significant source of work and income for farm families.

A great proportion of the 55,000 private forest owners of Estonia manage their forests by following the sustainable principles. The Estonian forest resources are mainly used in the wood processing industry. The wood processing industry comprises four production industries:

- wood processing
- production of paper and paper products
- publishing and printing, and
- furniture production.

When using the forests for wood, the other areas of application of the forest should not be paid less attention to. Preconditions have been established for the industrial collection of the by-products of forest and satisfying the needs of people taking berry and mushroom picking as a holiday and using the forest. To ensure an increase in the usage of forest during holidays, respective information programs have been worked out.

Competitiveness of agricultural production

The development and success of the economy of a country as a whole greatly depend on the international competitiveness of its sectors of economy. The international competitiveness of a sector of economy is a complicated phenomenon in which the efficiency of the activities of a company, geographical distance from destinations and the support policy of countries towards their producers intertwine. The situation at the assessment of the competitiveness of different countries is especially complicated.

In order to understand the current situation of the competitiveness of the Estonian agricultural production, attention must be paid to deeper problems as well. In the 1990s, the restructuring of agriculture was inhibited both by the collapsing of earlier Soviet markets and the liberal trade policy applied in Estonia. Mainly due to the liberal foreign trade policy of Estonia, the balance of both the whole foreign trade and the foreign trade of agricultural products turned negative. In such unequal competitive conditions, the competitiveness of agriculture as a sector decreased and there were no possibilities for making the necessary investments. The purchase prices of agricultural products decreased. In addition to this, the need increased in relation to the bringing of agricultural production into conformity with the EU directives. After the accession to the EU, the self-financing ability of the investments of Estonian farmers has increased in relation to direct aid, but the level of expenses made has also increased, and mainly so due to the increase in fuel prices [5].

In 2000, the trade regime of the Estonian agricultural products with the EU became more favourable as the EU gave up the export subsidies of the basic products entering the Estonian market. At the same time, Estonia levied import duties on the import of foodstuffs with the countries with which free trade Agreements had not been concluded. The proportion of agricultural products in the whole export increased to 8% in 2001 [8].

The effect of foreign trade on the development of Estonian agriculture has constantly been getting stronger after the regaining of independence. During the Soviet time, the Estonian agricultural production was mainly specialised in import feedingstuffs. A great proportion of the agricultural production was taken out of Estonia to the other regions of the Soviet Union. The policy of the Soviet Union significantly restricted the traditional export market of the Estonian agricultural products. The good competitiveness of the agriculture of the Estonia that has
regained its independence on the world market is best characterised by the fact that in case of mutually opened markets, the trade balance of the Estonian agricultural products has a great surplus. For example, the importance of Ukraine in the import of the Estonian agricultural products in 1999 was about 16 times smaller than in the export. In case of Latvia, the same ratio was more than four times and in case of Latvia, more than two times smaller [4]. It can be concluded from here that the reason for the regress in the Estonian agriculture in the last decade of the last century was not the low competitiveness of the sector of economy, but the worse position of the Estonian producers in the economic policy competitive conditions [8].

According to the structure survey, agricultural holdings of less than 10 hectares in size make up 65% of all agricultural holdings. At the same time, they only use 8.6% of the agricultural land. Agricultural holdings of more than 100 hectares in size make up 5% of all agricultural holdings, but use 65% of the agricultural land [5].

Summary

The main developers of rural life are family farms. Therefore, the Estonian rural life depends on the vitality and sustainability of the family farms. Forest has always been an important source of work and income for farm families. The Estonian forestry has a significant role in the economy of the country. From the viewpoint of social development, forestry as an insurer of employment in the country is especially important.

The accession to the European Union has significantly affected the development of rural life in Estonia, as a result of which positive changes have occurred in the rural life. It is important that the rural life was diverse and provided various job possibilities near one’s home, so that the availability of main services and the quality of life were guaranteed for the inhabitants. The Estonian Rural Development Plan for 2007-2013 is aimed at increasing the competitiveness of Estonian agriculture and forestry, maintenance of agricultural lands, increasing the quality of life of rural areas and diversification of rural business.

Important development and growth potential of business also lies in the development of the business and innovation knowledge of people. It is necessary for people to know how to use new ideas in their work. New more vital companies are the result of improved business awareness. To keep the Estonian rural life sustainable, more attention has to be paid to the wider supporting of the development of rural areas.

Sources

MANAGEMENT OF AGROTOURISM IN THE SUSTAINABLE DEVELOPMENT OF RURAL AREAS WITH THE EXAMPLE OF THE MAIOPOLSKIE VOIVODESHIP

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ABSTRACT

Agrotourism is a form of rural tourism that is based on the qualities of the natural and cultural environment. For this reason, this kind of tourism is particularly useful for implementing principles of ecological development and should be a permanent element of the sustainable development of rural areas.

In the opinion of the surveyed Commune Office employees, agrotourism can have a considerable to medium impact on the development of a commune (in almost all the communes, this was put down in Development Strategies). At the same time, the respondents underlined the extremely important role of environmental protection and reasonable utilization of the environment in the development of agrotourism services.

In the issues of agrotourism management based on the principles of sustainable development, an important role is played by the commune’s local authorities and the local community. Their entrepreneurship has a great impact on the development of this form of tourism, taking into account the aspects of environmental protection and the maintenance of the cultural heritage of the places visited.

Unfortunately, the greatest barrier to the future development of agrotourism services is the financial barrier, as was indicated in more than 70% of communes. Farmers can apply for EU funds in order to expand the portfolio of their services (refund of the costs incurred), but even so, they have to have their own capital to begin with, which is often the main shortcoming of any investment.

Key words: agrotourism, sustainable development, rural areas

Introduction

The notion of sustainable tourism was used for the first time during a UN conference, referred to as the “Earth Summit”, which took place in Rio de Janeiro in 1992. The idea of this form of tourist migration refers to the entire phenomenon connected with tourism and pertains both to the economic development of the population of the visited area and to issues related to environmental protection and the preservation of the cultural and historical heritage of tourist regions. In turn, during the international conference in the Canary Islands in 1995, the International Declaration on Sustainable Tourism was passed, setting forth the principles of tourism understood as such. The participants of the conference focused on the fact that tourism is an ambivalent phenomenon, as it can contribute to social, economic and cultural achievements, but on the other hand, it can cause degradation of the natural environment and loss of local identity [Gromkowski, 2004].

Various types of tourism can be distinguished within sustainable tourism. At the beginning of the 1990’s in Poland, a new form of tourism in rural areas emerged, namely agrotourism. This new phenomenon is connected to the organisation of tourist stays at operational agricultural farms. Income from agrotourism services constitutes an additional source of sustenance for farmers, whose main profits come from agricultural production.

Agrotourism should be based on the principles of sustainable development of rural areas. An important issue for farmers, their families and the local community, besides the incomes of the farmers, is maintaining fundamental aspects of conservation of the natural environment. Tourist visits must not cause degradation of the areas visited. Therefore, it is of paramount importance not to exceed the tourist absorption capacity and to host a limited number of tourists in a given area.

The essence and characteristics of sustainable tourism

Agenda 21, developed for the countries of the Baltic Sea region, defines sustainable tourism as “any form of the development of tourism or tourist activity which respects the environment, provides long-term protection of natural and cultural resources, and which is socially and economically acceptable and fair”. [Przezbryrska, 2000]. Thus, the detailed objectives of the development of tourism as such refer to three main elements: environment, economy and the individual. In view of the above, the development of sustainable tourism has three principal objectives, namely: economic benefits for the local community, improvement of the quality of life of the local community and protection of the natural environment.

Sustainable tourism is in opposition to traditional tourism, referred to as mass tourism, which violates
the state of equilibrium in nature and has no regard for the requirements of the natural environment. Sustainable management in tourism entails, first of all, economical management of natural environment resources and space as well as utilisation of the existing tourist and paratourist infrastructure (table 1).

**Table 1. The difference between conventional and sustainable management of tourism development**

<table>
<thead>
<tr>
<th>Conventional management</th>
<th>Sustainable management</th>
</tr>
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<tbody>
<tr>
<td>Unplanned tourist development</td>
<td>Planning first – then development</td>
</tr>
<tr>
<td>Each commune plans separately</td>
<td>Planning for entire regions</td>
</tr>
<tr>
<td>Disordered urban development – all over the place</td>
<td>Concentration of urban development, saving the land</td>
</tr>
<tr>
<td>Town architecture different from the local building style</td>
<td>Architecture typical for the surrounding area (form and raw materials)</td>
</tr>
<tr>
<td>Exploiting particularly valuable landscapes</td>
<td>Leaving particularly valuable landscapes intact</td>
</tr>
<tr>
<td>Building new infrastructure, new accommodation places</td>
<td>More effective utilization of the existing infrastructure</td>
</tr>
<tr>
<td>Leaving tourism development in the hands of outside promoters</td>
<td>Local population has the right to decide and participate in tourism</td>
</tr>
<tr>
<td>Taking into account economic benefits only</td>
<td>Carrying out an analysis of benefits and losses, with consideration for all the economic, ecological and social aspects</td>
</tr>
<tr>
<td>Creating a base for private vehicle traffic</td>
<td>Promoting public and alternative transport (e.g. bicycles, carts, sleighs)</td>
</tr>
</tbody>
</table>


There can be various forms of sustainable tourism in rural areas. M. Jalinik [2002] distinguishes four types of such tourism:
- rural tourism – covering all tourism organised in rural areas,
- agrotourism – tourism at agricultural farms,
- eco-agrotourism – tourism at farms which produce food using ecological methods,
- ecotourism – tourism in environmentally valuable and protected areas.

Currently, a lot of attention is devoted to agrotourism, as part of the sustainable development of rural areas and sustainable tourism. The key ecological features of this form of tourism are [Bia'obrzeska, Kisiel, Marks, 2000]:
- protection of the natural environment through the promotion of such forms of tourism which are economically productive, socially responsible and friendly to the environment,
- initiating tourism and agricultural activity that is adapted to the environment and the landscape,
- developing the production of food with raised ecological parameters,
- development of the infrastructure that supports the ecological patterns of tourism (transport, energy production, waste, sewerage and water management, etc.),
- maintaining the integrity of the landscape, cultural values and the attractiveness of the locality and the surrounding areas.

**Management in sustainable tourism**

In the opinion of Gromkowski [2002], management of tourism in an environment of sustainable development requires compliance with certain rules, which include the protection and sustained utilization of natural, cultural and social resources, and an interdisciplinary approach to tourism management. Moreover, the author mentions long-term planning, consisting in the harmonization of tourism development plans with strategic solutions for most areas (commune, region, state), as well as the participation of the local economy and population in the development of tourism.

On the other hand, according to D. Zaręba [2006], the management of sustainable tourism in all sectors of the tourist industry comes down to four general principles:
- ensuring the protection and sustainable use of natural, cultural and social resources,
- an interdisciplinary approach to tourism management – the interests of various entities are involved in the development of tourism: state administration, local self-governments, entrepreneurs, NGOs, consumers and local community,
- long-term planning – will help foresee the consequences of the impact of tourism on the environment and plan preventive actions,
- support of the local economy and the participation of the local community in the development of tourism – the tourism in the region should be based
first of all on locally available resources and on the initiative of the local population, ensuring financial benefits to the inhabitants and caring for a broadly-understood quality of life (health, cleanliness, safety, etc.).

The tourism development strategy plays an important role in the management of tourism in line with the principles of sustainable development. The strategy of the development of tourism on a commune level is of particular importance in relation to the local tourist industry. It is defined as long-term (prospective) action plan, which establishes strategic objectives for the development of tourism and adopts such courses of action and an allocation of funds which are required for the attainment of objectives and tasks [Michałowski, Ziółkowski 2002]. Among the most popular types of strategies for the development of rural tourism, A. P. Wiatrak (2005) indicates the strategy of sustainable development. In the opinion of this author, that strategy consists in the mutual adjustment of political, social, cultural, economic, environmental, spatial, institutional, etc. aspects. (Wiatrak 2005). Their foundation is comprehensiveness, which accounts for long-term development based on integrated governance.

Various entities participate in the management of agrotourism, in accordance with the principles of sustainable development of rural areas. The following can be distinguished among them: local authorities in the commune, Agricultural Consultancy Centres and agrotourism associations. Self-governments are responsible for developing the commune’s development strategy. Such a strategy should account for widely-understood tourism, including agrotourism. Agrotourism services can have a prominent role in the sustainable tourism development strategy in a commune. In rural areas which are characterised by appropriate natural qualities and rich historical and cultural heritage, this type of tourism has great prospects for success.

Moreover, the inhabitants of villages who are not directly involved in the agrotourist product production process play an important role in the development of agrotourism. They have the opportunity to provide service to tourists in a given locality through the organisation of various recreational services, e.g. guided tours.

**Results of the research**

The research, whose results will be presented below, was conducted at the turn of July and August, 2006. The research included representatives of 57 Commune Offices in the Małopolskie Voivodeship.

From all the communes that participated in the research, 55 have an up-to-date Development Strategy, and in two of them a strategy is currently being developed. Almost all of the existing Development Strategies – 53 – contain a SWOP analysis, mission and strategic vision for the development of tourism. As regards agrotourism issues, most strategies, in 51 communes, provide for actions supporting its development. In 26 communes, there are units or positions that deal with agrotourism. In 13 communes, there are plans for establishing similar units which will deal with agrotourism services, in one commune this has not yet been decided, and in 30 (30% of all the studied communes), there are no plans for creating such a position. This might result from the fact that in almost 1/3 of territorial self-governments, agrotourism services are not perceived as a factor which considerably contributes to local growth.

In the management of agrotourism in line with the principles of sustainable development of rural areas, a key role is played by local authorities in the commune. In questionnaire research, it was asked whether the involvement of local self-governments in the development of agrotourism in the commune is sufficient. More than half of the respondents (56.1%) answered “rather yes” and 14% “yes.” 15.9% of the respondents found it hard to answer this question and 14% said “rather not.”

The influence of the local self-government on the development of agrotourism services in particular communes was related to various actions, mainly in the field of promotional activity (47.4%), but also in the development of tourist and recreation infrastructure (19.3%) and the construction of technical infrastructure (12.3%) (table 2).

On the other hand, agrotourism services can have large impact on the social and economic development of the commune. The direct beneficiaries will be farmers who undertake agrotourism activity, but also, through the so-called multiplication effect, the local community and enterprises which operate in a given locality. In response to one of the questions from this group, almost 1/3 of the communes answered that the influence of the local self-government on the development of agrotourism is high. However, most responses – 27 (47.4%) – pertained to the limited impact of local authorities on the development of this type of tourism (drawing 1).

In the management of sustainable agrotourism, an important role is played by the entrepreneurship of the persons dealing with this form of tourism, their creativity, and willingness to cooperate with others. The owners of agrotourism farms who were studied undertake various forms of self-organisation. One of them is membership in rural tourism and agrotourism associations. Of the researched farms, more than
Table 2. The influence of the local self-government on the development of agrotourism services in the communes studied

<table>
<thead>
<tr>
<th>The impact of local self-government on the development of agrotourism</th>
<th>Number of responses</th>
<th>% of the no. of communes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Including: Participation in fairs</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Internet advertising</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Publication of leaflets</td>
<td>4</td>
<td>47.4</td>
</tr>
<tr>
<td>Distribution of informational materials</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trips to agrotourism farms</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Development of tourist and recreation infrastructure</td>
<td>11</td>
<td>19.3</td>
</tr>
<tr>
<td>Building technical infrastructure</td>
<td>7</td>
<td>12.3</td>
</tr>
<tr>
<td>Organisation of training courses</td>
<td>4</td>
<td>7.0</td>
</tr>
<tr>
<td>Funding agrotourism</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Organisation of various events</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Funding outdoor events</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Promotion of cultural heritage</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Record of agrotourist farmsteads</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Maintaining the cleanliness of the natural environment</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Own study, based on own research

Half (50.4%) are members of some kind of association. Membership in such organisations provides an opportunity for better and less expensive promotion. Moreover, associations cooperate with local authorities and agricultural consultancy centres. Many of the owners of the studied agrotourism farms (76.4%), regardless of affiliation with associations, cooperate with one another. Primarily, this
cooperation consists in sending tourists to particular farms (62% of the cooperating accommodation providers), exchange of experience (37.6%), and joint promotion (28.3%). Cooperation among farmers who do agrotourism business contributes to satisfying the demand for agrotourism. Farms with no free beds at a given moment recommend other accommodation places, often located in the same commune, to tourists. Almost 1/3 of hosts support other farmers in promotional activities. This results from personal involvement in the joint promotion, sometimes even without the support of an institutional environment or without membership in any association.

In the communes studied, questions were asked about the fields of social and economic life on which agrotourism has the most powerful impact. The majority of responses were related to an increase in the incomes of the population: this factor was mentioned in 45 communes. The improvement of the aesthetics of farms was indicated in approx. 63% of communes, whilst the promotion of communes was mentioned by almost 58% of the representatives of territorial self-governments. Moreover, 44% of respondents pointed to the increase in entrepreneurship and activity, whilst close to 37% to reduction of unemployment.

In the opinion of the employees of the Commune Offices who were asked about the negative consequences of the development of agrotourism, the major ones will be related directly or indirectly to the protection of the natural environment. These are pollution and the degradation of the natural environment (21 answers). On the other hand, 18 respondents claimed that there are no such negative consequences.

During the poll, respondents were also asked what they see as the greatest hindrance to the development of agrotourist services in a given commune. As the most troublesome barrier to the development of these services, the respondents indicated the limited financial resources of farms – in almost 72% of cases. On the other hand, problems related to the technical or tourist infrastructure, an unprepared accommodation base or low attractiveness of the area were treated quite marginally (table 2).

Table 2. The most troublesome barrier to the development of agrotourism in the commune

<table>
<thead>
<tr>
<th>The most troublesome barrier to the development of agrotourism in the commune</th>
<th>Number of responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited financial resources of farms</td>
<td>41</td>
<td>71.9</td>
</tr>
<tr>
<td>Unprepared accommodation base</td>
<td>3</td>
<td>5.3</td>
</tr>
<tr>
<td>No demand for this type of service</td>
<td>3</td>
<td>5.3</td>
</tr>
<tr>
<td>Low attractiveness of the locality</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Poor technical infrastructure</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Poor tourist infrastructure</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>No people wishing to rent lodging</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Other*</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

* In “Other”, the respondents pointed to the fact that “Agrotourism will not be in line with the commune’s existing vision” and “no cooperation between the farms”

Source: Own study, based on own research

One of the assumptions of sustainable development is increasing the quality of life of the local community. “Tourism should harmonize social life and be the reason for inhabitants’ satisfaction.” Wanagos and Studzienicki [2000] indicate safety, infrastructure, a clean environment, and maintaining the value of the local culture as the elements which are the common interest of tourists and the local community.

In the opinion of the surveyed Commune Office employees, commune authorities are responsible for providing all the elements contributing to a certain quality of life, to the extent permitted by the provisions of law and the financial resources of the communes.
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Literature


THE SOLUTION TO THE AGRARIAN QUESTION IN POLAND IN THE LIGHT OF THE CONCEPT OF SUSTAINABLE DEVELOPMENT

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ABSTRACT

Nearly three years after the integration of Poland into the European Union and after a considerable part of the rural population has been covered with the principles of Common Agricultural Policy, the Polish agrarian question remains unsolved. The aim of this study is to evaluate the impact of changes in the European model of agriculture on the sustainable development of rural areas and agriculture in Poland. The sustainable development considerations cover three planes: ecological, economic and social.

Key words: Polish agrarian question, agricultural policy, sustainable development

Introduction

Modern development of the economy, including agriculture and the entire food industry, leads to degradation of the natural environment on a large scale. After a period of delight with the effects of agricultural activity in the second half of the twentieth century, measured by the high yield of crops, productivity of animals and work efficiency, awareness of the consequences of such development is increasing. Despite the fact that the awareness of negative consequences of excessive artificial fertilization, the use of a high amount of plant protection chemicals, increasing arable field areas and cutting down in-field trees is not yet widespread, social movements advocating “nature-friendly” actions are growing in strength. Nowadays, not only the most fervent defenders of the natural environmental participate in these actions, but politicians and consumers as well [Runowski 2002]. Various types of risks appearing in areas where consumers’ health or even life is endangered are a source of growing awareness of the threats resulting from intensification of agriculture. Western European countries see the increasingly more negative natural, social and cultural, and economic effects of the current EU Common Agricultural Policy (CAP) connected with the present form of conventional agriculture. The manifestation of the BSE disease in Europe caused a great shock, because almost at the same time a new variant of Creutzfeldt-Jacob’s disease, a fatal brain disease, was found, which with high probability spreads from animals to humans. That is why the Ministry of Agriculture in Germany was transformed into the Ministry of Consumer Protection, Food and Agriculture. At the beginning of 2001, the German government saw the necessity for a new orientation of agricultural policy and proclaimed a new model of production for consumer safety, quality of production and conformity with environmental requirements. The famous notion of a “turn in the tide of agriculture” (German Agrarwende) appeared. The foundation for the success of the “turn in the tide in agriculture” is supposed to be continued consultancy with important groups of social actors, who are referred to as the “magic hexagon” of the turn in the tide in agriculture, that is consumers, farmers, the fodder industry, the food industry, retail trade and politics. The mounting crisis in the ecological foundations of agricultural production is arousing considerable interest in the problems of durability, and ecological agriculture best fulfils such requirements. The essential ingredient of consumer protection becomes the advancement of ecological and integrated agriculture, as well as the various forms of controlling food safety [Koœmicki 2005].

It is obvious that the growing interest in food safety as such is not the only stimulus that augments the resonance of the discussion on the contemporary path of the development of agriculture. This is because in the agriculture of developed countries there still are several, as yet unsolved issues, the most important of which are:

- income discrepancies (disparities) between the farming population and people employed outside of the agricultural industry,
- work efficiency lower than in the non-agricultural activity,
- low competitiveness of agricultural products in countries with a low or medium level of development as compared to economically well-developed countries [Klank 2006].

All the above-described processes led to a conventional sectoral common agricultural policy targeted mainly at the objectives of agriculture, and farmers taking the non-agricultural aspects of the development of rural areas into account more and more. It is not surprising, as CAP (Common Agricultural Policy) was based on two pillars, a sectoral pillar focused on the development of
agriculture, and a territorial pillar which takes into account non-agricultural economic aspects, environmental issues and social issues of the rural environment. At present, the revaluation of the policy of agriculture itself is noticeable. The complete implementation of the principle of sustainable development can be obtained through multifunctionality of agriculture, in which various dimensions of sustainability are expressed: environmental, economic and social, as are various areas of agricultural and non-agricultural activity in rural areas [Adamowicz 2004]. In these conditions, new strategies of further development of rural areas and agriculture emerge, based on the concept of “sustainable development,” which accounts for the above-mentioned problems. So far, the EU Common Agricultural Policy has been far from compliant with this sustainability concept.

**The sources of the complex peasant issue in Poland**

M. Halamska points to the social and economic environment, shaped differently by history, which determines the specific nature of the agrarian changes in Poland. She draws our attention to more than 40 years of delay in “the end of peasant era” as compared to similar transformations in West European countries. [Halamska 2005]. It is worth indicating here the sources of the peasant community, formed at the turn of 19th and 20th centuries, consisting in the fight for land, agrarian reform, modernization of rural areas, education of peasants’ children, fought by peasant political parties and rural youth organisations [Fedyszak-Radziejowska 2001]. “The other Europe,” stretching behind the Elbe, which included Poland, in the 19th and at the beginning of the 20th century meant the expanse of large farmsteads and the “peasant issue” well-known to Poles. Peasantisation of agriculture took place relatively late here. In Poland, this process was marked with abolition of serfdom in the mid 19th century, interwar agricultural reforms and the important conflict between the peasantry and landed gentry in Poland between the world wars. The conflict was resolved, radically and not quite in line with peasants’ expectations, by the socialist agricultural reform in the People’s Republic of Poland in 1944. The result of the reform was not only the liquidation of approx. 10 thousand gentry estates, each covering an area of approximately 400 hectares. From as much as 30% of the land obtained from the reform on former Polish territory, State-owned Farms were created, and 47% was given to landless people, in most cases former grange workers. The largest group of farms, as many as 1.5 million, established as a result of the reform, were small farms of approximately 2.5 hectares. Another important effect of the reform of 1944 was blocking the process of concentration of land; the number of farms covering a area less than 2 hectares and more than 20 hectares decreased. An increase of the position of medium-sized farms proved to be the most durable and long-term effect of that reform [Fedyszak-Radziejowska 2001].

After 1948, the process of depeasantization through the collectivization of agriculture began in Central Europe. The collectivization process did not take place in Poland. The complex socioeconomic process, which in Western European countries took at least several dozen years, in the Soviet Union and other countries was attempted to be carried out using political operations in a much shorter time. None of these processes took place in Poland. The peasant agriculture in Poland did not undergo the processes of farmerization, not only due to technological gap as compared to Western Europe, but most of all due to the fact that the peasant economy after World War II was excluded from the area of impact of free market mechanisms. However, what is even more important, collectivization in Poland was unsuccessful [Halamska 2005].

The characteristic, for socialist Poland, ideological war on “kulaks”, that is on the elite of peasantry, compulsory quota, problems with access to farming machinery, no ownership titles to land coming from the agrarian reform, and limitations in trade of land between farmers, form the modern history of “the peasants’ harm.” The end to some of the major limitations came as late as in the 1970’s. However, the 1990’s are the period in which rural areas absorbed the problems of urbanised areas, when hundreds of thousands of workers in “large building sites of socialism” were made redundant. In the years 1989-1998, as many as 217 thousand of the former inhabitants of rural areas returned to the countryside from workers’ hotels [Fedyszak-Radziejowska 2001]. These are some of the indicators that illustrate the situation of Polish agriculture at the end of the 1990’s (1998-1999) [Wilkin 2000]:

- the agricultural parity dropped to the level of approx. 38-40 %,
- the percentage of farmsteads with enough financial resources to invest and modernise their production potential was approx. 2 %,
- in the majority of farmsteads, the processes of decapitalisation of production assets took place,
- 1/2 of the gross added value produced by the agricultural industry was taken over by other economy sectors,
- the transfer of the added value from agricultural industry was compensated by the
transfer to the farmers in the form of subsidies from the budget to the KRUS fund, which, however plays mainly a social function,
- in 1999, the value of bank deposits of individual farmers (already very low) dropped by approx. 23%, and almost 80% of farmers had no bank savings at all,
- the access of the youth in rural areas to secondary and higher education became even harder in the 1990’s than in previous decades; youth from rural areas constitute as little as 10% of full-time higher education courses, of which youth from peasant families was as little as 4% (one needs to bear in mind that the population of rural areas constitutes 38% of the population of Poland and the peasantry is more than half of the population from rural areas).

All this was because in recent decades in Poland we went through critical, often difficult and painful, experiences inherent in the advance of new concepts of agrarian theory and practice (the system’s transformation and the end of the 45-year-long period of enforcement of centrally-controlled economy, and the special role of the peasant family economy in that system).

In well-developed countries, the fast pace of changes in economy, growing competitiveness, technological and organisational advancements, as well as the concurrent social changes, led to the “end of the peasantry era” (as Mendras called it). In the modern competitive economy, only a farmer, and not a peasant, was able to survive. This is the experience, a sometimes painful one, of a large group of peasantry farmsteads in Poland in the period of so-called post-socialist transformation and adjustment to the conditions of the European Union. Paradoxically, the largest and the most imminent threat to the peasant-type economy in Poland proved to be modern capitalism, and not the planned economy or the socialist state [Wilkin 2005].

The transformation of peasants into farmers, who play the role of entrepreneurs in the competitive market, is a time-consuming process and can include only part of peasant farmsteads. It is estimated that not more than 1/3 of farmsteads in Poland have a chance of this type of transformation [Jywuwiak 2003].

The problems of farmsteads adjusting to the quickly-changing conditions of the agrarian environment are the source of the so-called agrarian question. This question was not resolved with the transformation of the peasant economy into the modern farmer economy. Obviously, farmsteads that are market-oriented and operate according to the principles of a modern enterprise based on know-how can adjust much more easily to the new economic conditions than their peasant predecessors. This mere fact, however, does not eliminate the sources of the agrarian question, because the question is posed anew in new forms and is the main cause of the extensive interventionism of the State in agriculture [Wilkin 2005].

Summing up the agrarian policy of the government in the 1990’s, J. Wilkin states that the policy was both incoherent and unstable. It changed as frequently as the ministers of agriculture. There was no clear vision of the development of agriculture, strategy or comprehensive programs for restructuring and modernisation. Predominant were short-term objectives, extemporaneous interests and conceptual helplessness in the development and implementation of agrarian policy, corresponding to the scale of the challenge confronting agriculture at the turn of the 20th and 21st centuries. The problems of agriculture and the rural area population were not matched by the appropriate interest and involvement of the wider public and major social circles outside of rural areas. The questions of the rural areas and the agriculture were often distorted. Intellectual elites, who represented the needs of the rural population, including farmers, were insignificant and weak [Wilkin 2000].

As a result of the above-mentioned transformations in Poland, we are dealing with a group of approx. 1.8 million small farmsteads with an average area of 8.44 hectares of cultivated land (CL) and 9.60 hectares of total area. There are 1.97 million people employed in the Polish agricultural sector, or approx. 16% of the economically active population. The employment rate per 100 hectares CL is at the level of 23 persons. The above factors, as well as a number of other factors not mentioned here - for example, the level of prices of agricultural products and means of agricultural production, the production technologies used, as well as soil and climatic conditions (by approx. 30% less advantageous than the average for agriculture in the EU-15 countries), etc. – are reflected in the economic power of farmsteads in Poland.

In the structure of farmsteads in Poland (for the years 2003/2004) according to the economic size, as much as 69.8% were small farmsteads – up to 8 ESU (European Size Unit), 28.4% were medium-sized farmsteads – 8-40 ESU, whilst farmsteads above 40 ESU constituted 1.8% of all the farmsteads. For the sake of comparison, it is worth adding that in the same period in EU-15 agriculture, this structure was as follows: up to 8 ESU – 31.8%; 8-40 ESU – 25.0%; and above 40 ESU – as much as 25.7% [Agriculture... 2005].

The economic threshold adopted in the Polish
FADN (The Farm Accountancy Data Network) in 2004 at the level of 2 ESU is very low. Only one “old” Member State located in the same climatic zone as Poland – Ireland – has an equally low threshold. The other States are at a level four times (8 ESU – Austria, Denmark, Finland, France, Luxemburg, Germany, Sweden, Great Britain – Northern Ireland) or eight times higher (16 ESU – Belgium, the Netherlands, Great Britain). This comparison shows that Poland has several times weaker farmsteads in terms of economy than almost all “old” Member States [Rowciski 2006].

By the force of events, the above-presented structural weakness of agriculture has to have a negative impact on work efficiency. A simple estimate shows that work efficiency is 5-6 times lower than average work efficiency in the Polish economy (approx. 16% of the economically active population produces approx. 3% of GNP). The consequence of such a low work efficiency is low income of people employed in agriculture, as I have already illustrated with the size of disparity of agricultural incomes.

The place of Polish agriculture in the European agriculture model – dilemmas

First of all, sustainable growth of the agriculture, characteristic for the European model, needs to be increasingly more based on diversification of production, innovativeness and the manufacture of products with high added value, which are sought by the consumers. In such an environment, running a farmstead requires continued investments. This is possible only if two conditions are met. The first condition is profitability of production, and the second one is the level of income ensuring not only an appropriate standard of living but also making investments possible. Considering the structure of the economic size of Polish homesteads, the latter condition is fulfilled by only a small part of farmsteads. The majority of the remaining farmsteads do not earn income at an appropriate level and have no possibility of obtaining such an income in the future. In FADN methodology, a commercial farm is “a farm which is large enough to provide a main activity for the farmer and a level of income sufficient to support his or her family”. Therefore, the commercial farm has to achieve at least a minimum threshold of economic size. It is hard to expect that in Polish conditions, a farmstead of economic size 2 ESU will fulfil the criterion of sufficient income. In Poland, this condition is met, as in the “old” Member States, only by farms of the economic size of 8-10 ESU [Rowciski 2006]. Similarly, based on model calculations made based on the data for the first few months of 2004, a 15 hectare farm on poor soil and with an average level of crop output and high level of animal output (annual sales of 200 swine), even in an advantageous market situation, is not able to provide sustenance approaching the parity and the accumulation. Only intensive animal production (25 dairy cows) in a 30 hectare farm ensures the parity standard of life and the chances for the development of the farm [Poczta 2005].

It is worth pointing out here that farms covering an area of more than 30 hectares constitute as little as 3% of all farms in Poland, whilst the percentage of farms exceeding 8 ESU in the structure of Polish farms is 10.6% [Osuch et al. 2004]. This means that less than 10% of all the farms in Poland would have a chance of finding their place in the European model of agriculture.

The divagations presented here need to be complemented with two more elements. An optimistic element for Poland is the fact that these very farms have assets sufficient for making use of CAP structural funds (the funds appropriated, among other things, for modernisation of farms, but only for regions which show signs of a development gap in agriculture). On the other hand, a worrying element is the process of succession of agricultural farms in the EU-15. As can be seen from agricultural data, in the agriculture of all the 15 “old” Member States, the group of farms up to 50 hectares is “shrinking” (the exception is Ireland – up to 30 ha) [Klank 2006]. This is proof of a lack of interest (in particular among young farmers in Western Europe) in running a farm, which we in Poland today regard as having prospects for future development. Therefore, what is the place for Polish agriculture, if our farmers are convinced that the income from such agricultural production (at their farms) will not provide them with the proper standard of living in the long term? This dilemma will undoubtedly be reinforced with the improvement of the overall economic situation in Poland and the increase of attractiveness of job offers in non-agricultural sectors of economy.

Secondly, Poland, as a Member State of the European Union, participates in amending the Community policies, including CAP. There are going to be a lot of opportunities for promoting Polish preferences as regards the state of EU agricultural policy in the years to come. In this respect, one can enumerate several dilemmas of Poland in the implementation of CAP in its present form and in formulating the position with regard to its reforms [Guba 2006].

Should we maximize the absorption of EU funds at the expense of effectiveness of their utilization? For fear of incomplete absorption of EU funds, part of these funds within the 2nd pillar for the years 2004-2006 were appropriated for complementary
direct payments. Similarly, a relatively high share within the 2nd pillar in this period is for LFA – relatively easy to implement, however, with very little positive impact on changes in agriculture and in rural areas. Today, however, it seems that relatively high effectiveness of absorption of EU funds in this period makes it possible to increase the role of effectiveness criterion in the development of CAP in Poland for the years 2007-2013.

Should we maximise production effects (competitiveness) at the expense of social effects?

This dilemma is of paramount importance, as support for income is clearly defined as the main objective of CAP – the needs related to supporting incomes are, on the other hand, the highest in the group of the smallest farms. On the other hand, the mechanism of gradual transition to the full level of direct payments (phasing-in) provides grounds for ascertaining the need for concentrating the resources on actions which balance the competitive inequality. Thus, what should be done – should we support commercial farms, in most cases larger and often obtaining high income, or smaller farms with low income and with limited chances for survival in the increasingly competitive environment?

To what extent should we consider CAP costs for the remaining social groups?

In Poland, which is a country with a population earning a relatively low income, when considering the distribution effects related to CAP, one must not disregard the level and the distribution of the costs of such policy among taxpayers and consumers.

Should we support specific and thus more effective instruments, bearing in mind the fact that they require much higher institutional costs?

In the analysis of agricultural policy, we increasingly often find a recommendation to depart from traditional forms of support for the benefit of instruments of specific operation. This is one of the motives for which the instruments for the development of rural areas (CAP 2nd pillar) are preferred over the instruments of CAP 1st pillar (price support as well as direct area payments). However, one needs to bear in mind that the instruments of the 2nd pillar entail much higher requirements as regards the implementation institutions, which in turn might mean high costs of implementation, both for the budget and for the beneficiaries. In extreme cases, poor abilities and low effectiveness of the implementation institutions can decide the rationale for certain options of agricultural policy.

Will Poland benefit from these CAP instruments which limit production growth (quota) and distort the competitive environment?

Production quotas in CAP make it possible to maintain the EU market price above the world market price, and for this reason they are in general beneficial for agricultural producers. However, this assessment is more complex in the case of a country whose quota is far below the production potential, and which has cost advantage in the given field, at least as part of the unified market. This is the case for the milk quota in Poland, following accession to the EU. The dairy production sector in Poland is gradually becoming a real dilemma. Should we opt to maintain the quoting of production in the EU, in the case when: this sector has the cost advantage, letting it produce at competitive prices as compared to other EU States; the quota level proves to be particularly restrictive from the point of view of future growth of production and restructuring; the price support in exchange for a quota system is increasingly low, due to the reduction of intervention prices and, most probably, gradual ending of export subsidies.

Summary

The question arising here is: “Which changes in the Common Agricultural Policy will impact the sustainable development of rural areas and the solution to the agrarian question in the perspective of the years to come, assuming that the solutions stemming from the concept of sustainable development will be consistently implemented?”

The fulfilment of the sustainable development concept in the Polish agriculture faces a number of barriers. These barriers can be reduced to social barriers (low level of affluence of the majority of the rural population), economic barriers (lack of investment opportunities related to technology modernization and environmental protection), intellectual and mental barriers (low level of education, low ecological awareness), ethical barriers (no clear social opposition against improper activity of entities towards the environment), legal barriers (insufficient or imperfect legal instruments and still worse law enforcement), or social barriers (high unemployment and the resultant demoralization).

However, first, concrete solutions that facilitate the fulfilment of the sustainable development of rural areas and agriculture need to obtain the acceptance of both politicians and farmers. Above all, however, success is dependent upon the market response. One needs to be aware of the fact that the sustainable development concept and the European model of agriculture do not go hand in hand with globalisation and the principles of international exchange.

Bibliografia

EDUCATION AS AN ELEMENT OF SUSTAINABLE DEVELOPMENT OF RURAL AREAS IN POLAND

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ABSTRACT

This article aims to present the structure of education of inhabitants of rural areas as well as the problem of education of rural youth in Poland. Statistics show that there is a vast difference between the level of education in rural areas and cities, although the difference is getting smaller each year.

Moreover, educational advancement of the rural areas inhabitants, slow as it is, has been accompanied for the last ten years by a change in thinking about whether it is worth educating oneself and about the benefits of education, as well as a change in their educational ambitions and opinions about their own education.

Key words: sustainable development, structure education, educational advance

Introduction

According to Pearce’s concept, sustainable development of rural areas means maintaining a balance between economic, social and ecological objectives, and their fulfilment comes down to, among other things, improvement of the level of education [Zawisza, Kochanowska, 2003].

Thus, this article aims to present the structure of education of inhabitants of rural areas in Poland.

The system change, which took place in Poland after 1989, started a process of transformations from which individual social groups benefited quite asymmetrically. Therefore, for example, the economic situation of Polish rural areas and agriculture, instead of improving, with time has become extremely difficult. In the course of the reforms, there have been no real actions taken to introduce this category of population into the new social and economic system, created from scratch [Buczkowski and others 2001].

At the same time, differences between individual parts of Poland, resulting from economic conditions as well as sociological and cultural conditions shaped by history, are becoming more and more clear-cut. Rural areas in Poland are very diversified, and next to wealthier, highly-developed areas, there are poor neighborhoods, also referred to as problem areas [Bacski 2002, Hojy 2005]. Even within a single voivodeship, there are communes which develop faster and ones which stay behind.

The difficult situation of Polish rural areas has to have an impact on their young inhabitants. The future shape and character of rural areas will depend on their ambitions, plans and attitudes, and in consequence on their adopting certain life strategies. It is on the life decisions of this category that the pace and the scale of transformation and modernization taking place in the agricultural economy depend [Gorlach, Serêga, Dr¹g 2003].

The problem of education of rural youth

The fact that the structure of education in rural areas of Poland is disadvantageous comes as no surprise. Rural youth often finish their education with vocational schools, sometimes with technical schools. Central Statistical Office (GUS) data shows a huge difference in the level of education between rural areas and cities, although the situation has been gradually improving over the years. For example in 2004, 45.6% of the rural population and 25.7% of the city population held a primary or incomplete primary education degree (in 2006 it was 40.7% and 23.2%1), and higher education, 4.2% and 13.2% respectively (in 2006: 5.4% in rural areas and 17.5% in cities)[GUS 2004, 2006].

However, the educational advancement of Poles, slow as it is, has been accompanied for the last ten years by a change in thinking as to whether it is worth educating oneself and the benefits of education, and in the society’s educational ambitions and opinions about their own education. This will be discussed in detail further in this study.

The data collected with the use of a survey conducted by Warsaw Agricultural University (SGGW) in 150 higher education institutions, both state and non-state, indicates that in the year 2000 from 1.8 to 19.4% of youth from rural areas studied there (about 9.5% on average). Results of studies carried out by Nicolaus Copernicus University in Toruń and Warsaw University provide similar data, which shows that respectively 29.8% and 14.4% of students from small towns and villages study in both the universities [Depta et al. 2001].

It is important to note that even fewer young

1 In 2006, lower secondary schools were included in primary and incomplete primary education
people from rural families are at, for example, SGGW (less than 8%) [Borecki and Kluciscki 2000], and at the Agricultural University in Krakow from 3 to 18% depending on the faculty [Hoii 2001]. Szafraniec [2002] says that rural students constitute 10% of the total number of students, and peasant students less than 5%.

It is also evident that the problem is not only the youth’s lack of interest in taking up higher education, but also the distribution of the remaining levels of education. As Szafraniec [2002] points out, “rural youth study mainly in vocational schools, where they constitute 70% of the social structure of these schools. 25% of rural primary school graduates reach general secondary schools.”

Wasielewski [2006] claims, referring to GUS studies, that only every 140th peasant child continues on to higher education. Moreover, he asserts that more rural youth go to basic vocational schools, which prepare for basic worker professions (over 36% of the surveyed group), and fewer go to schools whose graduates are entitled to attend universities (27%).

As various publications claim, the percentage of students coming from rural areas does not exceed 2% and only every 120th student is of peasant origin, which constitutes only 0.8% of all students, whereas in the 1970s, the percentage was 17% [Papie 2006].

Domalewski [2006] presents a slightly more optimistic picture: The vast majority of rural children (66%) wish to continue their education in secondary schools (mainly in general secondary schools) - every third learner sees his or her future in a basic vocational school and only 2% intend to limit their education to acquisition of skills for a specific job. When it comes to peasant children, in most cases they still choose basic vocational schools. Research conducted by the author on students from four age groups in the economic faculty of the Agricultural University in Krakow revealed that the vast majority of the surveyed students were graduates of general secondary schools that came from the country or small settlements. The high percentage of students of this origin (46.3%) is – against the structure of all students – quite surprising, if we compare it to the alarming data on rural youth studying in Poland (about 2%). Most probably, this is connected with the fact that the research covered students from Agricultural University: an institution that would in theory attract more people from the country than from the city [Hoii 2001].

The percentage of students from rural areas and small towns is also mentioned by Imia [1999], according to whom, at non-agricultural universities their percentage does not exceed 10-15%, whereas at agricultural universities, the percentage of students from rural areas is higher. According to this author: “The demand in the economy for farmers with a diploma is low, which forces the graduates of these departments to take jobs in alternative professions, and thus to broaden their knowledge.”

Similarly, according to Putkiewicz and Zahorska [2001], only 2% of students come from rural areas. Despite problems with finding jobs for graduates of basic vocational schools, peasant youth still choose this type of education. Primary schools for years used to make a kind of selection, dividing pupils into those who should continue their education and those who should go to vocational school. Unfortunately, some rural schools, despite the seemingly equal level of teaching, are often not able to prepare learners well enough for them to continue on to education in general secondary schools.

Many politicians are aware (and usually express it during elections) that the change of the occupational structure of rural population is the most important and the most difficult task in the process of economic reforms in Poland. At the same time, for the last ten years, the percentage of full-time students from villages and small towns has been gradually decreasing. However, the absolute number of students (including rural students) has been rising. In 1990, 56 thousand people graduated from universities, and currently 180 thousand. Youth from villages and small towns are the lion’s share of students completing paid part-time studies at secondary private schools [Papie, 2006].

From the point of view of a small town or a rural commune, so far no positive effects of the reform of the educational system have been noticed. It has rather been the opposite. Koraszewski [2000] emphasizes this fact: “Sometimes voices of worry could be heard that vocational schools are completely removed from the reality of the job market and that only a small portion of the young people from rural areas went to secondary schools and hardly anybody went to universities. If the educational reform was going to change this condition, the starting point should have been early learning and a fundamental review of the system of teaching in vocational schools and those that entitle students to continue to technical schools and secondary schools. Because the whole educational reform is in complete chaos, there is absolutely no chance that in the coming few years, rural youth will have better access to higher education or better chances of obtaining quality vocational education at the level of secondary school.”

The issues addressed above, together with many other problems rooted in limiting certain subjects, such as foreign language teaching in rural school, as well as the poor equipping of these schools, make it very difficult for rural youth to get admitted to universities, particularly to renowned higher state
education institutions. However, determining the percentage of students coming from rural areas among the total number of students turns out to be a difficult task, which is evidenced by significant differences in the estimates quoted in literature.

As Kamiński points out, “The assessment of the present condition of education in the country is fragmentary and incomplete. The mass media informs us that rural youth constitute 1% of all students. If this were precise, this would mean that for every 1.5 million students, there would be only 15 thousand students from the country. We have 43 thousand villages in Poland, so it is easy to calculate that this would mean 1 student per 3 villages. The situation is bad, but is it that dramatic?” [Kamiński 2000].

In the light of the above opinion, the determination of the percentage of rural students that is found in publications appears to be highly underestimated. It is hard to say where the authors get the information from, even more so because the results of the abovementioned research do not confirm that the situation is that dramatic.

Due to the fact that villages are inhabited by less educated people, who have lower educational ambitions, the educational opportunities of rural children are lower than city children’s. Therefore, a consistent program reform of the educational system can be treated as an operation which with time would mean evening out the educational opportunities of children from various circles.

A number of barriers, related to the functioning of the educational system in the country, contribute to the worse situation of rural children (e.g. refusing kindergarten education, less qualified teachers, post-primary schools’ poorer educational offer) and barriers connected with the lower level of parents’ education and the more difficult financial situation of rural families.

The multiplicity and complexity of cultural, social, economic and organisation and system factors limiting rural children’s educational opportunities have to be emphasized. Overcoming these barriers is a long-term process in which many institutions and organisations can play a role. However, the responsibility for primary work in this scope rests on state authorities: self-government and administration.

The choice of post-primary school depends on many factors, starting from the educational ambitions of children and their parents (in CBOS (Public Opinion Research Centre) polls [2002], 36% of the respondents living in the country would like their daughters to complete a master’s degree, whereas this kind of ambition was declared by 60% of respondents from cities of 100 to 500 thousand inhabitants), to the school achievements of a pupil to date, to the economic possibilities of the family.

Talking about the educational opportunities of rural youth, it is worth having a closer look at the educational systems they prefer.

It has been known for a long time that the opportunity for rural youth to obtain higher education is extramural higher education, which despite its fees is, in general, a cheaper form of education than full-time studies. This is because the costs (accommodation, living, learning aids, etc.) that a candidate for higher education would have to bear if studying in a city are very high. Moreover, while studying full-time, one cannot be gainfully employed. However, this is not the only problem for people coming from villages and small towns far from cities. Sometimes, the costs of extramural studies in academic centres are also too high. These costs include mainly transport and accommodation for Saturday and Sunday sessions.

This is why many higher education institutions establish departments and branches, often located in small towns. Such a solution enables the inhabitants of the nearby villages to continue their education and obtain a licencjat degree2 or inżynier degree3, with the opportunity to obtain a master’s degree at the parent higher education institution. It is interesting that this form of education enjoys the interest of different age groups. The question arises whether such a form of education is a good way of evening the differences between the country and the city as regards the percentage of people with higher education. Most probably yes, but the doubt arises that the quality of such education will differ from that of the education the student could obtain in a renowned higher education institution in an academic centre.

In the case of children who live in rural areas, there are often other conditions that impact their decision about their education. They are related to the network of secondary schools in a given area, transport possibilities, accommodation in a dormitory, and the costs of transport or living outside the home.

The fact that both in the country and the city there are advantageous changes in the structure of secondary education is comforting; at present, youth prefer general secondary schools to vocational schools. However, very significant differences between the country and the city as regards education are still present. While in the city now,
the type of school chosen most often is general secondary school, in the country, the choice of vocational school is still dominant [Domalewski 2006].

A lot of factors contribute to the differences in chances for education between children from rural and municipal areas; however, one should stress the lack of an efficient system of scholarships and social care that would enable and stimulate children from poor families to take up and continue education.

Nevertheless, there are certain forms of support for children and youth from rural areas. These are non-governmental associations and funds that aim to help the poorest, e.g. in the form of a scholarship. They include: the Zofia and Władysław Pokuśowie Rural Youth Education Fund, which cooperates with the Agricultural University in Krakow; the Aleksandra Bakowska Scholarship Fund for Rural Youth; the project called: “Equal opportunities” (“Ryjwe szanse”) Local Scholarship Programs, the Stanisław Pigon Fund, etc.

It can be concluded that the picture arising from the presented research and educational ambitions of rural youth is fairly optimistic. However, at this point an question interesting might be “do Poles appreciate education?”

Almost all adult Poles (93%) are convinced that education is worth an effort nowadays – slightly more than three quarters (76%) strongly express such an opinion, and one sixth (17%) – with a certain hesitation. A few respondents (5%) see no point in educational efforts in Poland today. The lowest ambitions in this regard are observed among less educated and economically less successful people, e.g. among farmers [CBOS 2006].

Since 1993, the percentage of people who perceived the importance of proper education rose by 15 percentage points, whereas the percentage of people claiming that it is not worth studying dropped by 13 percentage points.

70% of respondents mention the fact that education ensures a high income as the most important reason for taking up education. According to 92% of the respondents, it is easier for educated people to form a career, and for 80%, education enables one to avoid poverty, impoverishment and unemployment. It is interesting that in comparison to 1993, the significance of motives related to employment stability and financial profits as well as an easier life has increased, whereas the significance of “self-developmental and intellectual as well as prestigious and occupational motives” has decreased [CBOS 2006].

Summary

Pearce’s concept of sustainable development, mentioned at the beginning of this study, assumes the realisation of certain socially desirable aims, including the rise of the educational level.

Over the last decade, Poles’ educational ambitions have risen significantly, but there are still clear differences between city and rural areas. Many factors contribute to the educational differences between children from rural and municipal areas, such as economic, regional, psychological and social or cultural barriers.

There are no doubts that living in a city gives young people much greater opportunities for development, and, as a result, a better adult life. Easier access to education, lower costs of education, and more options for selecting a desired school are all factors which make the discrepancies between rural areas and towns so clear-cut.

It appears that a solution might be to focus our attention on the situation of small towns, which may become centres of broadly-based development, including in the field of education.

Literature

THE PROSPECTS AND WAYS OF SUPPORTING THE SUSTAINABLE DEVELOPMENT OF LOCAL RURAL COMMUNITIES IN POLAND

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ABSTRACT

The implementation of the idea of sustainable development in national dimensions entails the need to take appropriate actions on a macroregional and specific local community scale. The development of territorial self-governments in Poland has in recent years increased the role of local communities in solving many socioeconomic problems, including problems which impact the quality of life of the inhabitants. The particular dynamics of the actions taken can be observed with the accession of Poland to the European Union.

Key words: ecological awareness, sustainable awareness, local community, proecological actions

Introduction

The economic and social development of the majority of the world’s countries has so far been based primarily on non-renewable sources of energy and excessive use of the resources at hand. Such a development strategy usually leads to upsetting the balance between man and the natural environment, which, in turn, endangers the health and life of present and future generations. An alternative to such a strategy, based exclusively on economic aspects of development, is the idea of sustainable development, which takes into account production and economic benefits as well as, above all, social and environmental benefits.

However, the idea of sustainable development, as presented in official documents and in scientific publications, encounters barriers and limitations, primarily of a bureaucratic nature. The level of awareness of the society and the will to accept such directions of development of one’s environment, which additionally take into account proecological aspects, are also of importance.

Among the many initiatives and actions taken on an international and regional scale, the initiatives taken within the European Union have paramount importance in promoting the idea of sustainable development. This is particularly well seen in the agricultural sector, which, in the opinion of experts, is by and large responsible for the degradation of the natural environment. The common agricultural policy, which has been implemented for a number of years and which prefers an intensive, industrial model of agriculture, led to a considerable reduction of diversity of fauna and flora, degradation of the quality of ground water, pollution of soil and loss of biodiversity [Piskorz 2006].

The increasingly evident negative consequences of intensive agricultural development became an important reason for reforms, which have for a dozen or so years been implemented as part of CAP. The subsequent reforms constitute an attempt to shift the support from agricultural production to actions aimed at promoting rural areas and preserving the natural environment. Various initiatives taken as part of the so-called 2nd pillar of the Common Agricultural Policy serve to fulfil this objective. One of such the initiatives is the LEADER pilot program, which can provide support for “actions aimed at raising environmental awareness and investments related to preserving and enhancing the environmental and cultural heritage, including the development of areas of high environmental value” [Kamicki 2006].

The pilot LEADER + program, also introduced in Poland, contributed to the establishment of more than 170 so-called Local Action Groups in various regions of Poland. The emerging organisations, in most cases established in the form of associations, actively join the development of local strategies of sustainable development of their own environments.

The aim of the study, sources of materials and methodology

The aim of the study is to present the essence of sustainable development in relation to the specific local community, and determining the most advantageous ways for it to be supported by local self-governments and the inhabitants of the commune. For the specific case study, the Siennica Ryjana commune was selected, located in the eastern part of Poland, formally part of the Lubelskie Voivodeship. This commune is well-known for numerous proecological initiatives and actions for the benefit of environmental protection.

Particular attention was paid to actions which are aimed at influencing proecological behaviour among the young and adult inhabitants of the commune. This behaviour translates into, among other things, promotion of a healthy lifestyle, respect for the cultural heritage of past generations, and caring
for the local natural environment.

The primary sources of materials used in the study are documents of the Commune Council and other institutions from the commune of Siennica Ryjana. The commune’s official website is an important source of information, which presents the investments already taken and planned as well as other actions serving the idea of sustainable development of the local territory. The data collected was analysed using available scientific literature and other papers in the field of the subject matter.

**General characteristics of the commune of Siennica Róžana**

The commune of Siennica Róžana, which is subject of our interest, is situated in the southeastern part of Lubelska Upland, in the River Siennica valley. It is situated 19 km from the town of Cheim and 11 km from the powiat town of Krasnystaw. In terms of administrative division, the commune is part of the powiat of Krasnystaw, which is part of the Lubelskie Voivodeship.

The total area of the commune is 98 km²; it is inhabited by more than 4.5 thousand people. The population density is low – 47 persons per km². There are 14 localities with solectwo status established in the commune. Each solectwo has its representative (soltys), a Solectwo Board and Revision Committee. They act on the basis of statutes approved by the Commune Board.

The commune is situated in the eastern part of Poland, where disadvantageous demographic phenomena have been occurring for several years. As a result of the migration to central and western regions of Poland and abroad, increasing year by year, the population is decreasing and its age structure is worsening. This outflow per annum is almost 1% and includes primarily men. Despite these disadvantageous trends, this commune, when we compare it to other communes, has a relatively good proportion of people at working age to remaining inhabitants. The predominating group (55% of all the inhabitants) are economically active. The percentage of people at post-working age is at the level of 20%, whilst children and youth constitute 25% of all the inhabitants.

The commune of Siennica Róžana is typically agricultural. More than 90% of the land is soils of 3rd and 4th valuation class, which in conditions of high culture are good both for traditional crops and specialised production (sugar beet, rapeseed, etc.). Agricultural production is run by 1200 family farms with an average surface area not exceeding 6 hectares. 166 entities perform economic activity in the commune, primarily companies owned by a single person and companies which employ up to 3 persons. Most entrepreneurs provide trade services in the form of convenience stores and shops with chemical and industrial goods, with plant protection chemicals, fertilisers and building materials. Other entrepreneurs carry out service activity in the field of “agricultural production machinery services”, carry out services related to general construction, as well as roofing, hydraulic, carpentry or installation work. Ten entrepreneurs provide transportation services, two of which provide passenger transport. Other entrepreneurs provide music and insurance services. A few entrepreneurs provide services in the field of agricultural consultancy, veterinary, tailoring or nursing care.

As in most rural communes, the commune of Siennica Ryjana has to struggle with the problem of unemployment. The registered unemployment rate exceeds 15%, and this does not include the hidden unemployment, which is a problem of farmer families. As in other communes in the eastern parts of Poland, the largest group of the unemployed are young people aged 18-34. Therefore, it comes as no surprise that year by year there is an increase in the group of young people, usually better educated, who migrate in search of jobs in other regions of Poland. The total employment rate in the commune is close to 44%, whilst the economic activity rate is 51.7% [Rocznik Statystyczny 2003].

The authorities of the commune actively support actions promoting education of the youth and children. A well-equipped Public Lower Secondary School and three primary schools function within the commune. Pupils benefit from free transport and school clubs. Thanks to the efforts of the self-government and funds obtained from the World Bank, the school youth can follow their interests and advance their skills, with the use of educational and didactic aids in the school club. Children from poor families or families at risk of social pathologies use the help of the commune’s Social Welfare Centre. In addition, each year, the “Help children survive the winter” event is organised. The event is organised for the benefit of the poorest families with many children, and includes primarily food aid.

The Commune’s Culture Centre conducts activity in the commune, aimed at children, talented youth and folk artists and poets. There is also a folk music band at the centre, a children’s folk dance group, a ballroom dance group, and many musical groups [www.Siennica.pl].

**The commune’s activity related to improving the condition of the natural environment and ecological methods of agricultural production**

Actions for the protection of the natural environ-
ment and sustainable development in the commune studied have been taken since the beginning of the 1990s. As early as in 1990, the commune began implementing a program for the extension of proecological investments. This resulted, first of all, in an extension of the water supply network, today used by 95% of the inhabitants. A major breakthrough in the actions aimed at protecting the natural environment in the commune of Siennica Ryjana was the development of “The Ecological Structure Development Study in the commune of Siennica Ryjana” in 1994 and its passing for realisation by the Commune Board. The results of the study carried out were and still are helpful in the fulfilment of fundamental ecological objectives, such as, for example:

- reasonable management of all the environmental resources in the commune
- maintaining the most valuable environmental qualities in a state as close to natural as possible
- adding new values to the natural environment
- Eliminating or reducing the negative impact of existing ecological threats and barriers [www.Sien-

The practical implementation of sustainable development in a particular local community should include comprehensive activities covering, among other things, the protection of soil, water and air. The program for improving the sanitary conditions, currently implemented in the commune, is consistently implemented in all the above-mentioned segments.

In recent years, due to the advancing process of extensification of agricultural production, there are no major threats resulting from the use of mineral fertilisers and plant protection agents in the commune. However, continually developing road transport could be a source of slight soil pollution. Nevertheless, the impact of this factor applies only to narrow strips of land directly adjacent to major communication routes. No plants which are likely to accumulate harmful substances, in particular heavy metals, should be grown in such areas.

Soil protection is closely related to the problem of collecting and utilising liquid and solid municipal waste. Recycling of municipal waste from the entire commune takes place at the waste landfill, commissioned in 1996. The commune’s landfill was built in compliance with all the basic requirements of environmental protection legislation. The landfill is isolated from the substrate, fenced, and has a proper access road as well as a sanitary protection zone.

The commune of Siennica Ryjana is one of the few communes in this part of Poland with an implemented and effective system for the collection of waste from individual households and property estates. A few years ago, distribution of 1.5 m$^3$ truck containers to individual localities at the cost of the commune was started. Larger containers were placed near education establishments and near work establishments. In 1997, the authorities of the commune started an action to liquidate illegal waste dumps in forests and wayside trenches. This action considerably improved the aesthetics of many localities and points of interest in the commune. Moreover, in order to involve the village inhabitants in solving the problems of environmental protection and maintaining the aesthetics of farms, villages and towns, the commune, in cooperation with the Voivodeship Agricultural Consultancy Centre, has organised the “My aesthetic and safe farm” yearly competition. Prizes for the participants are funded by the commune’s self-government [www.Sien-

With the extension of the water supply network, which causes a considerable increase in the water consumption in households, the problem of collection and recycling of liquid waste is aggravated. Constructing the sewage network and the effective waste water treatment system is an expensive process; however, it is essential for improving the condition of the natural environment and raising the quality of life of inhabitants and, potentially, tourists. The problem of waste water recycling in the commune is being gradually solved, with the use of diversified actions. A large mechanical-biological waste water treatment plant has been in operation for several years now, with a throughput of 200 and 100 m$^3$ per 24 hours. The insufficient sewerage system is being currently extended, with the considerable participation of the EU funds. At the same time, the idea of household waste water treatment plants is being implemented, in particular in places in which for the time being there is no possibility to build a collective sewerage system.

In the second half of the 1990s, a comprehensive air protection plan was prepared. As a result of the consistent implementation of that plan, as early as in the year 1999, a gas supply system for the entire commune was completed. Almost 60 km of gas supply network and the required connections to housing buildings, municipal building objects and work establishments were completed. Currently, 80% of households use natural gas. In order to improve the quality of air in the commune and in order to reduce the emission of pollutants, coal-fuelled boiler-rooms were modernised and changed into gas-fuelled ones. In the first place, the modernisation was performed in larger boiler-rooms in education establishments, office and municipal buildings and in
the housing building owned by the Commune Office.

Wide-ranging efforts of self-government authorities of the commune in the scope of improvement of natural environment and aesthetics of the surroundings were noticed long ago. This was reflected by the financial prizes and honorary diplomas awarded to the commune in numerous environmental and ecological competitions. The commune gained great popularity after winning 2nd prize in a Poland-wide competition organised in 1995 under the patronage of the president of the Republic of Poland, for the most ecological commune in Poland. Obtaining such a prestigious distinction, supported with a financial reward, enabled the commune authorities and inhabitants to seek additional funds and take new proecological initiatives.

Further distinctions and significant financial funds were obtained by the commune in competitions organized by the National Fund for Environmental Protection and Water Management: in 1996 and 2001 for the best realisation of tasks submitted in subsequent editions of the competition “for waste management in rural areas” and in 2001, the prize in the competition “low retention in rural areas.”

Among many other diplomas and distinctions, one should mention the prestigious title of “environmentally friendly commune” under the honorary patronage of the president of the Republic of Poland and the Minister of Environment, granted to the commune of Siennica Ryjana in 2003. This title, accompanied by a certificate, is a sign of the recognition of the efforts taken by the commune authorities and inhabitants for the benefit of sustainable development of the local community.

The successes achieved by the commune in relation to the protection of the natural environment are to a considerable extent the effect of wide-ranging educational work conducted for many years among children, youth and adult inhabitants of the commune. Its aim is to increase sensitivity to the problem of the aesthetic value of one’s own farmyard and entire localities, as well as the impact of environmental pollution on inhabitants’ health and quality of life.

Proecological behaviour of the youngest generation is shaped thanks to the implementation of ecological education school programs, but also through organisation of competitions, happenings, and art and photography exhibitions. The effect of these actions is a growing care for an unpolluted environment, the ability to live a healthy lifestyle and to behave properly in protected areas. Youths participating in this type of program learn about how to prevent degradation of the natural environment and the possibilities of restoring it.

Thanks to the cooperation between the commune and the Voivodeship Environment Protection and Water Management Fund in Lublin, ecological campaigns are carried out under the slogan “Protection of the natural environment in the commune of Siennica Ryjana.” The ecological effect of this type of action is making children and youth sensitive to the beauty of homeland nature, developing local patriotism expressed in care for one’s own environment and showing the dependence of human mental health on the condition of the environment [Lasota 2004]. As part of this campaign, numerous events and competitions promoting environmental knowledge and a proecological lifestyle are organised.

In the 2002/2003 school year, a particularly extensive program of ecological events in the commune was implemented. The celebration of a “day with ecology” and an ecological march across the commune were important points summarising the whole campaign. Apart from children and youth, also participating in the march were representatives of self-government authorities, parents and other inhabitants of the commune. Members of an ecological interest group drew up petitions related to the protection of the environment and nature of the commune and hand-delivered them to the self-government authorities. The day with ecology was also a good opportunity to present ecological issues in the form of theatrical performances, mini-cabarets and “healthy food” eating. For the representatives of the Department of Environment Protection of the Voivodeship Office and the powiat Sanitary and Epidemiological Station, this was the appropriate time for a lecture on the condition of waters in the vicinity and the principles of healthy nutrition [Lasota 2004].

A noteworthy action for the benefit of developing the ecological awareness of young inhabitants of the commune was establishing a special sports and ecology class in the local lower-secondary school. The main aim of this initiative is to promote among pupils a healthy lifestyle and the realization of standards of ecological actions during the three-year course. Moreover, the students of this class are the coordinators of the annual “Clean up the World” campaign and initiators of the separation of waste and collection of aluminium cans. The funds obtained from the sale of recyclable waste will be used to equip school labs and workshops and to purchase sports equipment.

Following the initiative of teachers, school youth also take actions related to environmental conservation in the area and monitor natural environment in the close vicinity. They also care for monuments of nature and valuable species in the commune, and search for new, interesting natural spots, where there
are interesting flora and fauna species. Pupils make information boards and place them where uncontrolled burns of grassland and moorlands is prohibited, with a clarification of the harmfulness of such actions. They also participate in forest planting actions and nourishment of forest nurseries. Thanks to the cooperation with Forest Division in Krasnystaw, the youth participate in “green” lessons, learning about forest life, its pests and other dangers [Lasota 2004].

Ecology issues are also propagated among adult inhabitants of the commune. Annual meetings, organized in all localities, are an opportunity for taking such actions. During these meetings, lectures and discussions related to the protection of the natural environment and healthy lifestyle are held. Moreover, ecological education includes the organisation of competitions that promote the aesthetics of individual farmyards and whole villages as well as tidying up the whole commune. These actions broaden the ecological knowledge of the inhabitants and raise their sensitivity to the natural environment and the need to protect it.

Summary

Building an ecologically aware society requires transparency of actions, clear and commonly accepted initiatives, and more than anything the ability to engage as much of the local society as possible in the efforts. The authorities of the commune studied fully understand this need; thus, they strive for the efficient and quick flow of information, including organisation of rural gatherings, meetings and feasts, as well as publication of brochures, leaflets and press releases in the local press. All these actions contribute to the integration of the local community in joint actions and enhance the sense of responsibility for the present and future condition of the natural environment.

One can say that Siennica Ryjana is one of the few communes in which sustainable development based on respect for nature is already under way. This is done for the good of the local community and the tourists who visit these areas. In this respect, this commune may serve as an example for other communes in Poland and for many local communities in the European Union.

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PROBLEMS OF COOPERATION AND HARMONIZATION OF GROUP INTERESTS IN THE CONTEXT OF INTEGRATED AGRIBUSINESS DEVELOPMENT

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ABSTRACT

Using a theory of group activities the article will address the issues of cooperation and harmonization of interests of organization members as a model of activity in the conception of sustainable rural development. The problems discussed in the paper will comprise: group cohesion, intergroup conflicts and their alleviating, group roles. The analysis aims to find a group response to involvement in the process of sustainable rural development considering the above mentioned limitations of group activities. The Author perceives a necessity of realization the sustainable agribusiness development through balanced teams (organizations), referring to identification of team role according to R.M. Belbin.

Key words: group, team, teamwork in the concept of sustainable rural development, cohesion, group roles

Introduction

A complex character of problems which contemporary world faces, such as environmental pollution, global warming or homelessness is beyond the coping possibilities of individuals. Numerous institutions sharing their knowledge and resources must handle them, since this may lead to the desired solutions.

In contemporary world leadership constantly faces tasks, which require identification and determination of common benefit = sustainable development, struggling with social problems, as well as inspiration and mobilization of others to undertake joint activities. Joint activity requires certain knowledge and skills to harmonize interests of various persons and groups. What is a group as a team? How can one improve the efficiency of group work in rural areas? These are crucial questions which have been posed in the presented article in the context of a hypothesis, that sustainable development depends among others on the effectiveness of teamwork, organizational and institutional activities (as opposed to individual activity).

Sustainable development of agribusiness

Sustainable development is a modern conception of shaping internal equilibrium in agribusiness and its links with the environment. It involves maximization of net benefit from economic development on condition that it will protect and ensure the reconstruction of natural resources utility over a long period of time. The conception aims to interrelate economic development with protection of natural resources and global equilibrium of ecosystems. In the approach presented above sustainable agriculture is a complex structure and comprises:

1. Intersectorial relations, particularly between agriculture, forestry, water economy and fisheries;
2. Management of natural resources, particularly the land, soil and water;
3. Natural environment protection, including counteracting stepping process, protection against erosion and counteracting the vanishing of species;
4. Institutional structures1;
5. Relationships between the government and private sector;
6. Scientific research and dissemination of its results.

The conception of sustainable development is an example of global thinking and derives from the canons of the economy of welfare. It is understood as a sum of (long-term) benefits and satisfaction achieved in result of growth processes (limiting social losses) [Woś A.]. On the other hand, Jojewski and Skinder [2005]3 understand the sustainable development under Polish conditions as balancing economic, social, ecological, technological and spatial aspects at individual stages of multifunctional deve-

1 Institutional structures are the basic subject of team activities in which rules of increasing efficiency described in this article may be applied. The importance of institution for the regional development was among others emphasized by Kołuch [2004], who concluded that a lack of coherent system of institutions capable of coordinating the development policy poses one of the main obstacles hindering region development.
development. The authors quoted above consider the necessity to conduct scientific research on sustainable development by interdisciplinary teams of professionals and experts and subsequent implementation of the results in practice.

**Group and problems of collaboration**

Observations of transformations occurring in rural areas show that the model of integrated farmer activities makes possible efficient overcoming difficulties, particularly resulting from the scale and quality of production [Domagalska-Grędyś 2004, 2006]. Producers form groups not only for economic reasons. Frequently they also manage to maintain the environment-friendly image through the use of suitable cultivation rules and technologies of production but also proper wastewater and waste management [Boguta, Ejsmont, Ochaś 2003].

Conception of sustainable development of agriculture and rural areas (generally agribusiness) may be most efficiently implemented not only by interdisciplinary research teams but also by producer groups and organizations. The role of teams and groups seems obvious, if only by the analogy with the role of employees teams which currently are the most effective link of development. However, it should be emphasized that a number of problems may occur in a teamwork (e.g. reaching cohesion, negative outcomes of rivalry, group conflicts), and no conception of group activities will be successful if these problems are not solved.

Let us start with the definitions. A group is “each number of persons” who are connected by mutual interactions, psychologically aware of one another and perceiving themselves as a group [Kołuszniak 2002]. However, it should be emphasized that in the context of the problem discussed in the article, i.e. sustainable development, the use of team seems more suitable than group. Teams are more purposeful than groups and according to the definition they constitute a group numbering between two and twenty people, complementing one another with their knowledge and skills. These people have a common objective, standards and values for which they all feel responsible. The main objective sets the direction of work and gives meaning to their activities, the standards determine the ways and conditions of team members functioning, while the values allow to focus on important matters and omit the unimportant [Zgud, Kossowska 2000].

**Factors affecting the quality of cooperation**

1. **Cohesion**

Cohesion of team is a level of and development of links between team members (organization members) and the level of “team spirit”. It is also a measure of the team attractiveness for prospective members. Most coherent groups reveal strong links apparent as mutual loyalty and respect for the group standards. Less coherent groups are more prone to the influence of external factors degrading the sustainable development (e.g. with the view of individual gain individual members agree to larger fertilizer doses, limit expenditure on environmental protection, do not identify themselves with team objectives, etc.). Lack of cohesion in a group realizing the conception of sustainable development may markedly worsen the effectiveness in the area of group operations (village, region or country).

2. **Competition and conflict**

In practice of group activities one of frequently encountered problems is competition and the state of conflict. Intergroup conflict is particularly dangerous, since in this case the task is not as important as gaining advantage over another person or group. Negative consequences may lead to a mutual negative stereotype threatening proper realization of tasks.

In order to solve the problem of group conflict Edgar Schein [1988] suggests:

1. reducing the conflict through improvement of communication and distribution of goals;
2. preventing conflicts by establishing such organizational terms, which would stimulate coopera-

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4 The observations concern Polish and European agribusiness. In Polish literature of the subject numerous works addressing this issue focus on the period before and after Poland’s integration into the EU (since 2004).

5 The necessity to respect the natural environment by agricultural producer groups was stated in the Act on agri-producer groups and their unions, article 1 ...producer groups are created in order to adjust agricultural production to market conditions to improve farming effectiveness and production planning with particular regard to its quantity and quality, concentration of demand and organization of agricultural product sales, but also for the protection of natural environment.


7 Kołuszniak B. 2002: Zachowanie człowieka w organizacji. PWE. Warszawa, s.81.

Problems of cooperation and harmonization of group interests in ...

...tion rather than competition.

The conflict prevention strategy does not lead to ultimate agreement and artificial situation described by Końuszki [2002] as “complete bliss” because a conflict and dissatisfaction on the level of group or organizational task are desired, since they are prerequisites for finding the best solution to the problem.

Other common problems are joining objectives of individual members with group aims and inhibiting the competition limiting the collaboration.

In case of rival groups, the characteristic phenomena occurring within groups and among them comprise among others [Scheriff 1961]:

- Better cohesion and loyalty of members, diminishing individual differences.
- The climate changes from informal to formal, focused on tasks; the emphasis shifts from psychological needs to completing tasks.
- Management changes from democratic to autocratic, the group tolerates better.
- The group is better structured and organized.
- The group requires better loyalty and subordination from its members to present a “common front”. Each of the rival groups perceives the other as a more serious enemy than a neutral object.
- Each group begins to experience a distorted perception; the tendency to perceive own good points, negation of weaknesses, a tendency to perceive the worst sides but not strong points of other groups; a negative stereotype “they are not as fair as we are”.
- Hostility towards the other group increases when the interaction and communication decreases, which favours the persistence of the negative stereotype.
- The tendency to listening in such a way as to maintain the stereotype.

Two situations may arise in result of the phenomena described above:

1. The first one connected with the winner group characterized by: retaining the hitherto cohesion, laziness and the situation of “fat and happy” type, aiming at improving the collaboration and small need for bettering relationships.

2. The second one concerning the looser group characterized with quarrels, looking for the culprit, accusations of e.g. the manager, judges, the situation of “thin and hungry” type and a negative assessment of the other conflict party.

Reducing of negative consequences of intergroup competition

Competition and intergroup conflicts seem inevitable, however it does not denote a helplessness in view of such situations. Edgar Schein [1988] states that the main problem of group rivalry is the conflict of goals and a wane of interaction and communication between groups. It favours the negative stereotypes and distortion of perception. In order to prevent it one should:

1. Locate the common enemy and shift the problem to a higher level.
2. Develop a strategy of negotiations so that interactions are formed, e.g. between group representatives.
3. Set an important common objective – completely new task.
4. Reduce the conflict through laboratory training also called sensitivity training, in which:
   a) the objectives of groups in conflict are openly discussed,
   b) both groups discuss with each other, present their feelings and attitudes,
   c) groups share the perception of themselves and the others, one person speaks whereas the rest is listening
   d) an analysis of differences occurs, “private meeting” followed by a public session with both groups’ representatives.

Team roles and an attempt at their adaptation in activities of teams implementing sustainable development programmes

Although many contemporary leaders and managers think that competition is the most stimulating form of development, in fact it works for a short period of time and in longer perspective brings definitely negative consequences. A team is usually composed of various persons who play various group roles. Identification of such roles and allocation of tasks within the possessed resources (roles) may be useful. One of the conceptions was developed by R. Meredith Belbin [1993], who assumed 9 team roles (1. Implementer, 2. Coordinator, 3. Shaper, 4. Plant, 5. Resource investigator, 6. Monitor/Evaluator, ...
Selection of employees for task teams based on R.M. Belbin's classification is made using Self Perception Inventory (SPI) used for measuring preferences of the eight roles potentially undertaken and played in a team (they have been characterized below).

Conception of team roles according to R. Meredith Belbin

- **Implementer** – changes conceptions and plans into practical activity, organizes and does things systematically and efficiently. Features: orderly, conscientious and practical. May doubt the efficacy of new ideas and changes, has plenty of common sense, owing to him projects and solutions are implemented in practice. Realist, does not like to change plans.

- **Coordinator** – controls the way in which the groups attempts to reach its objectives. Capable of efficient utilization of the team resources, the process leader. Recognizes group strengths and weaknesses and is able to use the individual potential of each employee. Features: even-tempered and dominant. His characteristics involves rather common sense than intellectual reflection. Not aggressive in his management style.

- **Shaper** – hard driving task leader, shapes the way in which group efforts will be utilized. Focusses his attention immediately on setting goal and priorities. He wants to influence group discussion and the result of group activities. Features: restless, dominant, impulsive, easily becomes irritated. Tense, dynamic, poses challenges, strives to overcome inertia, self-satisfaction and inactivity. Wants to see the effects fast. Competes with the others, may be arrogant but owing to him “things happen”.

- **Plant** – the ideas person, has new ideas and strategies with particular regard to the most important matters and tries to “force” his vision upon group attitude towards a problem using confrontation of opinions. Features: dominant, unconventional individualist. Using his imagination and intellect may disregard details and make mistakes but also criticize ideas of others. The graver the problem, the more challenged he feels to solve it. He thinks that all good ideas at first look strange. Creates the atmosphere of genius around himself.

- **Resource investigator** – maker of contacts and provider of information, investigates, analyzes and gains information on ideas, state of knowledge and resources outside the group. Makes external contacts which may prove useful for the team. Capable of negotiating. Features: even-tempered and dominant, enthusiast, good networker interested in the world in general. Supports innovations and is a good improviser. Slightly cynical while seeking profit for the group. Reveals great skill in contacts with other people and discovering everything new, skillfully responds to challenges. Loses energy fast after the initial fascination. His usual saying is: “new opportunities are created because of mistakes the others make”.

- **Monitor/evaluator** – analyzes the problem, evaluates ideas and suggestions therefore the group starts from a position better prepared for decision making. Features: sober-minded, thinks carefully and accurately, free of emotions. Able of cool judgment, discreet, practical, deals only in facts, no sentiments. He is the most objective, neutral and emotionally uninvolved person, likes to have time for thought. May lack skills or ability to inspire others, he is no enthusiast, but his reserve allows to make sound decisions.

- **Team worker** – oriented towards social aspects of work, mild and sensitive. Support the group members, strengthens cooperation and improves communication, the social glue within the team and loyal to it. Features: level-headed, hardly willing to dominate or compete, with high capability of empathy. In crisis he may be undecided, does not like confrontation but his loyalty and devotion to the group are invaluable.

- **Completer** – focused on real effect, i.e. completion of task by the appointed deadline and ensuring the highest standard. May be difficult in contacts because disregards the chance activities and often becomes entangled in details, unimportant for the task completion. Always fully aware of the goal. Features: restless, tense and orderly. Able to see things through to the end, conscientious, painstaking and well-ordered.

- **Specialist** – concentrates on key areas of work. Focuses on technical details. Greatly involved in realization of tasks. Features: focused on definite objective, involved, “self-driven”. Provides valuable knowledge and skills. Focused on a narrow area of his own activities, may not perceive the whole picture.

The characteristic of team role evidences that there are no ideal roles and one must realize the ups and downs of each role because then it is easier to allocate tasks to individual team members. In this way it may be expected that they will be realized efficiently. Application of the role theory seems particularly useful for explaining and predicting behaviours of the team members (implementing the concept of sustainable development, e.g. advisors, farmers or rural entrepreneurs). To operate efficiently a team needs **members with definite skills**: firstly specialist technicians and technologists; secondly
persons able to solve problems and make decisions and finally persons with interpersonal skills [Robbins 1996].

Belbin’s experiments [1981 and 1993] proved that the composition of a team is one of more important variables determining its effectiveness. A team needs balance to be effective. It does not mean balancing an individual but rather complementing each other. Such state should be ensured by selection of people capable of fulfilling specified roles. Belbin discovered and described eight important roles. A team member is willing to assume and fulfill efficiently one of the team roles (so called preferred role). However, depending on the situation (demand) it is possible to assume a different, i.e. temporary role. However, depending on the situation (demand) it is possible to assume a different, i.e. temporary role owing to even slight natural predispositions).

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Investigations conducted in 1996-1997 by Witkowski and Ilski to determine the usefulness of Belbin’s Team Role Self-Perception Inventory to Polish conditions revealed its practical applications. The method was presented in detail by Ilski [2000]14 and Kołusznik B.15 in her work entitled: Psychology in manager’s work. The test material consists of a) test questionnaire prepared separately for men and women containing 56 statements in seven equally numerous groups; b) computational sheet with collective table of results and key with marked self-perception answers for individual roles; c) interpretational sheet.

Conclusion

Complexity of problems and multi-aspect character of sustainable activities make integrated activity necessary. Not only interdisciplinary teams but also producer groups are the carriers of the theory of sustainable agriculture development. Using the reliable methods of group activities requires knowledge and skills. Efficient management of a group depends on the recognition of factors limiting team efficiency (such as lack of cohesion, competition among members and conflicts) and recognition of team roles. Team roles theory by R.M. Belbin discussed in the article allows to evaluate the team members and may be used in the activities of interdisciplinary organizations (producer groups) realizing the sustainable development of agriculture. One may risk a statement that there are no bad teams there are only wrongly managed ones!

References


CONDITIONS AND COURSES OF ECODEVELOPMENT IN OPINION
INHABITANTS OF SELECTED MUNICIPALITY IN SWIETOKRZYSKIE
VOIVODESHIP

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ABSTRACT

The area covered by protected areas in Poland sums up to 33.1% and amount of it varies as far as single regions
are concerned; the region with the highest percentage of areas covered by them is in Swietokrzyskie Voivodeship –
62%. There are 72 municipalities in Swietokrzyskie Voivodeship among which in 49 protected areas cover more than
half of the area. These areas are usually landscape parks and protected landscape areas. One of those 49 is Sobkow
municipality, which is covered by protected areas in 72%.

The research was conducted among 103 inhabitants, who expressed their opinions in questionnaires. This
dissertation presents the courses of development preferred by the inhabitants of municipality in the aspect of sustainable
development. The research was based on inhabitants’ opinions concerning particular courses of development, i.e.
tourism, services, handicraft, industry and small business, folk culture and art, agriculture, food processing, and
wildlife protection. Moreover, the inhabitants pointed the most urgent courses of actions for local governments from
the following: financial security, social and health welfare, shaping the consciousness of social role, development of
municipality’s economic potential, shaping and protecting of environment, shaping of spatial structure, safety of
inhabitants.

The results show that agriculture and agricultural products and food processing are the most preferred courses of
development on the protected areas of Sobkow municipality (commune, gmina), while the inhabitants chose the
development of industrial potential, health and social welfare to be the most important courses of actions for local
authorities.

Key words: eco-development, rural areas, protected areas, protected landscape area

Introduction

Landscape parks and protected landscape area should constitute natural enclaves of an equable and
constant development where basic rules of nature preservation are observed. Therefore the formation
of principles of an appropriate regional development based on the concept of constant and moderate
development, especially in valuable areas where nature is preserved, is particularly significant.
Development conditions of the protected areas are the result of both the potential of natural resources
of those areas as well as of objective exterior factors shaping the position in the whole area.

Regional development can be defined as a process of economic, social, cultural and political changes leading to the rise of residents’
prosperity through the process of transformation from less advanced states to the ones more advanced
and complex (Adamowicz 2003). What belongs to the
tasks of a gmina is especially securing a harmonious
development, i.e. balance between social and material elements of the gmina, as well as between economic
and ecological ones. In order to achieve that, the
gmina performs a variety of its own tasks, which boil down to four groups:
• economic, spatial and ecological order; shaping economic development, space planning and protection
of the environment
  • technical infrastructure (roads, water-supply, public transport, etc.)
  • social infrastructure (educational system, social welfare, etc.)
  • order and public safety (for instance firefighting service) (Wiatrak 2003)

Gminas may, and even are obliged to, prepare and accomplish strategic plans on their own as well
as search for the most efficient strategies of regional development. The strategy of regional development
embraces certain purposes and a general way of acting of a subject within the scope of the most
significant and crucial decisions concerning the future of a given area. This strategy, as a management tool,
enables us to work efficiently and to select appropriate solutions and directions of activity. Working out a strategy of commune development requires an
active participation by involving commune authorities, its administration, eternal experts, representatives
of local society as well as district and voivodeship government and the voivode (Poskrobko 1999). The
basis of the strategy efficiency is accepting it by the society, which can be achieved by involving the
regional society in the process of strategy building, especially regional authorities and opinion-shaping circles.
This paper aims at presenting courses of socio-economic development favoured by the inhabitants of Sobkow gmina, 72 % of which is situated in Wloszczowsko-Jedrzejowski Protected Landscape Area and Checinsko-Kielecki Landscape Park.

The scope and methodology of research

The research consisting of setting the courses of development of protected areas in Swietokrzyskie voivodeship include, among others, recognising nature and landscape value of protected areas in Swietokrzyskie voivodeship. This research has been carried out since 1998. The stock-taking of environment components was limited to basic factors conditioning multifunctional and balanced development of rural areas and agriculture i.e. identification of soils, identification of water and soil conditions and plant cover.

This paper is based on personal research, in particular: survey results, meetings with Sobkow authorities and inhabitants concerning development. The surveys were particularly prepared from the perspective of possibilities for protected areas development and they included households’ representatives. People with different level of education took part in it, including mainly people considered as leaders according the notion presented by Siekierski (2004) that mainly such people set the courses of development actions within particular rural community.

This publication is financed by the Scientific Research Council in 2004 to 2007 as a research project.

The number of questionnaires addressed directly to inhabitants was 230, out of which 123 were filled in and 103 were analysed. In the group of questioned inhabitants the majority were women, 19 men filled in the questionnaire. 17,5 % of respondents had professional education: 17,5 % secondary education, 51,5 % higher education, others had elementary education. The respondents were mainly white-collar workers (72,8 %) and farmers (1,9 %). The survey carried out concerned: favoured courses of development of research area, ecological awareness, possibility of maintaining agricultural and turistic activity, problems of everyday life making the development difficult, some demographic aspects, development chances and obstacles. Statistic data and materials obtained from gmina – mainly local plan for bringing land into cultivation – constituted supplementary element of the research.

Sobkow is a typical rural gmina in Swietokrzyskie voivodeship with a total area of 145 sq km, inhabited by 8 225 people and a population density of 56,5 (population growth rate is ” - 3,64” %). There is 66,7 km of water supply network and 0,1 km of sewage system. There are 462 business entities according to Polish Classification of Activity (PKD). It is mainly trade – 174 entities. Investment outlay for water management amounted to the total of 269 600 PLN out of which 269 600 PLN were spent in 2002 for water intake and water supply. The total surface of soils is 9 598 ha in which land have 8 366 ha and arable land have 6 613 ha. There are 2 525 heads of cattle and 13 062 heads of swine.

Courses of development of Sobkow gmina in the opinion of its inhabitants

Taking into consideration external factors a question, about institutions’ influence on gmina’s development, was asked. In the opinion of respondents it is as follows: the most favourable influence have gmina’s self-government units (53,9 %) and agricultural consulting centres (32,3 %). Such institutions as political parties and trade unions have negative influence on the situation. Among all respondents 64,1 % are conscious of the fact that they live in a protected area.

Gmina’s inhabitants take indifferent attitudes, particularly over such social issues as organisational abilities (23,8 %), enterprise (17,6 %), and authorities’ initiative (29,7 %). 37,3 % of respondents maintain that the inhabitants identify themselves with their region, 31,3 % claim that they are hard-working and determined; 35,7 % indicate social pathologies as the negative feature.

As far as the influence of the spatial structure on the gmina’s development is concerned, 53,9 % of respondents stated that the aesthetics of landscape and availability of terrains have a positive influence (48,0 %) and 50 % pointed at the location in the region.

Most of the courses of actions of the gmina’s authorities mentioned in the questionnaire were thought to be the most important by the respondents, and the percentage of particular answers was as follows: health care and welfare – 53,4 %, shaping the social awareness and attitude – 35,0 %, developing the economic potential of the gmina – 49,5 %, protection of environment - 37,3 %, material status - 41,7 % and safety of inhabitants - 52,9 %.

As far as the cooperation with other gminas is concerned the respondents think that there should be actions connected with planning and carrying out investments (53,5 %), building and exploitation of waste dumps (59,8 %) and health protection (64,6 %)

The respondents believed the following courses of economic development to be of highest for gmina:

- agriculture – 55,9 %
- agricultural and food processing – 46,0 %
- tourism – 54,5 %
environmental protection – 50.5%  
services – 44.6%  
handicraft – 39.6%  
culture and folk art - 37.6%  
industry and small-scale production – 46.9%  

Later on the respondents answered the questions concerning barriers and chances for development in abovementioned courses of development.

As main barriers for development of tourism in gmina they mentioned:
• lack of financial resources for such a development – 39.2%  
• lack of economic instruments supporting such a development – 39.6%  

While a chance for development they saw in help in free legal and economic consultancy services (44.1%) and credit guarantees (47.0%).

In respondents’ opinion the main obstacles for services development in gmina were:
• unprofitability of such an activity – 39.0%  
• lack financial resources for such a development – 41.0%  

While a chance for development they saw in means of transport tax allowances and exemptions (41.2%) and credit guarantees (41.4%).

In respondents’ opinion the main obstacles for handicraft development in gmina were:
• lack of economic instruments supporting handicraft – 33.7%  
• lack financial resources for such a development – 40.6%  

And as a chance for development they saw again in credit guarantees (43.4%) and property tax allowances and exemptions (41.2%).

In respondents’ opinion the main obstacles in development of industry and small-scale production were:
• lack of investors supporting development of industry – 41.6%  
• lack of economic instruments supporting such a development – 39.8%  

Again, a chance for development would be in free legal and economic consultancy services (37.8%) and credit guarantees (46.0%).

In respondents’ opinion main obstacles for development of environmental protection were:
• lack of financial resources for such a development – 37.2%  
• lack of interest of gmina’s inhabitants in environmental protection – 34.7%  

Again, a chance for development would be in free legal and economic consultancy services (39.6%) and credit guarantees (44.4%).

As the most important objectives concerning gmina’s economic potential development the respondents mentioned:
• promotion of well organised and specialised farms – 52.5%,  
• presenting an offer for the prospective investors – 53.5%  

The respondents thought the influence of the protected area on the gmina’s development to be: neutral in the following aspects: industry, shaping and protection of environment, agriculture and tourism.

According to the respondents the problems listed above are the most urgent and should constitute the priority in the field of the gmina’s activity:
• Extending and repairing roads – 64.7%  
• Creating new working places and curbing unemployment – 70.6%  
• Organised collection of litter and disposing of illegal waste dumps – 69.0%.

Conclusion
Despite many limitations resulting from nature preservation and infrastructure deficiencies the gminas situated in protected areas give the inhabitants of rural areas the possibilities for development because of chances for multifunctional development, among others, through tourism or health foods production. This kind of actions require special form of subsidising, i.e. they should first of all obtain financial resources for multifunctional development, especially for creating new non-agricultural working places and for creating infrastructure for nature preservation and structural changes in agriculture. Moreover, business entities should have the chance to obtain subsidies in recognition of limiting conventional production for the environment friendly one in protected areas in order to level their chances on
the market, which would be favourable for active nature preservation. Such instruments would force the multifunctional development based on ecological farming, tourism and services concerning leisure activities. These instruments already exist in Poland, for example agro-environment program since September 2004. There exists the necessity to intensify such actions in order to obtain larger resources from other sources assigned for this goal. There exist, moreover, the need to introduce a program promoting such actions for nature preservation in order that inhabitants interested in it have information on where and how to apply for resources assigned for this goal, because there is a minutely knowledge on this field and farmers ask about it.

The improvement of life quality, natural environment preservation and extension of economic potential are the basic and strategic goals of the actions of local authorities and local community.

Because of its geographical situation in relation to industrial centres of the region the gmina has little employment possibilities outside agriculture, which constitutes an adverse factor.

The result of the research carried out shows that agriculture constitutes a favoured course of economic activity in the gmina area (55.9 % of respondents). Agro-alimentary processing and tourism – mentioned by respondents on further positions (respectively 46.0 % and 54.5 %) – give also chances for multifunctional development. The course and type of proposed agriculture in this gmina is explicitly pro-ecological, that is based on ecological farming. The role of ecological farming in durable and eco-development of protected areas is particularly important because of agriculture being the dominating course of development on these terrains.

References


PROTECTION OF THE NATURAL ENVIRONMENT IN POLAND AND ITS TASKS IN REALIZATION OF SUSTAINABLE DEVELOPMENT – SOURCES AND DIRECTIONS OF FINANCING

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ABSTRACT

The work is an analysis of the environmental quality in Poland considering its basic components: air, water and protection of the earth. The Author analyses the level and structure of outlays on various projects aimed at environmental protection and water economy over a long period of time (1996-2005) and presents the sources of their financing. The detailed assessment was carried out for ecological funds, which are a part of pro-ecological endeavours structure and particularly helpful for acquisition of assistance funds from the European Union, and for co-financing self-governments implementing environmental projects in rural areas.

The financial means planned for 2007-2010 outlined together with their structure necessary to realize the obligations for the natural environment protection assumed by Poland.

Key words: natural environment resources, investment outlays, areas of financing, ecological policy

Introduction

Sustainable development is a long-term conception of socio-economic development considering current and future implications between systems of economy, society and natural environment. It is an answer to contemporary challenges and ecological hazards caused by hitherto unknown development of inparticular, transport and other branches of economy, but also progressing urbanization and technization of life. It involves such a way of economic and social management, shaping and use of environmental potential which will ensure a dynamic development of production processes and sustainability of natural resources utilization but also simultaneous improvement and maintaining high quality living standard. While striving to realize such aim, environmental protection should be inseparable part of the development processes. Under conditions in Poland undertakings in the area of environmental protection should be connected also with a necessity to repair tremendous ecological losses due to improper human interference in the natural environment.

Ecological losses caused by human activities in Poland under the previous economic regime were estimated for 1990 on the level of 8.1% of the global production at that time and 15.2% of gross domestic product (Famielec 1999).

Present paper aims to present the state of the natural environment and endeavours made for its improvement. Determined were the state of resources, outlays and directions of investments in individual areas of the natural environment. The basis for the analysis was provided by the data obtained from the Main Statistical Office, data from the literature of the subject and form the Ministry of the Natural Environment.

2. Environmental quality diagnosis and adjustment processes

Along with the process of system and economic transformations, which took place in Poland at the beginning of the nineties of the previous century, considerable investment outlays were made for the protection of the natural environment. The outlays on the environmental protection reached the highest value in the second half of the nineties (1997 and 1998). The highest value (in current prices) was registered in 1998 (10.8 billion zlotys). At that time it constituted 1.9% of gross domestic product and about 10% of the total investment outlays in Poland. The amount of outlays started to decrease after 2000 reaching 0.8% of gross domestic product and c.a. 6% share of the protection investments in total investment expenditure (Tab.1). The expenses total per 1 inhabitant in 1996-2005 constituted between 196 and 202 zlotys in 2005, at the highest level of 279 zlotys in 1998.

Significant changes happened in the structure of outlays on pro-ecological investments in the natural environment area. These were apparent as sums spent on air and climate protection decreasing from almost 3.6 billion zlotys in 1996 to 1.1 billion zlotys in 2005 at an apparently increased spending on water protection, water supply and waste management from 1.2 billion zlotys to 3.6 billion in 2005. It was also accompanied by increasing expenditure on ventures connected with water management, mainly on water treatment, water tapping and supply systems (water supply systems were mainly constructed in rural areas), but also on water reservoir and
Protection of the natural environment in Poland and its tasks in ... 101

1.4 billion zlotys was spent on these undertakings in 1996, whereas in 2004 almost 2 billion zlotys.

Poland is counted among countries deficient in water resources. Its total resources measured by the water outflow are 63.1 billion m³, which in conversion to 1 inhabitant is 1.6 thousand m³ (Ochrona 2006). Such level of water resources places our country in a position unfavourable in comparison with other European countries, since they are thrice smaller than the average for these countries, and seven times lower than water resources of such countries as: Finland or Sweden (Grzesiak et al 2002).

In 1990-2005 water intake for the in particular the needs of the population decreased from 14.2 billion m³ to 10.9 billion m³. The decrease is the result of the restructuring of mainly power and pulp and paper in particularity as well as declined water consumption by the inhabitants using water supply systems owing to limiting losses in water distribution, installing water meters and increased water prices for households, which inclines the consumers to save water. An apparent decline in water consumption by city dwellers from 76m³ in 1990 to 37m³ in 2005 per capita was observed (Ochrona 2006).

The surface waters tapped from rivers and lakes, which in 2005 constituted 9.2 billion m³ of total requirements, and underground water resources of 1.6 billion m³ are the main sources of water supply in Poland. In the structure of water use 70.7% go to the in particularities needs, the share of agriculture and forestry make up 10.1%, whereas 19.2% falls to the users of water mains network (mainly public utilities).

Pollution and degradation of water resources are mainly caused by sewage discharge from in particularities and by individual users. The volume of in particularial effluents and municipal treatable sewage declined in 1990-2005 by 49%, i.e. from 4.1 billion m³ to 2.1 billion m³. In 2005 untreated sewage constituted 186 M m³ of which 6.2% was in particularial sewage and 10.5% was the wastewater drained by the municipal sewer system. Despite considerable outlays on water management and sewage disposal, constructing of sewer system and sewage treatment plants, still considerable volume of sewage, almost 186mln m³ and 57 mln m³ of treated sewage is discharged into rivers, lakes and soil. The proportions of individual types of sewage treatment plants operating in cities in 2005 looked as follows 57% - biological treatment plants, 40.6% - plants with upgraded level of biogen removal and 1.9% - mechanical sewage treatment plants. In 1995 the respective types of sewage treatment plants made up 74.9%, 5.9% and 19.2% of the structure (Ochrona 2006). At that time only 42% of the country inhabitants were using the sewage treatment plants, whereas in 2005 the percent of population was much higher, reaching 60.2%, of which city dwellers made up 85.2% and rural inhabitants 20.4%. The National Programme of municipal sewage treatment adjusted to the European Union requirements assumes that by 2015 all city agglomerations inhabited by more 2 thousand people will be equipped with sewage treatment plants, which means that during about 10 years about 900 new sewage treatment plants and 450 sewer systems must be constructed.

A noticeable progress in limiting pollutant emission into the atmosphere as particulates and gases

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<tbody>
<tr>
<td>Incomes in M zlotys (current prices)</td>
<td>7.552.9</td>
<td>10.766.9</td>
<td>8.223.0</td>
<td>7.307.9</td>
<td>7.702.3</td>
</tr>
</tbody>
</table>

Financial structure. Total = 100,0

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</thead>
<tbody>
<tr>
<td>Protection of air and climate</td>
<td>47.6</td>
<td>43.1</td>
<td>29.4</td>
<td>15.8</td>
<td>14.9</td>
</tr>
<tr>
<td>Sewage disposal and water protection</td>
<td>28.6</td>
<td>31.8</td>
<td>40.6</td>
<td>42.8</td>
<td>46.9</td>
</tr>
<tr>
<td>Water economy</td>
<td>18.7</td>
<td>16.2</td>
<td>20.1</td>
<td>27.0</td>
<td>22.3</td>
</tr>
<tr>
<td>Waste management and earth protection</td>
<td>4.8</td>
<td>7.7</td>
<td>7.4</td>
<td>10.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Other areas</td>
<td>0.43</td>
<td>1.2</td>
<td>2.0</td>
<td>4.3</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Share in GDP [%]

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</thead>
<tbody>
<tr>
<td>Share in investments total [%]</td>
<td>11.6</td>
<td>9.5</td>
<td>6.1</td>
<td>6.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Expenditure per 1inhabitant zl</td>
<td>196</td>
<td>279</td>
<td>213</td>
<td>191</td>
<td>202</td>
</tr>
</tbody>
</table>

Source: Elaborated on the basis of (Ochrona 2003 i 2006)
was observed after 1990. It was possible owing to closing down numerous factories and power plants harmful for the environment, progress in economy restructuring and improvement of its efficiency, as well as due to a better utilisation of fuels and raw materials, among others owing to replacement of traditional energy carriers by substitutes less arduous for the natural environment. In the same period changes in the structure of solid fuel, i.e. hard coal and brown coal utilisation were observed. Their share in total primary energy generated in 1988 constituted almost 80%, whereas in 2005 only 60%. It was possible by greater utilization of such energy carriers as petroleum and natural gas and increasing the share of renewable sources of energy, i.e. biomass and energy generated by unconventional methods, i.e. water, wind, sun or geothermal energy, which in 2005 made up 3.5% of the total structure. According to Poland’s accession obligations, in 2010 the share of these sources of energy should reach 7.5%. The outlays and undertaken activities resulted in diminishing the total gas and particulate emission to the atmosphere. In 2005 sulphur dioxide emission decreased by 61.3% in comparison with 2005, emission of nitrogen oxides by 37.2%, carbon oxide by 24% and carbon dioxide by 17% (Tab.2).

Table 2. Total emission of main air pollutants in Poland in 1996-2005

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>1990</th>
<th>1995</th>
<th>2000</th>
<th>2005</th>
<th>Per 1 inhabitant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphur dioxide</td>
<td>3210</td>
<td>2376</td>
<td>1511</td>
<td>1241</td>
<td>32.5</td>
</tr>
<tr>
<td>Nitrogen oxides 2</td>
<td>1280</td>
<td>1120</td>
<td>838</td>
<td>804</td>
<td>21.1</td>
</tr>
<tr>
<td>Carbon oxide</td>
<td>-</td>
<td>4547</td>
<td>3463</td>
<td>3426</td>
<td>89.8</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>381482</td>
<td>348926</td>
<td>314812</td>
<td>316700</td>
<td>8299</td>
</tr>
<tr>
<td>Particulate matter 3</td>
<td>1950</td>
<td>1308</td>
<td>464</td>
<td>443</td>
<td>11.6</td>
</tr>
</tbody>
</table>

1. Estimated data. 2. nitrogen oxide calculated in NO2, 3. for the years 1990-1995 emission from stationary sources and for the years 2000 and 2004 from stationary and mobile sources – data for these year incomparable with previous years.

Source: Data from National Center for Emission Sources Inventory [in:] Ochrona 2006.

Reduction of particulate emission to the atmosphere was also registered, however due to a change in the counting method the values are incomparable with each other.

Despite the progress connected with reduction of pollutant emission, obtained rates of gas and particulate emission to the atmosphere are still high. Equivalent pollutant emission rate computed for 2003 and expressed in sulphur dioxide equivalent for Poland was 181.6kg, whereas in the European Union countries it was 143.9kg, for Japan 63kg and similar values for Czech Republic -185.5kg, for Hungary 195.3 and for Slovakia 163 kg per 1 inhabitant (Radwan 2004).

Hitherto expenditure on the earth protection and waste management should be considered insufficient in relation to the remedial tasks. During the analyzed period only 4.8% of capita expenditure were allocated to this area and 11.1% in 2005. In 2005 about 140M wastes was produced of which municipal wastes constituted 7%, whereas in 1990 the respective values were 155M tons and 7.2% (Ochrona 2006). An improvement in utilization and management of wastes from the sector of the economy was observed in 1990-2005. In 1990 only 54% of them was reused, in 2005 it was 79.3% at simultaneous decrease in the deposited wastes from 46% to 13.4%. Wastes gathered for years reached 1.8 billion tons in 2005 and their storage area occupies about 10 thou. ha. A majority of wastes (62%) is generated in two provinces: małopolskie and dolnośląskie. Poland belongs to countries which produce the greatest amounts of wastes in Europe. In conversion to gross national product unit, the amount several times exceeds the rates for selected well developed countries. In 2003 160 kg of wastes was produced per 1000 USD (GDP), whereas the respective amount in Germany was 30 kg, in the United Kingdom and Japan 40 kg and in France, Spain and Austria 80 kg (Radwan 2004).

Despite a considerable progress, Polish economy is still characterized by a high degree of energy consumption, resources consumption and environ-

1 Equivalent emission was computed by multiplication of values of nitrogen oxide and particulates by 2.9 and carbon oxides by 0.5 and adding sulphur dioxide emission.
ment consumption. It is perceived as much higher use of resources and energy than in many well developed countries in the world. Energy intensity rate computed for Poland is c.a. 30% higher than in the EU countries or Japan but comparable with American economy. In 2003 the energy intensity expressed in units (tons of equivalent oil) per 1000 USD (gross domestic product) was 0.32 in Poland, 0.26 in Austria, 0.17 in Spain and Japan, 0.19 in the United Kingdom, Germany and France and 0.25 in the US. According to Ney (2001) energy consumption of Polish economy in 1991 was 0.576. High energy consumption of produced GDP was caused by many factors, mainly by existing industry structure in which branches consuming large amounts of raw materials dominated, with considerable share of old-fashioned heavy industry, using energy intensive and material-consuming technologies, extensive economy with low-efficient labour and inconvenient structure of generated primary energy basing on solid raw materials (hard and brown coal), but it was also due to a lack of habit of rational energy use in the society. Sources of primary energy saving should be also sought in decreasing energy intensity of the economy, limiting losses in its transport (especially heat transfer) and diversification of energy carriers so far dominated by coal. It should be mentioned that industry, like in most countries is the main recipient of primary energy, which in Poland constitutes about 60% of the total generated energy.

Waste storage on landfills remains the main way to manage municipal wastes, of which 254 kg per one inhabitant were gathered in Poland. A considerable part, almost 94.1% find their way to landfills and only 2% are sorted. Still too small portion is processed at composting plants or in waste incinerators, whereas in well developed countries only between 40 and 60% of wastes go to landfills, even though more is produced per capita. For instance, in 2004 about 537 kg were produced per 1 inhabitant in the EU countries, 600 kg in the United Kingdom, 567 in France, 600 kg in Germany, 506 kg in Hungary and 238 in Czech Republic (Ochrona 2006). The plans outlined until 2010 assume the recovery of 10% of municipal wastes at considerable diminishing their amounts sent to landfills (Polityka 2006).

New legal regulations have been in force in Poland since 1 January and financial instruments compatible with the European Union requirements (Directive 94/62WE) providing bases for creating a rational system of waste management. Entrepreneurs were obliged to selective collection and then recovery and recycling of hazardous wastes, harmful for the environment (Law on product charge and deposit fee and law on packing and packing wastes have been in force since 2002). The legal regulations and fees aim to prevent waste accumulation on landfills. Particular attention was paid to certain groups of products and materials, arduous and harmful for the environment (used car-batteries, batteries, car tyres, refrigerating and air-conditioning equipment, waste oils, plastic wrappings, aluminium, paper, glass, etc).

The amount of product and deposit fees depend on the degree of their arduousness to the environment, difficulties with their recycling and recovery. The law on wastes (2001) currently in force makes obligatory development of the national plans of waste management. These plans should be strictly connected with environmental protection programmes prepared for individual areas and comply with the ecological policy of the State. It should serve to find rational, ecological, technical and economic solutions (Radwan 2004).

Presented quality of the natural environment considering its three components: water, air and earth protection shows the scale of problems which the economy and society face in Poland to prevent hazards and degradation of the natural environment and to improve it. It also results from contractual obligations to restore the natural environment assumed by Poland after accession to the European Union.

3. Ways and directions of financing pro-ecological measures in Poland

Financing the natural environment protection and water economy projects in Poland is based on the enterprises’ own funds, financial means from municipality (gmina) budgets, foreign ecological funds (assistance programmes) and on credits and bank loans. Shares of individual sources of pro-ecological investments financing in 1997-2005 were compiled in Table 3. The first, basic group of investors consists of enterprises and municipalities, whose share in the investment outlays on environmental protection makes up between 48.9% and 49.1% and on water economy between 46.9% and 46.1%. The outlays are supplemented by funding from ecological funds, foreign sources, credits and bank loans and budgetary means.

The sources of funding mentioned above are the core of the system. However, with progressing economy and system transformations and development of new market entities, one should expect enlargement of investment sources. However, the most means still come from enterprises, municipalities and ecological funds following the rule “the polluter pays”. Hitherto available means on environmental protection are insufficient, therefore foreign funding acquired from assistance programmes...
and from bank sector units is very important. The main investors in pro-ecological projects in the nineties comprised enterprises whose share in the protection of the natural environment constituted 62.4%, while a growing share of municipalities was marked after 2000. Municipalities’ and budgetary units’ participation in the investments was especially visible in the outlays on water economy. These units have been active financially supporting water mains and water treatment plant construction in rural areas, as well as development of combined sewerage systems and wastewater treatment plants construction. In 2005 about 2.1 billion zlotys was spent on these projects in Poland owing to significant support of municipalities and their inhabitants. Assistance funds from the European Union in the frame of ISPA, SAPARD and PHARE programmes made up a considerable share of 500M zlotys.

Financial means obtained form ecological funds are a notable contribution to the investment structure. Their involvement over the last years was growing both in the environmental protection and in water economy financing. The funds play an important role in projects realized by self-governments, municipalities and budgetary units. In 2003-2005 ecological funds contributed 11.5 billion zlotys to the above mentioned projects (Tab.4). In the structure of expenditure in the form of grants and loans the greatest shares fell to provincial environmental protection funds and water economy funds (47.3%), the National Fund (35.4%), district (powiat) and municipal (gmina) funds, which comprised 17.3%. Ecological funds in Poland function on the basis of the “Law on the Protection of the National environment” and have a four-level structure. The National Fund and 16 provincial funds have legal personality, whereas the district (powiat) and municipal funds do not. The source of income for the funds are fees for the use of the natural environment, sewage, gases and particulates discharge to the environment, water protection, water tapping and waste disposal and incomes from fines for tree and bush cutting down and for infringement of environmental protection laws. Incomes of the funds (the National and provincial ones) comprise dues from loans and bank credits, profits from stock market (securities and shares dealing), voluntary contributions, bequests, gifts, performances in re and means from foundations, etc.

Incomes generates from the above mentioned sources in 2003-2005 reached 7 175 M zlotys, of which 32.2% fell for the National Fund, 38.4% for provincial funds, 6.4% for district founds and 23% for municipal funds. The main source of income were fees for the use of national environment (69.2), then fines for cutting down trees and bushes, infringement of environmental protection requirements and products fees, which jointly made up 11.6%. The other incomes originate from loan interest rates, free means and other sources, and comprised 19.2% (Sprawozdanie 2006).

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<tbody>
<tr>
<td>Environmental protection</td>
<td>Water economy</td>
<td></td>
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<tr>
<td>- own means (of economic subjects and municipalities)</td>
<td>48.9</td>
<td>44.8</td>
<td>49.1</td>
<td>46.9</td>
<td>41.7</td>
<td>46.1</td>
</tr>
<tr>
<td>- ecological funds</td>
<td>16.9</td>
<td>25.3</td>
<td>21.2</td>
<td>5.2</td>
<td>13.6</td>
<td>16.3</td>
</tr>
<tr>
<td>- domestic credits and loans</td>
<td>16.5</td>
<td>13.9</td>
<td>7.6</td>
<td>3.5</td>
<td>3.6</td>
<td>4.7</td>
</tr>
<tr>
<td>- budgetary means¹</td>
<td>5.8</td>
<td>2.5</td>
<td>2.7</td>
<td>33.1</td>
<td>14.2</td>
<td>17.3</td>
</tr>
<tr>
<td>- foreign means</td>
<td>3.8</td>
<td>8.8</td>
<td>16.0</td>
<td>0.5</td>
<td>22.6</td>
<td>11.0</td>
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<tr>
<td>- other means</td>
<td>8.2</td>
<td>4.7</td>
<td>3.4</td>
<td>10.8</td>
<td>4.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Groups of investors:</td>
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<td></td>
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<tr>
<td>- enterprises</td>
<td>62.4</td>
<td>47.7</td>
<td>47.2</td>
<td>20.3</td>
<td>24.6</td>
<td>33.7</td>
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<tr>
<td>- municipalities</td>
<td>34.9</td>
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<td>50.4</td>
<td>52.3</td>
<td>35.8</td>
<td>33.5</td>
</tr>
<tr>
<td>- budgetary units</td>
<td>2.7</td>
<td>1.8</td>
<td>2.5</td>
<td>27.4</td>
<td>39.6</td>
<td>32.8</td>
</tr>
</tbody>
</table>

¹ Means from central budget, provincial and district self-governments
Source: Elaborated on the basis of (Ochrona 2006)
Generally, financing in the form of loans and credits constituting 50.3\% of the spent means prevailed in the funds for the years 2003-2005. At that time the unreturnable funding made up 47.9\%. The latter form of financing was characteristic for district and municipal funds. Capital funding, purchase of parts, securities and shares in consortia constituted 1.8\% and comprised the National Fund and provincial funds.

Beneficiaries of financing allocated to the environmental protection comprise local self-government units (municipalities, districts and self-government provinces) and units of the public finances sector, which jointly used up 73.1\% of means. Such big shares are connected with tasks appointed to respective funds and associated with absorption of the EU funds originating from cohesion and structural funds, mainly ISPA and SAPARD. It also influences the type structure of expenditure on the natural environment protection, in which outlays on water protection and water economy prevail together with construction of sewer system and wastewater treatment plants, which to considerable degree are realized by municipalities and municipalities unions. These facts were confirmed by reports of the provincial funds for the years 1993-2003 in which proportions of expenditure on the environmental protection looked as follows: water protection, water supply and sewage disposal 53.5\%, protection of air and climate 27.7\%; waste management 8.2\% and the other areas 10.6\% (Radwan 2004).

Considering the types of expenditure on main areas of environmental protection, in 2003-2005 the funds allocated the highest proportion funds (43.1\%) to water protection and water supply and sewage disposal. This area of expenditure prevails in the National Fund in provincial funds and municipal funds. So far it has happened at the cost of diminishing expenses on endeavours connected with the protection of air and climate, whose share in the preceding years revealed a successive decline from 31.3\% in 1994 to 22.9\% in 2002 (Radwan 2004).

The outlays on the earth protection and waste management are low and still diminishing position in the funds, they decreased from 10.3\% in 1999 to 8.6\% in 2002, whereas in 2003-2005 the share of funds was even lower, i.e. 7.9\%. In this area district (powiat) funds were the most involved (26.9\%). The other areas of the environmental protection have registered an increase in relative expenditure share from 11.5\% in 1999 to 23.4\% in 2002 and 25.2\% in the following years. Such structure of expenses is markedly affected the means from the National Fund allocated to mining industry (damage removal, reclamation of workings after exploitation of brown coal, sulphur and sand), geological works, expenses on protection of the natural environment, landscape, on forestry, environmental monitoring, financing of research and dissemination of ecological knowledge supported by other funds.

According to the State Ecological Policy for 2007-2010 formulated by the Ministry of the Natural Environment with the further perspective for 2010-2014, assumes necessary outlays of 63.8 billion zlotys on investment projects and about 1.8 billion zlotys for non-investment projects (Tab.5). It means that on average about 16.5 billion zlotys should be spent annually. The amount of outlays results from Poland’s obligations towards the EU structure (implementation of the EU directives for the years 2007-2010) and was determined as 52.4 billion zlotys (Polityka 2006).

Taking into consideration the hitherto structure and prospective expenditure on the environmental protection it is obvious that the following should increase:

- outlays on the areas connected with the use of natural resources to diminish society pressure upon the natural environment involving pollutant emission.

Table 4. Areas of pro-ecological project financing by ecological funds in 2003-2005

<table>
<thead>
<tr>
<th>Funding from environmental protection and water economy</th>
<th>Expenditure (^1) M zlotys</th>
<th>Sewage disposal and water protection</th>
<th>Atmospheric air and climate protection</th>
<th>Waste management</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>4073.8</td>
<td>32.5</td>
<td>28.0</td>
<td>5.7</td>
<td>33.8</td>
</tr>
<tr>
<td>Provincial</td>
<td>5455.7</td>
<td>53.7</td>
<td>22.5</td>
<td>7.2</td>
<td>16.6</td>
</tr>
<tr>
<td>District</td>
<td>468.2</td>
<td>17.9</td>
<td>30.5</td>
<td>26.0</td>
<td>25.6</td>
</tr>
<tr>
<td>Municipal</td>
<td>1525.6</td>
<td>41.2</td>
<td>15.6</td>
<td>10.6</td>
<td>32.6</td>
</tr>
<tr>
<td>Funds - total</td>
<td>11523.3</td>
<td>43.1</td>
<td>23.8</td>
<td>7.9</td>
<td>25.2</td>
</tr>
</tbody>
</table>

\(^1\) Included financing from loans and grants

Source: Computed on the basis of (Ochrona 2006).
into the air, sewage discharge, protection of soils and waste management. Human activity should focus on modernization processes in the economy to limit material consumption, water consumption and raw material consumption, decrease the use and improvement of efficiency of utilized resources, limiting the “end of pipe” investments for the benefit of integrated investments,

- expenditure on activities aimed at improving the natural environment, which under Polish conditions belong to the most expensive, the most difficult to implement because of their scale and scope. However, they have a significant effect upon the quality and living standards of the society. These include endeavours aimed at protection of water resources of the country, which is connected with improvement of water supply and sewage disposal. It requires construction and modernization of existing sewer systems and wastewater treatment plants in cities and in rural areas, construction of retention water reservoirs, waterfalls but also flood defences. About 35 billion zlotys will be allocated on these undertakings until 2010,

- outlays on improvement of air quality and counteracting climate changes, involving diminished energy consumption, changes in economy structures through diminishing the share of energy-intensive industries and using energy carriers less arduous to the environment through their further diversification, successively increasing share of energy from unconventional and renewable sources. The means planned on counteractions connected with improvement of air and climate quality will amount to almost 19 billion zlotys,

- expenditure, amounting to over 6.5 billion zlotys has been planned on waste management, to meet requirements of recycling and recovery of packaging materials, construction, modernization and reclamation of codisposal landfill sites. Limiting large sized and construction waste dumping by improved system of waste collection, their management and recovery.

Any measures aiming at protection of the natural environment, landscape and biodiversity should be undertaken more vehemently than hitherto. Endeavours in this area comprise both investments and non-investment projects, therefore they should be connected with supporting research works on natural environment quality and biodiversity, reintroduction of vanishing species, protection of valuable environment, natural forests and plant alliances, but they should aim to create new and expand the existing landscape parks and natural reserves, or supporting organic and integrated agriculture and development of ecological education.

The directions and tasks in the environmental protection and water economy mentioned above will require investments twice higher than in 2005. At least a half of the investments outlays will be made by enterprises and municipalities, about 1/5 of funding will be provided by ecological funds, 1/5 will originate from the EU assistance funds (cohesion and structural funds), whereas the other means will be derived from the public finances.

Conclusion

Implementation of the conception of sustainable development is inseparably connected with improvement of the natural environment quality. Under conditions in Poland it requires considerable financial outlays, which in 2003-2005 should reach annually on average about 16.5 billion zlotys. Remediation of the natural environment quality should comprise mainly: protection of the atmospheric air and climate, protection of waters and water supply

<table>
<thead>
<tr>
<th>Main areas</th>
<th>Investment projects</th>
<th>Non-investment projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M zlotys</td>
<td>%</td>
</tr>
<tr>
<td>Air and climate protection</td>
<td>18 600</td>
<td>29.1</td>
</tr>
<tr>
<td>Sewage disposal and water protection</td>
<td>28 500</td>
<td>44.6</td>
</tr>
<tr>
<td>Water economy</td>
<td>6 400</td>
<td>10.0</td>
</tr>
<tr>
<td>Waste management</td>
<td>6 500</td>
<td>10.2</td>
</tr>
<tr>
<td>Noise protection</td>
<td>2 500</td>
<td>3.9</td>
</tr>
<tr>
<td>Protection of nature, biodiversity and landscape</td>
<td>820</td>
<td>1.3</td>
</tr>
<tr>
<td>Other activities</td>
<td>532</td>
<td>0.8</td>
</tr>
<tr>
<td>Tools and instruments for task realization</td>
<td>80</td>
<td>0.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>63 852</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sources: Elaborated on the basis of (Polityka 2006)
and sewage disposal, as well as protection of soil and waste management. It should be enhanced by further transformations in the structure of economy aiming to develop the areas of raw material and energy saving.

Enterprises’, municipalities and budgetary units’ own funds will be of crucial importance in financing the environmental protection in the approaching years. From among the European Union funds the most important will be ecological funds, National fund and provincial funds which support endeavours in the protection of the national environment.

The environmental protection projects will be possible to realize under conditions of dynamic economic growth only if high absorption of means from the EU programmes is ensured. It should be accompanied by properly formulated and efficiently realized tasks supported by investors’ own funds, whose guaranteed share should reach the level of about 1.7 gross domestic product in 2007-2010.

References

ANALYSIS OF EMPLOYEES MOTIVATION FOR THE NEEDS OF CONTROLLING IN THE DEVELOPMENT OF COMPANY’S MOTIVATIONAL PROGRAM

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Mária Sirotiaková - UMB, Slovakia

ABSTRACT

In our contribution we analyze motivation of the employees in Slovak Nuclear Plant a. s. Mochovce from the time and factual aspects. We carried out this analysis in years 2003–2005 and the order of motivators’ importance was determined through the inquiry research based on averaged individual evaluations of the researched motivational factors. By means of a cluster analysis we distinguished two basic groups of employees whose motivational orientation was similar and so it was possible to define different programs of motivation for them. The result of our work was the finding that the importance and structure of motivational factors were changed within the analyzed years. That is why we recommend repeating of the motivational analysis at intervals of 12 months.

For the needs of controlling which plays an important role in coordination of systems of planning, management and inspection of many functional areas of the company, the analysis of motivational factors is really a significant sphere that helps in determination of company’s motivational program.

Key words: Motivation, analysis of motivation, motivational factors, controlling.

1. Introduction

One of the basic conditions of human success and effective performance in a working process is motivation. It makes an essential part of theoretical management of human resources. Manager’s ability to motivate employees is considered as one of the most important abilities since success of a business depends on it. Labour force potential in a business depends on many factors. One of them are internal factors which make a part of employees’ characteristic and the other are external. Both groups of factors influence each other. Working activities are not directed only by motivation but also through information, assigned tasks, introduced technological processes and so on. This is a specific type of human activity and its sources can be found not only in internal incentives of individuals (needs, interests, values, attitudes, etc.) but also in external factors (motivators e.i. in stimulative means and methods of management), through which employees’ behaviour is influenced (Koubek, 2002). All together it should be in accordance with company’s strategy and helps it to reach its goals. Plant controlling can support companies to meet their goals, too. Controlling is a conception which provides general help and support to the system of management whereby “controlling completes and integrates management in its conceptual, functional and institutional meaning as well as in personnel meaning (Eschenbach, 2000). According to Horváth controlling is a tool of management and its role is to co-ordinate planning, inspection and ensure informative data base.

Motivation is closely connected with controlling. Under this term we understand a system of electronic management whose structure and functionality supports the execution of company’s activities in a form of projects. Under the system of economic management we understand planning, monitoring, analyzing and assessment of company’s activities with the aim to increase their productivity and improve motivation (www.contros.cz). The sphere of motivation becomes an important factor of plant controlling.

Systematic determination, utilization and motivation of human potential are conditions of formation and development of company’s strengths and competitive advantages. It is necessary to realize that people present a motive power in a company which decides about performance quantity and quality, about company’s operation and about its success or failure on competitive markets (Blašková, 2003).

2. Goals of work

Most of companies are interested in what they should do to achieve a permanent high level of human performance. That is why they emphasize a selection of the most suitable way of human motivation through the tools like different incentives, bonuses, management of people and work they execute. The problem of analysis of motivational factors development from the time and factual aspects was carried out in Slovak Nuclear Plant Mochovce a. s. in years 2003–2005. Its aim was to group company’s employees into individual groups through the method of cluster analysis and underline motivators for groups of employees whose value orientation was the same. Based on the results we obtained we defined motivational factors which are the most important for work motivation in the company. Then we
compared the current situation to the situation which was found within last two years.

3. Material and methodology

With the aim to create groups of similarly oriented groups due to their motivation we applied a cluster analysis which presents a set of mathematical and statistical techniques for identification of similar groups. Its role is to merge objects (in our case employees) of observation into clusters (groups) so that their internal group homogeneity is as strong as possible and differences between the objects from different clusters are the biggest. In our case we applied Ward’s method which is based on a formation of maximization of cross-clusters homogeneity and to find it out we utilize an inter-group value of sum of squares. It means that by Ward’s method we try to find the lowest total value of sum of squares between groups or clusters. Clusters are created in each step and it brings the lower and lower value of squares sum.

To recognize individual results we prepared a universal questionnaire which was utilized for all categories of employees and through which we defined scales of evaluation of individual motivational factors. From the point of view of personnel management the questionnaire brings several advantages in comparison with other analytical methods. One of the most important is bigger openness, directness and freedom in expressiveness of respondents due to questionnaires anonymity. In contrast to personal interviews questionnaires are less stressful and responses are not influenced by atmosphere, environment and relationships. By means of a questionnaire it is possible to analyze basic information concerning the respondents, e.g. their age, sex, employment, education, etc. The questions create the atmosphere of concentration and enable to get more objective results. The disadvantage of a questionnaire in some cases is its relatively low and uncertain return because it depends on a decision of a respondent if he/she is willing to fill in the questionnaire and to send it back. An important task is a way of questionnaires evaluation. In our situation we applied 9 – level scale on base of which our respondents were supposed to assign one of nine levels of importance to each motivational factor (pict. 1).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely unimportant</td>
<td>Strongly unimportant</td>
<td>Mediumly unimportant</td>
<td>Slightly unimportant</td>
<td>Neutral</td>
<td>Slightly important</td>
<td>Mediumly important</td>
<td>Strongly important</td>
<td>Extremely important</td>
</tr>
</tbody>
</table>

Pict. 1 Questionnaire’s evaluation scale

The questionnaire utilized to analyze motivational factors was prepared in a unique form for all occupation categories of employees so that it was simple, understandable and transparent. Its form and content were in accordance with questionnaires utilized with the same aims in SE Mochove, a.s. in 2003, 2004 and 2005 so that it was possible to compare the results obtained within individual years (Hitka, 2004, Hitka, Sedmák, 2002).

4. RESULTS

4.1. Analysis of motivational factors from time and factual aspects

Analysis of motivational factors was carried out in the company during three consecutive years (in October 2003, October 2004 and in November 2005) and its role was to mention the development of motivation of technical and economic employees from the time and factual aspect. Based on the results which were found out it is possible to suggest measurements which will ensure the increase of employees motivation and consecutive rise of productivity performance in the company. Based on a cluster analysis groups of similarly motivated employees were formed. Next step was to process obtained sub-clusters to graphs and tables and to compare the newest results with the previous ones. The total number of analysis respondents in years 2003-2005 was 288 (see tab. 1). We can definitely state that the development of motivation in individual years was influenced by prepared personnel changes and similarity of importance of motivational factors in particular years is very low. In each year it is possible to define four basic similar groups of employees (see graphs 1 – 3).

<table>
<thead>
<tr>
<th>Occupation category</th>
<th>Number of respondents in 2003</th>
<th>Number of respondents in 2004</th>
<th>Number of respondents in 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical and economic employees</td>
<td>100</td>
<td>122</td>
<td>66</td>
</tr>
</tbody>
</table>
Graph. 1 THP employees (year 2003)

Graph. 2 THP employees (year 2004)
We can see a substantial decrease of motivation in the first two selected groups of THP employees in 2005 (graphs no. 4 and 5) and its cause was fear of the employees concerning the future development of the company and job loss. It is a little bit strange and interesting at the same time that motivation in the first group of THP employees was the highest in 2004 when other employes were pesimistic due to the company privatization. They realized that the situation is quite serious next year and their motivation went down as well.

In the second group THP employees almost all motivational factors show diametrically different values in 2005 when we compare them to the values from previous years and this fact confirms that the employees lost confidence in a positive development of the company.
In the first group of THP employees a motivator (base pay) gets the top position in 2005. This motivator did not show so high level of importance during previous years so a visible change in the structure of motivation can be seen. The motivator rate of responsibility was considered as an important motivational factor during all three years.

**Tab. 2 Comparison of motivational factors importance in the first group of THP employees (years 2003-2004-2005)**

<table>
<thead>
<tr>
<th></th>
<th>Year 2003</th>
<th>Year 2004</th>
<th>Year 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence at work</td>
<td>Financial benefits</td>
<td>Base pay</td>
<td></td>
</tr>
<tr>
<td>Supervisor’s personality</td>
<td>Certainty at work</td>
<td>Financial benefits</td>
<td></td>
</tr>
<tr>
<td>Authority</td>
<td>Independence at work</td>
<td>Certainty at work</td>
<td></td>
</tr>
<tr>
<td>Mutual communication</td>
<td>Supervisor’s personality</td>
<td>Rate of responsibility</td>
<td></td>
</tr>
<tr>
<td>Rate of responsibility</td>
<td>Rate of responsibility</td>
<td>Atmosphere at work</td>
<td></td>
</tr>
</tbody>
</table>

A very important motivational factor in the second group of THP employees during the whole monitored period is **labour protection**.

The third cluster of THP employees shows a decline of motivation in 2004 and its increase in the following year when the level of motivation was the same as in 2003 (graph no.6). This development of motivation emphasizes the influence of changes which were executed in the company in 2004 and caused a substantial decline of motivation in this year.

**Tab. 3 Comparison of motivational factors importance in the second group of THP employees (years 2003-2004-2005)**

<table>
<thead>
<tr>
<th></th>
<th>Year 2003</th>
<th>Year 2004</th>
<th>Year 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial benefits</td>
<td>Financial benefits</td>
<td>Work hours</td>
<td></td>
</tr>
<tr>
<td>Certainty at work</td>
<td>Certainty at work</td>
<td>Labour protection</td>
<td></td>
</tr>
<tr>
<td>Good informedness</td>
<td>Mutual communication</td>
<td>Independence at work</td>
<td></td>
</tr>
<tr>
<td>Mutual communication</td>
<td>Labour protection</td>
<td>Rate of responsibility</td>
<td></td>
</tr>
<tr>
<td>Labour protection</td>
<td>Base pay</td>
<td>Ecology of the company</td>
<td></td>
</tr>
</tbody>
</table>
Complicated situation in the company in 2005 caused the complete change of the order of motivational factors. This group of employees paid attention to the only factor during three years and it was labour protection.

**Graph.6 Comparison of motivational factors average values of THP employees – 3rd cluster (years 2003-2004-2005)**

**Tab. 4 Comparison of motivational factors importance in the third group of THP employees (years 2003-2004-2005)**

<table>
<thead>
<tr>
<th>Year 2003</th>
<th>Year 2004</th>
<th>Year 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification with work</td>
<td>Certainty at work</td>
<td>Base pay</td>
</tr>
<tr>
<td>Independence at work</td>
<td>Independence at work</td>
<td>Certainty at work</td>
</tr>
<tr>
<td>Supervisor’s personality</td>
<td>Good informedness</td>
<td>Financial benefits</td>
</tr>
<tr>
<td>Rate of responsibility</td>
<td>Authority</td>
<td>Stress at work</td>
</tr>
<tr>
<td>Company’s image</td>
<td>Mutual communication</td>
<td>Atmosphere at work</td>
</tr>
<tr>
<td><strong>Labour protection</strong></td>
<td><strong>Labour protection</strong></td>
<td><strong>Labour protection</strong></td>
</tr>
<tr>
<td>Information concerning own work</td>
<td>Style of leadership</td>
<td>Good informedness</td>
</tr>
</tbody>
</table>

Development of motivation in the fourth group of THP employees was different from other monitored groups of this occupation category. While in the first two groups of THP employees we could notice a clear decline of motivation in 2005 here the motivation increased considerably. Such a different development of motivation carried out within one occupation category can prove that various changes in a company have a different impact on individual groups. A cause of such a variety can be categorisation to a different working area, influence of managers, atmosphere at work and human relationships in a company.

Based on a table 5 we can state that motivational factors which motivated the group number four of THP employees and at the same time they kept their importance during the whole monitored period are atmosphere at work and financial benefits (even if in 2005 they did not get such a uniquely determined importance).

**Tab. 5 Comparison of motivational factors importance in the fourth group of THP employees (years 2003-2004-2005)**

<table>
<thead>
<tr>
<th>Year 2003</th>
<th>Year 2004</th>
<th>Year 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmosphere at work</td>
<td>Atmosphere at work</td>
<td>Labour protection</td>
</tr>
<tr>
<td>Financial benefits</td>
<td>Financial benefits</td>
<td>Certainty at work</td>
</tr>
<tr>
<td>Certainty at work</td>
<td>Independence at work</td>
<td>Base pay</td>
</tr>
<tr>
<td>Identification with work</td>
<td>Supervisor’s personality</td>
<td>Financial benefits</td>
</tr>
<tr>
<td>Base pay</td>
<td>Mutual communication</td>
<td>Atmosphere at work</td>
</tr>
<tr>
<td>Information about negative consequences</td>
<td>Rate of responsibility</td>
<td>Mutual communication</td>
</tr>
</tbody>
</table>
5. Discussion and conclusion

Based on our three year analysis we can state that the development of motivation depends on microeconomic and macroeconomic aspects and conditions in which SE Mochovce, a. s. exists and operates its business. Even if you know internal and external conditions well it is quite difficult to forecast the development of motivation from a long-term view. Our analysis can be a proof of that.

Results we found out are in some cases diametrically different even if we compare them within the same occupation categories. Some of distinguished groups are motivated at almost the same level during a long period of time especially when we compare average values of individual motivational factors of one occupation category as a whole. Other groups present a substantial decrease of motivation and its cause is fear of the employees of losing their jobs and future development of the company.

Next clusters of employees show the decline of motivation in 2004 and its repeated increase in the following year to the level of 2003. Strong differences in the development of motivation whether from time of factual aspects can be the results of company's restructurization which was executed in 2004 and its result was a sharp total decrease of motivation in comparison to the situation in 2003. Personnel changes that were supposed to happen were known as a threat by the employees and they were losing their certainty, started to become pesimistic and of course the total performance of the company went down as well. Based on the graphs we can say that in 2005 motivation rose again and the situation in the company was stabilized.

Due to the fact that the situation of privatization of SE, a.s. by an Italian company ENEL is not stabilized enough even now and significant changes concerning motivational factors may occur we recommend to do a similar research about employees' motivation in the future. On the base of its results we will able to find out modified requirements of employees and utilize them in determination of motivational program.

The problem of work motivation belongs among very important areas of systematic studies of organizational behaviour. Its importance is underlined by the fact that if we want to direct behaviour of individuals and groups or teams we have to know and be able to influence their motivation. Valuable information today is a fact that motivation of each individual is a picture of his/her personality. This idea brings an opportunity and at the same time a duty for managers, personnel experts and employees to be aware of the motivation and to strengthen it through the aspect of individual differences of particular personalities.

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SEMANTICS AND PRAGMATICS OF THANKS AND APOLOGIES IN ENGLISH DISCOURSE

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ABSTRACT

Speech acts of thanks and apologies are indispensable parts of discourse activity, be it a spontaneous conversation or a well-arranged public speech. Typically, these speech acts are not only internally structured, they are also elements of larger structures. They perform specific functions and are specifically lexicalized. Thus, grammatical, lexical and functional peculiarities of thanks and apologies are the subject-matter of the research. Its main aim is to reveal pragmatic and communicative mechanisms of discourse interaction, to consider the two kinds of highly recurrent and routinized speech acts, to show that a contrastive analysis can help to reveal typological relationships between them and to distinguish certain kinds of both thanks and apologies, as well as to prove that the values and norms of a given speech community have a bearing on whether or not they are to be considered as being related activities. A communicative and functional approach to the study aims at tracing analogies and divergences between the two speech acts - thanks and apologies - and at better understanding the ontology of these social and communicative politeness phenomena in language use.

Key words: semantics, pragmatics, thanks, apologies, discourse.

During the past 20 years it has been possible to observe an interesting development in the study of human language use, in particular in the art of conversing. As is known, conversation is a serious and necessary occupation. In pragmatic terms, it is a passport to social interaction that has its own rules with regard to the form and content.

Though the general account of these two kinds of speech acts is bound to remain fragmentary. Thanks and apologies as defined against the background of a given socio-cultural system are not the same thing as when seen in other cultural context. While thanks and apologies may exist as generic types of activities across cultures, it is obvious that the pragmatic considerations of their implementation are culturally defined. Among the linguistic tools of ready-made routine behaviours thanks and apologies occupy a prominent position. Under the ethic effect of indebtedness, communicants tend to equate gratitude with a feeling of guilt. Apology expressions seem to be the most appropriate means to meet the resultant requirements.

Many thanks and apology speech acts can function as self-contained discourse units. Thus thanks and apologies are typically delivered in the form of declarative sentences and belong to the class of positively charged statement whose illocutionary force is aimed at evoking, affirming or reinforcing solidarity relationships between interactants. Speech acts of thanks and apology have a highly conventionalized communicative pattern that does not necessarily call for a response.

Leaving the speech act of thanks or apology unanswered does not imply agreement with the statement expressed therewith; that is, that the other party is being rude, or that something is deplorable, unpardonable, etc. If there is no real issue between the parties, apology expressions can pass unacknowledged. A major function of their usage is to make communication inoffensive. In other cases, however, a response is felt to be appropriate, and strategically viewed the most common strategy then is to deny the guilt implicit in the apology.

Semantic point of view formulaic utterances of thanks and apologies is not always perceived by interlocutors as hackneyed, stereotyped expressions lacking in any real content, as is often the case with other formulaic utterances. The use of routine formulae is not discrediting to the speaker, and apologies and thanks do not sound insincere if they follow conventionalized patterns. Indeed, linguistic etiquette requires that communicants should make extensive usage of routines, often leaving little room for variation. Pragmatically self-contained speech acts of thanks and apologies consist of locutions, illocutions and interactional acts or moves and are functionally closely interrelated. Socially both thanks and apologies share common pragmatic features, emphasize obligation and interpersonal commitment.

If we inspect the occurrence of gratitude expressions, a number of criteria suggest themselves for keeping different kinds of thanks distinct; that is, there are different kinds of properties that enable us to make distinctions. Let us return in this connection to the first position of the communicative pattern of verbal gratitude. Every verbalization of gratitude is directed to some action (or actions) of a “benefactor” or to a result of this action. This may be termed the
**object of gratitude.** The object of gratitude can differ in kind on a very wide scale. Among the dimensions in which thanks can differ from one another the following four seem to be particularly important:

- thanks *ex ante* (for a promise, offer, invitation)
- thanks *ex post* (for a favour, invitation (afterwards))
- thanks for material goods (gifts, services)
- thanks for immaterial goods (wishes, compliments, congratulations, information)

- thanks for some action initiated by the benefactor
- thanks for some action resulting from a request/ wish/ order by the beneficiary
- thanks that imply indebtedness
- thanks that do not imply indebtedness

Obviously, these four criteria do not define eight distinct classes of thanks, and they are certainly no definite taxonomy. Other criteria are conceivable, and the ones listed here are not mutually exclusive.

According to this quadrochotomy, the object of gratitude can be described in terms of different properties. It can be real vs. potential; material vs. immaterial; requested vs. not requested; indebting vs. not indebting. Obviously, the object of gratitude varies also on a scale of weightiness. Different objects of gratitude require different strategies for thanks and appropriate responders, as will be seen presently.

A further complication is that the nature of the object of gratitude is not the only factor that determines the choice of a gratitude expression. The quality of the interpersonal relation between the participants is equally important. Whether the interaction takes place between close friends, family members, strangers, or employer and employee, etc. in a way affects the assessment of the object of gratitude, and hence the choice of gratitude expression. Thus the social relation of the participants and the inherent properties of the object of gratitude work together to determine the degree of gratefulness that should be expressed in a given situation.

Let us now consider apologies apart from thanks. Scholars find similar conditions here [Coulmas 1999:239]. Like thanks, apologies are reactive. They make reference to the first element of the three-place apology pattern. As such they are directed towards some action or event or a consequence. This part of the course of events is considered negative and unwanted for the recipient of the apology. His interlocutor sees a reason for regret in it. Let us call it, then, **the object of regret.**

Again, the object of regret can differ in various dimensions from one apology to another. It can be described as a kind of damage, annoyance or inconvenience which is predictable vs. unpredictable; indebting vs. not indebting. Accordingly, there are different kinds of apologies as well as responses.

Predictable intervention into the normal course of events calls for anticipatory apologies (ex ante) if conditions allow. Sometimes apology and object of regret occur simultaneously. If an interaction is initiated in a way or under conditions that the initiator knows or assumes to be undesired by his interlocutor he will often start off with an apology. The following words were what Patty Keen first said when she approached Mr. Hoover:

(1) *Excuse me for calling you by name,*

*Mr. Hoover, but I can’t help knowing who you are with your picture in all your ads and everything*  

Patty apologies for what she is about to do and immediately offers a justification. Similarly, to intrude upon someone often is regarded as an object of regret. The problem here is that we cannot ask a person permission to intrude upon him without doing just that. Hence the derived usage of apology expressions as attention setters. There is always the possibility that someone we want to ask for directions does feel very much disturbed. To take account of this possibility, we therefore best begin with an apology. There are standards with regard to what can be requested and expected of others, and they are reflected in the nuances and kinds of apologies which are felt to be appropriate relative to a given case of intruding upon someone, invasion of privacy, etc.

The same is true of *ex post* apologies. It depends on the nature and gravity of the object of regret. What kind of formula we choose (Sorry, I’m sorry, I’m awfully sorry, I’m really terribly sorry, I apologize, Please forgive me, etc.); and whether or not our apologies will be accepted. Sorry, I’m late may be acceptable when someone comes late to a party, but not when someone makes somebody else miss his airplane.

It is a conspicuous feature of some apologies that they are produced in spite of the unavoidability of the object or regret of its being beyond the control of the speaker. These cases are particularly frequent in institutionalized context, e.g. if a representative of an organization has to apologize for a delay which he had means to prevent [Coulmas 1999:256]. Of course, he identifies with the organization and speaks on its behalf, but in addition he may also express his regret for an event which is unpleasant for his interlocutor.

Such an interaction does not allow a response that imposes responsibility on somebody who preferred the apology. Interestingly, the English and Americans do make apologies, on occasion, without
recognizing any real responsibility. The object of regret, in these cases, is not indebting. The occurrence of apologies of this kind clearly shows that regret, not necessarily responsibility for an unwelcome change of the course of events, is the point of making apologies (Edmondson 1981:273).

Apologies with no responsibility for the object of regret on the part of the speaker have a strong resemblance to expressions of sympathy. Neither of them require or allow pardoning, and it is no coincidence that similar or identical linguistic means are used for either purpose. I'm sorry and many other variants can be employed to express regret about something that one has or has not occasioned. The object of regret does not have to be indebting for the speaker. In other words, at one end, apologies border and gradually merge into expressions of sympathy.

At the other end of the total range of apologies, where responsibility is admitted, a number of similarities with certain kinds of thanks become visible. The latter emerge most patently if we consider the response strategies appropriate for thanks and apologies.

Some formulae were seen to serve as responders to apologies as well as thanks. The strategies underlying their usage are also the same. In principle, there are two opinions: recognizing the object of gratitude or regret and relieving the interlocutor of its burden, or, alternatively, denying the existence of such an object or playing it down. Which of those strategies is opted for in a given situation depends on the role relationship of the participants and on the nature of the object of gratitude or regret, respectively. Of particular importance is the degree to which the speaker who verbalizes gratitude or apology is responsible or held responsible for its coming into existence. Whether a benefit was asked for or voluntarily offered, whether or not one is involved or assumed to be involved in some mishap thus has a bearing on the way thanks and apologies are reciprocated.

For instance, ex ante thanks are, in a way, advance thanks directed towards a declaration of the intention to do something for the benefit of someone else. In response, we do not normally use phrases implying that we did perform an act for the benefit of our interlocutor, such as e.g. not at all. Formulae like this are more appropriate following ex post thanks, because by using them we implicitly recognize the existence of the object of gratitude.

The above mentioned general distinction between two kinds of response strategies is the following:

- recognizing the object of gratitude and indicating that whatever one has done to bring about its existence was gladly done (you're welcome, that's quite all right, please, it's my pleasure, etc.);
- denying the existence of the object of gratitude or playing it down (not at all, don't mention it).

Recognizing the existence of the object of gratitude is not always permissible. If, for example, thanks are directed to an immaterial object of gratitude such as a compliment you're welcome is surely no appropriate reaction. The flatterer cannot admit flattery.

By the same token, wishes generally do not seem to count as objects of gratitude for which the speaker can implicitly claim credit. Consider the following episode:

(2) Trout... sneezed.
   ‘God bless you’, said the manager.
   This was a fully automatic response
   many Americans had to hearing a
   person sneeze.
   ‘Thank you’, said Trout. Thus a
   temporary friendship was formed
   (Vonnegut. Breakfast of Champions, p. 74).

Trout’s thank you is a “fully automatic response” here too. There is not very much actually that the manager did to put Trout under an obligation to feel grateful. Hence you’re welcome would be somewhat overbearing as a reply.

Actually, it would be a breach of conduct, because God bless you - thank you is a conventionalized two-place sequence. It is interesting to note how pointedly the author directs our attention to the super ordinate communicative function of the exchange on the interpersonal level: “Thus a temporary friendship was formed.” Another reason why a responder that indicates the benefactor’s satisfaction at having done something for the benefit of his interlocutor may be barred is that the occasion for the whole episode was unpleasant for the latter. Thus pleasure is rather an unseemingly response to thanks for consolation.

Similarly, responders of this kind are unlikely if the object of gratitude is not indebting. An object of gratitude is not indebting if it is being paid for. If we buy our groceries we may very well say thank you to the salesclerk, just as the cashier may say thank you upon receiving the money. But neither shopkeeper nor customers are likely to reply ‘pleasure’. This formula seems to presuppose free-decision of the benefactor. In the context of buying and selling, however, the course of events is largely predesigned.

O'key is one of the responders for thanks and apologies. While its main function in contexts of verbal gratitude is to acknowledge receipt, the situation is slightly different with apologies. Here it conveys more of a sense of acceptance. You’re welcome (with rising intonation) according to [Mir
convincingly argued by R. Lakoff (1973) are the essential relations between interlocutors. It has been argued that apologies and thanks are strategic devices whose most important function is to balance politeness relations between interlocutors. The problem of the cross-cultural comparability of thanks and apologies is of core importance. We have to consult the conventionalized means for fulfilling politeness functions (Coulmas 1981:81). He mentions, however, that the way in which a cultural context imposes restrictions on a kind of linguistic activity can often be seen to vary in a specific way from one socio-cultural system to another.

Similarly as with thanks, responders to apologies differ as regards the extent of recognition of the object of regret that they imply. If we say, “for this time I’ll forgive you”, we accept the apology while indicating that there is something to forgive. By contrast, why, no, that’s quite all right, is more like playing down the existence of an object of regret or denying it altogether.

Not infrequently we make apologies that do not call for any reaction at all. For example, when leaving a restaurant table thus terminating or temporarily interrupting an interaction we ‘excuse’ ourselves:

(3) ‘Excuse us’, said Miss Baker,
“We should be off now to relieve a baby-sitter”
(Fitsgerald. The Great Gatsby, p. 15).

The same device may also be used, in formal settings to ask for permissions or consent. If this is not the case, it is simply a polite way to inform our partner of our intentions. Obviously, the truck driver does not ask for permission:

(4) “Excuse me,” said the truck driver to Trout, “I’ve got to take a leak”
(Vonnegut. Breakfast of Champions, p. 88).

The choice of apologetic formulae in contexts of this kind indicates that the situation is conventionally interpreted as a negative - negative for the addressee, that is - intervention in the course of events.

Thanks and apologies can be viewed in the light of many other distinctions. An investigation in terms of possible responders is important for two different reasons. One is that the responders provide an interpretation of object of regret and object of gratitude, which is a correlate of the interpretation of the course of events underlying verbal apology and gratitude respectively. The other is that the conditions of their application reveal a structural complementarity of thanks and apologies.

The problem of the cross-cultural comparability of thanks and apologies is of core importance. We adhere to apologies and thanks as strategic devices whose most important function is to balance politeness relations between interlocutors. It has been convincingly argued by R. Lakoff (1973) among others [see Brown, Levinson 1978; Quirk 1972] that politeness is a universal linguistic phenomenon. According to these scholars, apologies and thanks seem to exist as generic speech acts in every speech community. Coulmas (1981) even ventured the hypothesis that language provides a stock of these conventionalized means for fulfilling politeness functions (Coulmas 1981:81). He mentions, however, that the way in which a cultural context imposes restrictions on a kind of linguistic activity can often be seen to vary in a specific way from one socio-cultural system to another.

The scholars, for instance, observed that British thank you is different from American thank you. While in American English it is mainly a formula for the expression of gratitude, British ‘thank you’ seems on its way to marking formally the segments of certain interactions with only residual attachment to ‘thanking’ in some cases. In Australian English thank you can also be used as a kind of verbalizing punctuation mark of interaction. It can thus occur three times in succession, if, for instance, a ticket is sold on a train:

(5) Conductor (handing over the ticket):
Thank you. Passenger: Thank you.
Conductor: Thank you (Coulmas 1081:91).

From a study on verbalization of gratitude in South Asian Languages we know how differently gratitude expressions are used by Hindi speakers as compared to Europeans.

Gratitude and indebtedness are more closely linked. Indeed, there is no such thing as verbal gratitude that does not imply the speaker’s indebtedness towards the listener. Hence in situations involving exchanges of goods, no verbalization of gratitude takes place. Neither the customer nor the shopkeeper will therefore exchange phrases equivalent to ‘thank you’. Similarly, to help each other among family members is only to comply with one’s duties, and, therefore any verbalization of gratitude is considered taboo, and it is insulting or looked down upon when family members or close friends interact with each other. It follows then that we have to consult the values of a society in order to determine when verbal gratitude is considered proper payment for an action, accomplishment, or gift, and when it is not. The same holds true for apologies.

In a society which is so highly conscious of ‘face’ as the Japanese it is not surprising to find many patterns of speech behaviour that provide participants with appropriate means to prevent embarrassing surprises. Among Japanese routine formulae apology expressions are a conspicuously large group.

There is a great variety of very general apology formulae whose range of application is not very...
specific. They are used on occasions where European speakers may find it difficult to see any object of regret. Rather they are used to line other speech acts such as greetings, offers, thanks with an apologetic undertone.

Among Japanese students of English, it is a common mistake to make apologies where no such acts are expected or anticipated in the respective speech community. Correspondingly, a Western student experiences the extensive usage of apology expressions as a striking feature of everyday communication when he first comes to Japan. Even if he has learned the most common expressions of apology, he finds out very soon that he lacks the necessary knowledge of speech situations, which would allow him to predict and use them in an appropriate way. Apology expressions seem to be used much more frequently than in Western cultures, and, in many cases, the Western student will be unable to see any reason at all for apologizing (Coulmas 1981:82).

For instance, a Japanese formula sumimasen can be used as general conversation opener, attention – setter, leave taking formula, apology, and, notably, gratitude formula. Upon receiving a gift, Europeans would not normally say excuse me or I’m sorry. In such a situation sumimasen is, by contrast, quite appropriate.

It is quite apparent that the conception of object of gratitude and object of regret does not concur completely with its European counterpart. The speaker of sumimasen acknowledges his indebtedness toward his interlocutor.

The Japanese conception of gifts and favours focuses on the trouble they have caused the benefactor rather than the aspects, which are pleasing to the recipient. Leaving after a dinner invitation The British may say thank you so much for the wonderful evening. Under similar circumstances, one of the things the Japanese guest does say is O’jama itashimashita (‘I have intruded on you’). Literally this formula means, ‘disturbance have been done to you’ or ‘I caused you trouble’. A typical response of the host (hostess) to this is iie, iie, do itashimashite which means ‘no, no, don’t mention it’. Lie is the morphological unbound negative. While the speaker acknowledges the existence of some object of gratitude or regret and hence his indebtedness, the addressee denies it. A typical pattern in the use of Japanese gratitude and apology expressions.

Analogies can be drawn in cross-cultural comparison of English and Ukrainian thanks and apologies. Ukrainian and Japanese speech behaviour have much in common, Ukrainians also thank the host and hostess for the invitation to come to one’s home, for food and warm treating sating “Дякуємо. Вибачте за турботу,” to which a typical response is “Вибачте нас”, or “Вибачайте, якщо щось не так було. Заходьте ще.”

Such words would sound strange in English-speaking culture. Though there are more similarities than differences in English and Ukrainian cultures. For both cultures breach of conduct, violation of a social rule, etc. involve first of all loss of face. Face-conscious behaviour is characterized by two correlative attitudes: not embarrassing others and protecting one’s own face. Maintenance of face is one of the central values governing interaction in the two cultures. For Japanese it is most important in the domain of ritual behaviour in a very wide sense, as defined by Lebra:

The ritual situation that elicits ritual behaviour rangers widely, from the extremely structured situation, such as a ceremony, to the undefined, accidental situation, such as an unexpected encounter with an acquaintance in the street, from play scenes to work scenes. What links them all is that Ego defines Alter or a third person (or both) as an outsider whose opinion he cares for (1976:120).

Apologies indicate the speaker’s willingness to conform to conversational rules and social expectations. Not infrequently this seems to be their sole purpose.

Verbal apology in English and Ukrainian occurs even if there was no serious or real offence as a precaution against misconduct or unanticipated negative interpretation of one’s performance. If a situation is actually impaired by a violation of a social rule blaming oneself for the violation is an essential part of the repair. One of the mechanisms for defending face is to use apologies not only as a part of repair work but also as a means to forestall the need for repair. Hence apology expressions are often used in English and Ukrainian. Most conspicuous in this regard are apologies that are performed in reaction to a favour. For instance:

(6) Suddenly I felt depressed, longing for something. I felt was forever beyond me. I got to my feet. “Thank you, Doctor,” I said automatically. “Now you can return to your interrupted lunch. I’m... sorry I had to disturb you.” “One of the hazards of my profession,” he returned

(Hughes. Nurse at Golden Water, p. 73).

(7) Ласкар устав з канапи й зібрався йти. На порозі ще глянув прихильно на Колю і сказав: · Як тільки повернешся, зайди, аби я про все знати. Не шкоду, Диментію, що дав тобі державну посаду. Щасливої
дороги! - Дякую, пане. Простіть за клопіт і прощайте
(Івасюк. Серце не камінь, с.252).

From these two examples we can judge that the reverse side of the benefit of a favour is the strain that it cost the benefactor to carry out. For this strain the one who benefited is held responsible, and thus an apology is appropriate.

Another example also testifies to this fact:

(8) Ви бачите, Савето, не сам зайшов до вас. Ноги мої самі до вас довели. Вибачайте за солодкий відпочинок та страву, що мав у вас. Стільки клопоту завдав вам. Чим відплачу за все?
(Івасюк. Серце не камінь, с. 18).

As it is seen from the example Ukrainian apology formula Вибачайте is used instead of the verbal gratitude. The interchangeable use of apology and gratitude formulae is specifically peculiar to Western Ukraine speech behaviour which obviously testifies to the existing differences in English and Ukrainian language use of thanks and apologies speech acts.

What is being expressed in examples (6), (7), (8) is not so much apology referring to any particular person, but rather recognition of a certain type of social relationship, where one party admits a general feeling of indebtedness to the other.

Apologies and thanks as used by Englishmen and Ukrainians as well as Russians are not expected to yield any significant information, they carry a major social theme. They set the tone of interaction between members of a hierarchically structured society adhering to ethics of indebtedness. The smallest favour makes the receiver a debtor. Social relations can be regarded, to a large extent, as forming a unity of mutual responsibilities and debts.

Not every favour can be repaid, and if circumstances do not allow proper repayment, communicants tend to apologize. They acknowledge the burden of the debt and their own internal discomfort about it. Thanks and apologies used in innumerable circumstances, and serving a variety of functions beyond the imagination, are not merely cliches with no substantial message associated with them. Rather they serve to balance debt and credit between parties. They convey a sense of moral indebtedness so characteristic of social relationships in any community.

References

THE INFLUENCE OF THE BLACK SEA REGION ON THE GRAIN MARKET

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ABSTRACT

The Black Sea region acts as one of the most dynamically developing sectors of the world economy. The object of research is the world grain market. The goal of research is analyzing the main tendencies of grain sector’s developing of CIS countries, methodological analysis of the efficiency of their export policy and correlation with the world grain market. The main methods implied in the research are such as: complex and system analyses of AIC regulation, graphanalytical and correlation analyses of export policy optimization, expert analysis of the world grain market.

Key words: Black Sea region, grain market, policy, agricultural trade.

All players of the market are especially interested in the grain harvest estimations for Russia, Kazakhstan and Ukraine because these countries are the largest wheat exporters in the Black Sea region.

The fundamental scientific contribution into investigation of general theoretical and special problems of agricultural trade and export activity is made by the outstanding scientists and economists such as: S. Berkum, St. Cramon-Taubadel, Germain D., P. Haidutskyi, M. Kompanets, S. Kvasha, O. Oliynyk, Pankratov A., Rylko D., P. Sabluk, M. Trasy, L. Striewe and others. Despite their basis, the author of the article thoroughly investigated problems of the development of trade policy of the Black Sea region concerning stabilization of grain sector, a grain forecast and future tendencies in the world grain market.

In the erstwhile USSR, post soviet countries were wheat importers in the world grain market. But from the beginning of the 21st century, the main producers Russia, Ukraine and Kazakhstan began to explore the possibility of exporting grain. During two seasons in 2001-2002, these countries practically established a price level for the feed wheat and feed barley in the international market.

In the mid-1990s, the world grain market experienced a relatively short period of tight supplies and high export prices. Production rebounded rapidly, especially in the main exporting countries like the USA, EU, Canada, Australia, and stocks were rebuilt. By mid-1998, prices of wheat and of maize had fallen to nearly their lowest since the 1970s. Latterly, markets have stayed relatively depressed, with supplies being adequate to meet the continued growth in commercial needs, and prices showing considerable stability.

Since world wheat and coarse grains production reached a record in 1996, it has remained a little lower. Output in the main exporters was sustained at a high level, as yield increases offset area reductions, but their crops fell in 2001 after bad weather in several key-producing areas. In China, there was also a significant fall in output driven by new policies to deter production of lower-quality grain. Production in the Black Sea region was variable but there was major improvement in 2001 as better marketing conditions encouraged farmers to apply more agricultural inputs. In many developing countries, wheat production was relatively stable, but there was an overall increase in their output of coarse grains.

Overall growth of world grain consumption has been slowing down in the early 1990s. However, feed use of grains continues to expand at a moderate rate in major exporting countries reflecting growing meat production, especially in the United States. The steep decline in use in the CIS appears to have bottomed-out in 2001/02 but consumption in China has leveled-off. Food and feed use grain continues to increase in many developing countries in Asia and Latin America.

World grain consumption has risen in each of the last 45 years except for three -1974, 1988, and 1995 - when tight supplies and sharp price hikes lowered consumption. Growth in world grain demand, traditionally driven by rising incomes and population growth especially in the Indian subcontinent and sub-Saharan Africa, is also now being driven by the fast growing demand for grain-based fuel ethanol for cars. Roughly 60% of the world grain harvest is consumed as food, 36% as feed, and 3% as fuel. While the use of grain for food and feed grows by roughly 1% per year that used for fuel is growing by over 20% per year.
World grain trade has increased by about 10% since the mid-1990s to nearly record levels [1], with most of the growth in imports attributable to developing countries. Some former major wheat importers, notably China and Pakistan, have considerably reduced their purchases since the mid-1990’s, while imports by Iran, Brazil, North Africa other than Egypt, and many least developed countries are higher. Coarse grains imports by Mexico, North Africa and Near East Asia have grown, principally to supply their expanding livestock industries, but the increase of imports by Pacific Asia has temporarily come to a halt.

At the beginning of 21st century, the share of the major exporting countries in world grains trade has fallen, because of much larger exports by countries in the Black Sea region, South Asia (for wheat) and Brazil (for maize). Sales of maize by China have been variable, but very large in some years.

World grain stocks rose steeply in the latter 1990s, but have recently been falling, mainly because of a considerable drop in China’s carryovers. Stocks in the five major exporting countries remained large until the current season, when they declined after their poor harvests. Following a succession of large crops, stocks in India have reached record levels. These developments have kept world grain prices relatively low, fluctuating within a narrow band. At those levels, prices do not provide satisfactory returns for many grain producers, who have turned to their governments for substantial financial support to
The influence of the Black Sea region on the grain market

In recent years the overall growth in world grains consumption and production appears to have slowed down, the process of change in the global grain economy has accelerated because of a strengthen position of the CIS. Trade in grains and products is flowing in new directions and in more processed forms in response to more open markets and to changing consumer requirements, where quality factors are becoming a key factor in the market place.

The CIS having the population 279,3 mln people (4,3% of the world population) in average produced 125,5 Mt of grains (wheat, barley and maize) during 2000-2006 that made 9,55% of the world grain production. The highest parameters in grain production were for wheat 83,14 Mt (14,74% of the world volume) and barley - 32,88 Mt (23,65%), the lowest were for maize – 9,46 Mt (1,56%).

The grain production in the CIS was estimated at 447,3 kg per capita that was two times more than in the world – 208,7 kg. The highest level of grain production per capita was in Kazakhstan, Moldova, Ukraine and Russia, the lowest one was in Tajikistan, Armenia, Georgia and Uzbekistan.

Table 1. Grain production and export in the CIS

<table>
<thead>
<tr>
<th>Country</th>
<th>Production, Mt (average)</th>
<th>% of the CIS production</th>
<th>Production per capita, kg</th>
<th>Consumption per capita, kg</th>
<th>The main exporters, Mt</th>
<th>The main importers, Mt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>64,1</td>
<td>51,1</td>
<td>443,6</td>
<td>389,7</td>
<td>9,1</td>
<td>1,58</td>
</tr>
<tr>
<td>Ukraine</td>
<td>29,19</td>
<td>23,35</td>
<td>641,5</td>
<td>511,2</td>
<td>7,54</td>
<td></td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>14,62</td>
<td>11,7</td>
<td>870</td>
<td>488</td>
<td>5,33</td>
<td></td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>12,02</td>
<td>9,62</td>
<td>259</td>
<td>350</td>
<td>0,72</td>
<td></td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>4,85</td>
<td>3,88</td>
<td>186,5</td>
<td>179</td>
<td>0,15</td>
<td>0,42</td>
</tr>
<tr>
<td>Moldova</td>
<td>2,8</td>
<td>2,24</td>
<td>794,4</td>
<td>447</td>
<td>0,57</td>
<td></td>
</tr>
<tr>
<td>Belarus</td>
<td>2,59</td>
<td>2,07</td>
<td>255</td>
<td>308</td>
<td>0,58</td>
<td></td>
</tr>
<tr>
<td>Kyrgyz</td>
<td>1,81</td>
<td>1,45</td>
<td>369,4</td>
<td>377,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>1,8</td>
<td>1,45</td>
<td>375</td>
<td>339,6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS</td>
<td>125,52</td>
<td>100</td>
<td>447,3</td>
<td>396,4</td>
<td>23,2</td>
<td>5,3</td>
</tr>
</tbody>
</table>

Source: APK-Inform

During 1993-2006 the CIS reduced the planted grain area from 73,6 to 125,5 Ml ha but increased the yield. The structure of grain production consists of wheat 66,9%, barley 26,19% and maize 7,4% especially in Turkmenistan (96,1%), Uzbekistan (94,8%), Kazakhstan (82,8%), Tajikistan (81,55), Azerbaijan (80,7%), Russia (68,4%) and Ukraine (57,9%). Barley takes a definite place in the structure of grain production in Belarus (66,8%), Ukraine (31,3%) and Russia (29,3%); maize – in Georgia (56,8%) and Moldova (50%). This structure shows a middle level of intensive development of animal industries (poultry and pig farming).

During 1993-2006 the average level of grain yield was 19,3 C/ha because of using extensive technologies. The highest level of grain yield is in Uzbekistan (34,9 C/ha), Moldova (32,9), Kyrgyz (29,2), Azerbaijan (26,9), Turkmenistan (26,9) and Ukraine (26,5). The lowest level of grain yield is in Kazakhstan (11,2C/ha), Russia (18,4), Tajikistan (18,5) and Georgia (21,6). There are different climate conditions in the CIS [2]. If these countries use intensive technologies for grain production their total supply would increase up 25-35%. It is very important for the CIS because it would help to use grains for ethanol production and influence on prices of mineral oil.

During 2002-2006 the CIS in average exported 23,2 Mt (wheat – 15,9 Mt (69,7%), barley - 6,1 Mt (26,7%), maize – 1,55 Mt (6,85). The import of grains was estimated at 5,3 Mt (wheat – 4,1 Mt (77,5%), barley – 0,53 Mt (10%), maize - 0,64 Mt (12,1%). In the total world import of grains the CIS had 3,2% (wheat – 5,44%, barley – 3,29%, maize - 0,86%).

There are four main grain exporters in the Black Sea region that provide 22,9 Mt (98,8%) of grains such as Kazakhstan – 36,46%, Ukraine – 25,66%, Moldova – 18,75% and Russia – 12,93%. The main grain importers in the CIS are Russia, Azerbaijan, Belarus, Georgia, Tajikistan and Armenia. They import 4,59 Mt (86,6%) of grains each year. Armenia is set to be 93%, Tajikistan – 66,15% and Georgia – 62,16%. Unfortunately these three countries don’t provide their food safety.

All players of the grain market are especially interested in the harvest estimations for Russia and Ukraine, because these countries suffered mostly from the frost while being the two largest wheat exporters in the Black Sea region. In 2005/2006-season, Russia and Ukraine increased their shares in wheat export. The majority of Black Sea countries grow winter...
wheat; spring wheat is cultivated prevalently in Russia and Kazakhstan. Such countries as Romania, Bulgaria, and Moldova grow hardly any spring wheat. Ukraine usually seeds spring wheat on the area of around 500 Th. ha. In Russia area under spring crops is by 15 Ml ha. As yields of spring wheat are much lower, the increase in the area under spring crops in Russia seems very unlikely. Kazakhstan grows spring wheat only. Growth of wheat areas started about 10 years ago. In 2005/06-season spring wheat area was the biggest amounting to 12,4 Ml ha [3].

Table 2. Wheat production and export in the CIS

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Production in Mt.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>46900</td>
<td>50550</td>
<td>34100</td>
<td>45300</td>
<td>47600</td>
</tr>
<tr>
<td>Ukraine</td>
<td>21349</td>
<td>20556</td>
<td>3600</td>
<td>18000</td>
<td>18700</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>12700</td>
<td>12600</td>
<td>12400</td>
<td>9950</td>
<td>11000</td>
</tr>
<tr>
<td>Total</td>
<td>80949</td>
<td>83706</td>
<td>50100</td>
<td>73250</td>
<td>77300</td>
</tr>
<tr>
<td>World production</td>
<td>580930</td>
<td>566861</td>
<td>553034</td>
<td>625153</td>
<td>607964</td>
</tr>
<tr>
<td>% to the world production</td>
<td>13,9</td>
<td>9,0</td>
<td>11,7</td>
<td>12,7</td>
<td></td>
</tr>
</tbody>
</table>

| **Export in Mt.** |        |        |        |        |        |
| Russia           | 4372   | 12621  | 3114   | 7951   | 10000  |
| Ukraine          | 5486   | 6569   | 66     | 4351   | 5500   |
| Kazakhstan       | 3977   | 6238   | 5200   | 2700   | 3500   |
| Total            | 13835  | 25428  | 8380   | 15002  | 19000  |
| World export     | 108481 | 108499 | 110540 | 109868 | 109130 |
| % to the world export | 12,8 | 23,4 | 7,6 | 13,7 | 17,4 |

* Forecast

Russia is the main grain producer in the CIS. For the last 10 years it reduced grain planted areas to 4,2 Ml ha and total grain supply to 4,7 Mt especially for barley. Total supply of wheat, barley and maize was 64,1 Mt during 2002-2006. Every year Russia exports 9,5 Mt of grains and imports only 1,5 Mt. In general export-import balance of Russia is +7,92 Mt (export of grains varies from 6,8 to 10,2 Mt) according to the conjuncture of the world grain market. Export of grains is estimated at the level of 14,8% of the total supply [4].

Ukraine takes the second place in grain production after Russia. For the last 10 years it increased planted areas to 11 Ml ha but reduced total grain supply from 33,8 to 29,2 Mt (13,6%) because of yield decreasing from 31,2 to 26,5 C/ha (11,8%). During 2002-2006 Ukraine produced in average 29,2 Mt with the planted area 11,24 Ml ha. Despite high level of grain consumption 23,3 Mt (512,2 kg per capita) 7,54 Mt of grains is exported (25,8% of total supply) every year.

Kazakhstan for the last 10 years reduced grain planted areas from 19,6 to 12,98 Ml ha and total grain supply from 20,4 to 14,6 Mt. In general Kazakhstan produces 14,6 Mt of grains (870 kg per capita) every year. During 2002-2006 the level of grain consumption was 488 kg per capita or 8,2 Mt of grains every year. Kazak grain export is set to be at 5,3 Mt (36,4% of total supply). There is no practical grain import [5].

The export potential of Russia, Ukraine and Kazakhstan continues to remain high because of increase in grain production at one hand and fall in domestic grain consumption for both food and feed purposes on the other. During July 2004 - February 2005, Ukraine exported 567 tones of feed wheat to Philippines, South Korea, Indonesia and India. Russia supplied about 191 tons of milling wheat to Pakistan during the same period. In 2004-05 record high barley crop in Ukraine was accompanied by sharp cut in feed barley production and export in Canada and Australia. This led to a quick jump in barley export from Ukraine. Russia, another traditional feed barley exporter, started to sell it after November 2004 in the Asian market, especially to India, Pakistan and China. South Russia is playing a major role in general grain production. High domestic prices and better access to credits in Russia have led to improvement of economic conditions of farmers there.

2005/06 MY is the second successive bumper crop season in Ukraine. At the same time, the grain production was at average annual level. The seeded acreage under wheat recovered to its level seen in the bumper crop years of 2001 and 2002 at the
The influence of the Black Sea region on the grain market

Expense of slightly shrunk areas under barley and corn. Keen interest remains in corn production. The corn crop was from 5.7 to 7 Mt for the three successive seasons, while it was at most 3 Mt before. Barley is the most stable export Ukrainian grain. Therefore it is the most preferable while seeding spring crops; its use for feed is minimized and replaced with alternative crops. Wheat export increased in 2005/06-season owing to rich crops for the past two years. However, the following 2007-year will show again that the presence of Ukrainian wheat in the world market is unstable. Favorable weather during the corn harvesting resulted in good quality of corn. Combined with moderate prices, this made Ukrainian corn a competitive commodity in the world market.

The cumulative grain export potential of Russia, Ukraine and Kazakhstan has the potential for growth and causes capturing new commodity markets. Despite the general development of market relations in the CIS, increasing of export potential was based on reducing of the domestic grain consumption and the livestock of cattle [6].

Table 3. The main exporters in the world grain market, 2001-2005

<table>
<thead>
<tr>
<th>Wheat, %</th>
<th>Barley, %</th>
<th>Maize, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA – 25</td>
<td>CIS – 32</td>
<td>USA - 60</td>
</tr>
<tr>
<td>CIS – 15</td>
<td>Argentina - 27</td>
<td>Argentina - 15</td>
</tr>
<tr>
<td>Australia – 14</td>
<td>EU-25 - 22</td>
<td>China - 12</td>
</tr>
<tr>
<td>EU-25 – 14</td>
<td>Canada - 8</td>
<td>Brazilia - 4</td>
</tr>
<tr>
<td>Canada – 13</td>
<td>Others - 11</td>
<td>CIS - 2</td>
</tr>
<tr>
<td>Argentina – 8</td>
<td>Others - 7</td>
<td></td>
</tr>
<tr>
<td>Others – 11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: USDA

The competitive advantages of Russia, Ukraine and Kazakhstan are evident especially their geographical position that allows them to offer grains with the low cost price to importers. During the last five years the CIS took the first place in the export of barley, the second – export of wheat (except a poor harvest in 2003) and the fifth – of maize. The main sales markets for these countries are the EU-27, North Africa, East Asia (South Korea, Indonesia, Philippine, Bangladesh).

According to the forecasts, the CIS especially Ukraine will increase grain export to the EU-27 up 50% despite its progressive new grain producers and exporters like Romania and Bulgaria. Nowadays the West European countries especially Italy, Spain and Portuguese import Ukrainian feed grain of the 4th and 5th classes for flour resorting to bake the bread more cheap and nutritious for consumers. It is well known that for producing a high quality flour Ukrainian producers mix wheat from southern regions that contains more gluten with wheat from the northern and central regions that contains cellulose (wheat of the 4, 5, 6 classes). The countries of the European Union are interested to buy cheap and ecologically clean grains from Ukraine.

Currently, all large international grain-trading companies are actively working in the CIS and creating national network. Some of the leading such companies are Glencore, Alfred C. Toepfer International, Cargill International SA, W.J. Export-Import, Inc., Louis Dreyfus Group, Helian Agrotrade, Unigrain, Agriss-Kom, Bunge, Aster-Grain and SGS. They are trying to remove middlemen between actual growers and buyers in the world grain market. In Russia there are more than 500 grain trading companies, in Ukraine more than 600.

In Kazakhstan flour-grinding plants are mostly located in the grain sowing areas, such as Akmolinsky (18%), Almatinsky (16%), Kostioniysky and North-Kazakhstan areas (14%). The Food Contract Corporation is a state owned company and the biggest player in Kazak grain market. Large international companies ensure the farmers better profitability, reduced risks and guaranteed transactions.

According to forecasts, in other five years, Russia, Ukraine and Kazakhstan together will emerge as the third largest grain exporter after the EU-27 and US. Russian position is getting stronger by increasing of food wheat share in its general export. The main buyers of Russian grain are South Europe, Middle East, North Africa, the CIS, Saudi Arabia and India. In 2007-2009 Russian mid-annual grain production is estimated at 73-78 Mt. In the coming three years, gross domestic demand for fodder will increase to 3% and remain at the level 45-48 Mt in 2007/08 [7].

Kazakhstan will settle its needs for wheat import from North Asia and Caucasus. It is also going to increase export to Mediterranean countries, North Africa and China. Kazakhstan is going to sell about 1 Mt of grains to Iran every year using the SWAP transaction schemes. Kazakhstan has been steadily producing about 16 Mt of grains for the last three years. The general planted area under grain crops
has stabilized at a level of about 14 Mha. Wheat makes about 75% of grain production. As against Russia and Ukraine that mainly produce soft wheat, Kazak wheat contains much protein (70% of wheat contain 14% of protein).

In Kazakhstan subsidies and credit benefits per hectare are widely used now. Besides, there are large projects underway like construction of railroads and carrying out of ports on the Caspian Sea. In Russia leasing funds are applied to increase deliveries of more expensive technical equipment to farmers. Ukraine has been using the subsidies to credit interest rates and insurance rates in agrarian sector for the last five years. The government used to subside wheat seeds, fertilizes and other commodities.

In the last years, Ukraine focused to renovate its position in the world grain market. Taking into account a forecast of slow increasing tempos of grain consumption, Ukraine will strengthen its influence in food and fodder wheat markets. It is going to increase its cereal production to 40 Mt or to 2.6% per year due to expansion of cropping areas to 1% and increasing of grain productivity to 1.6%. According to forecasts, up to 2010 its average grain consumption is estimated at 27.5 Mt (food grain – 7.8 Mt, fodder – 12.5 Mt). By 2010, Ukrainian grain export can increase to 3% (against 1.5% in 1998-2000) [8]. The main buyers of Ukrainian grain are the CIS, EU-27, Africa and Asia-Pacific region.

For the major grain exporters in the Black Sea region, the 2006/07 supply and demand outlooks for wheat and for coarse grains are starkly different. Winter wheat crops in Ukraine and Russia look promising. Higher production, coupled with larger carrying stocks, will boost total supply in this region and allow for higher domestic use. Exports are also expected to climb (except Ukraine), with more likely being sold to key North African and Middle East markets. This will intensify competition for traditional suppliers such as the United States and the European Union.

According to Federal service of Russian State Statistics grain crop totaled 82.3 Mt in bunker weight by November 1, 2006, down 0.5% from the analogous date of 2005. At the same time grains were threshed from 93% acreages including maize - from 71%.

At the beginning of 2007 Russian market of milling and feed wheat was characterized by price stability. Insignificant price decreasing was observed in the southern region. Demand for feed barley slightly activated in the southern region and Volgograd region. Feed maize market kept price stability. In 2006/07 MY demand prices for wheat and barley in the export grain market in Russian ports increased. High demand from Russian and foreign importers supported prices for Kazakh milling wheat.

According to the forecast, in the current 2006/07-season Kazakhstan will export about 6 Mt of grain. Such export volume would be reached due to record harvest of grain 2007 – 18.5 Mt.

As of November 1, 2006, Ukraine had harvested 4.74 Mt of grain maize from 1,244 Mt ha. It is down 17.3% from last year according to State Statistics Committee. The average yield of grain totals 3.81 tonnes per hectares (against 4.39 tonnes per hectare in 2005). Poltava region is the leader from other regions on harvesting campaign - 526,000 tonnes; average yield is 4.28 tonnes per hectare.

According to State Statistics Committee, by the 1st of November Ukraine had in stocks 12.92 Mt of grain, down 4.3 Mt last year. In particular, Ukraine has 6.25 Mt of wheat (against 8.16 Mt as of November 1, 2005). 6.34 Mt from the total volume of grains being in stocks falls to the share of agrarians (including 2.58 Mt). Storage and milling enterprises had 6.58 Mt in their stocks (including 3.68 Mt of wheat).

In 2006/07 Ukrainian market of wheat noticed reducing of trade-purchasing activity due to introduction of limits for grain export. Lack of offers against a background of high demand caused selling prices range reduction in feed wheat market. The markets of feed barley noticed price stabilization due to halting of purchasing activity of export-oriented companies. Harvesting progress and more real lots from Russian and foreign importers supported prices increasing of grain productivity to 1.6%.

In 2006/07-season trade-purchasing activity in milling wheat segment in Ukrainian ports was low. The decision of Cabinet of Ministers about introduction of quotation for export of feed barley, wheat, feed maize and rye influenced trade-purchasing activity in the grain market. Conclusion of new external economic contracts between foreign importers and Ukrainian export-oriented companies was minimal. At that, interest of foreign companies towards import of Ukrainian grains remained high.

The Cabinet of Ministers of Ukraine implemented grain export licensing and quotation regime in October 2006. This document offers to impose the following volumes of quotas of grain export from Ukraine till June 30, 2007: wheat and mixture of wheat and rye (meslin) (except emmer wheat) - 730,000 tonnes; barley – 1.3 Mt; maize - 840,000 tonnes; rye - 3.000 tonnes.

The indicated document provides exclusion of requirements concerning total volumes of quotas for agricultural products export in 2006 from the
regulation of CMU No 1304 d. d. December, 2005, "On approval of list of goods which export and import is a subject of licensing and volumes of quotas in 2006".

We remind that regulations of Cabinet of Ministers of Ukraine No 1418 d. d. October, 11, 2006, introduced positions concerning grain export quotas introduction in November-December 2006 in the following volumes: wheat and mixture of wheat and rye - 400.000 tonnes; barley - 600.000 tonnes; maize - 600.000 tonnes; rye - 3.000 tonnes.

Government draft regulations introduce an order of distribution of licenses for export of separate kinds of agricultural production and quotas. In particular, it provides that 80% of total volume of export quota for separate kinds of agricultural production is distributed between applicants that exported this product last three years pro rata the volumes of actual export of the production for the indicated period. Other 20% of export quota is to be distributed between rests of applicants pro rata their declared volumes.

But at the same time the Ukrainian government’s efforts to limit exports of wheat, barley, and corn have unnecessarily disrupted the normal functioning of markets. The restrictions on exports are causing serious damage to Ukraine’s economy, its investment climate, and its reputation as a reliable trading partner.

The export restrictions are inconsistent with the spirit of Ukraine’s laudable efforts to join the World Trade Organization. Ukraine’s grain traders have faced losses in excess of one hundred million dollars, while farmers have been denied access to world market prices and have incurred storage costs for unsold grain.

Grain traders are particularly concerned by the negative long-term consequences this policy could have on Ukraine’s investment climate. They have invested nearly one billion dollars into the economy to build and upgrade important infrastructure, such as port facilities, silos, grain elevators, and processing plants. These companies are also significant employers, accounting for approximately 15-20 thousand jobs in Ukraine.

They have helped modernize and develop the Ukrainian agricultural sector, have made significant contributions to the communities where they do business, and are among Ukraine’s largest corporate taxpayers. Some of grain companies have already been forced to begin laying off workers and reducing their operations in Ukraine. The financial losses they are now enduring because of the trade restrictions come at a time when grain traders have received only a fraction of the VAT refunds that are due them.

At present the State Tax Administration owes grain traders at least $130 million in VAT refunds.

While we understand the Ukrainian government concerns for food security, the estimates from a variety of credible sources indicate that this 2006/07 MY the state won’t play a significant role on the world grain market.

The government of Ukraine should not interfere with the grain market rather than making extra efforts to work with the firms in the grain sector to address any potential supply problems. Ukrainian government concerns for food security but the justifications for grain export restrictions have not been convincing. Ukraine’s barley crop, according to all available estimates, is significantly higher in 2007 than last year. Ukrainian farmers should be able to take full advantage of international markets to sell that crop. Estimates from a variety of credible sources indicate that this 2007-year’s wheat harvest is in line with normal historical averages at around 14 Mt.

To cap it all, not everything is as simple as that, and the examples that we provided are too ideal in demonstrating the dilemma of how to opt between the methods of state support in the market. Ukrainian market situation might appear to be not so friendly for it as it has been in 2005/06-season. And while speaking of grains which were touched by governmental price support it is seen that now it is being offered at prices on the level of production cost, which does not always ensure it a buyer.

There is a real possibility to provide increasing of the Black Sea region grain production and export in comparatively short terms. The main issue today is to develop a model of grain market functioning, to define the aims, the scopes and the limits of systematic state interference, which would reduce oscillations of the price and production pendulum, provide predictability of situation on the grain market and a steady motivation of grain producers to expansion of production and the private business – to increase in investments.

According to the model of export policy of the Black Sea region it is necessary to attract direct foreign investment into grain sector and grant long-term preferential credits for grain traders to improve grain production and export of the Black Sea region. It will influence on the total grain supply, quality and domestic consumption – three main factors that make impact on forming of grain delivery.

It is proved that for optimization effective export policy it is worth returning VAT to grain exporters in time, liberalizing grain delivery, improving customs-tariff regulation to protect grain business in the Black Sea region. The model of export policy stipulates creating mechanisms of financing the new
sales markets of grains, certification of their quality and advertisement of grain trading companies.

The role of effective grain markets of Black Sea region is paramount to reach an optimal situation of economic efficiency, and hence of sustainable development and welfare. The functioning of the grain market should stimulate sustainable economic activities, otherwise long-term social and economic costs must turn out to be higher than the value created, thus leading to an overall negative value-added.

The Black Sea region can play a significant role as grain manufacturer-exporters in the world grain trading. Russia, Ukraine and Kazakhstan have all prospects to gain authority of reliable partners that guarantee qualitative products in the world grain market.

References
THE USE OF FINANCIAL INSTRUMENTS FOR ENTERPRISE FINANCING IN LATVIA

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ABSTRACT

Latvia has developed financial market instruments model that complies with European Union requirements and that could be used by companies for borrowing as a financing alternative. However, the main factor behind the low development of debt securities market is the unfavorable tax legislation towards debt securities, as enterprises can not write down all interest payments for attracted means, but for loans granted by credit institutions it is allowed. In addition to that, the preparation of financial instruments and their placement on the secondary market is a more expensive way of attracting resources, where in the case of small issues (up to 1 million LVL) the Riga Stock Exchange costs can add up to 60-70% of all costs for the resources attracted.

Latvian enterprises for the attraction of capital resources use loans 84% of volume, capital securities 13% of volume and debt securities 3% of volume, thus the Latvian enterprises become fully dependent from loan givers, as the number of banks and their capacity is limited. The state and municipal enterprises can attract capital resources on the financial instruments market, but do not use this opportunity.

The situation is different with municipalities. Latvia is the only EU country that has not ratified points 8. and 9. of the European municipality charter on free and unlimited municipality participation in the financial capital markets, consequently, Latvian municipalities have not done a single issue. The borrowing and guarantee issue of Latvian municipalities is limited by the law “On municipality budgets”, although municipalities and their enterprises are vital parts of regional development. In Estonia municipalities have done several securities issues for the cities of Tallinn, Tartu and Parnu. Also large enterprises with state and/or private capital have not done the attraction of resources on the financial instruments market in Latvia. In Estonia and Lithuania already several enterprises with state and/or private capital have done several security issues with different maturities and in different currencies.

In order to include publicly offered financial instruments on the regulated market (RSE), the accounting of the emitting enterprise has to conform to the international accounting standards, which creates additional costs for the enterprises, however, such demand conforms with the international norms.

According to the legislation, on the Latvian financial instruments market the issue of many multifunctional and complexly structured securities is possible, in the creation of which different terms and technologies can be used according to world practice.

In order to facilitate the development of the debt securities market the authors offer to make changes in the Riga Stock Exchange regulations to decrease the financial instruments service costs at least by 50%. RSE has lost economic gain from nonexistent market instruments.

Key words: Capital markets, attraction of financing, financing instruments

Since its inception in 1993, the securities market has experienced rapid development in Latvia, but, unfortunately, till 2005 the State and companies have not been using capital market as a source of financing, although the securities market in other countries plays a significant role in capital attraction. The majority of the stocks, which form the largest part of the listed securities, have been listed due to state privatization policy, and the enterprises have not themselves deliberately chosen such direction of development.

Latvia has developed financial market instruments model that complies with European Union requirements and that could be used by companies for borrowing as a financing alternative. However, the main factor behind the low development of debt securities market is the unfavorable tax legislation towards debt securities, as enterprises can not write down all interest payments for attracted means, but for loans granted by credit institutions it is allowed. In addition to that, the preparation of financial instruments and their placement on the secondary market is a more expensive way of attracting resources, where in the case of small issues (up to 1 million LVL) the Riga Stock Exchange costs can add up to 60-70% of all costs for the resources attracted.

Latvian enterprises for the attraction of capital resources use loans 84% of volume, capital securities 13% of volume and debt securities 3% of volume, thus the Latvian enterprises become fully dependent from loan givers, as the number of banks and their capacity is limited. The state and municipal enterprises can attract capital resources on the financial instruments market, but do not use this opportunity.

The situation is different with municipalities. Latvia is the only EU country that has not ratified points 8. and 9. of the European municipality charter on free and unlimited municipality participation in the financial capital markets, consequently, Latvian municipalities have not done a single issue. The borrowing and guarantee issue of Latvian municipalities is limited by the law “On municipality budgets”, although municipalities and their enterprises are vital parts of regional development. In Estonia municipalities have done several securities issues for the cities of Tallinn, Tartu and Parnu. Also large enterprises with state and/or private capital have not done the attraction of resources on the financial instruments market in Latvia. In Estonia and Lithuania already several enterprises with state and/or private capital have done several security issues with different maturities and in different currencies.

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compliance with the international norms for the inclusion of securities in the regulated market.

Currently in the Latvian debt market there are only 2 enterprises (Alta Real Estate Partners and Happy Trails), which have done debt capital attraction on the market. In other cases the issues have been done by Latvian and foreign credit institutions, which adds up to 86% of all debt issues in Latvia.

Also on the stock market the situation is similar. In the last 10 years only one new stock has appeared on the regulated market, namely, SAF Tehnika, although especially on this market the biggest investor interest can be seen, as the stock market offers the biggest profit opportunity.

Latvian state and municipal enterprises can attract capital resources on the financial instruments market, but in real life these opportunities have not been used and loans have not been issued, as large enterprises with state or municipal capital have not done resource attraction on the financial instruments market. However, in Estonia and Lithuania enterprises with state on municipal shareholding have done already several security emissions with different maturities and denominated in different currencies, for example: Lietuvos Energija AB, Mazeikiu Nafta AB, Eesti Energia AS, Eesti Telekom AS, Lietuvos Dujos AB, Lietuvos Telekomas AB, Eesti Post AS, Baltika AS, Tallink Grupp AS, Tallinna Kaubamaja AS, Endockrininiai Preparatai AB.

With regard to municipalities themselves, Latvia is the only EU country that has not ratified the 8th subpoint of point 9 of the European municipality charter on the free and unlimited participation of municipalities in financial capital markets, thus Latvian municipalities have not done any issues. The borrowing and guarantee issue of Latvian municipalities is limited by the law “On municipality budgets”, although municipalities and their enterprises are vital parts of regional development. In Estonia and Lithuani enterprises with state on municipal shareholding have done already several security emissions with different maturities and denominated in different currencies, for example: Lietuvos Energija AB, Mazeikiu Nafta AB, Eesti Energia AS, Eesti Telekom AS, Lietuvos Dujos AB, Lietuvos Telekomas AB, Eesti Post AS, Baltika AS, Tallink Grupp AS, Tallinna Kaubamaja AS, Endockrininiai Preparatai AB.

For example, in Russia in 2005 such securities appeared on the market in the nominal volume of 4 billion USD. The Latvian legislation does not limit the emission of such securities and the possibility of their emissions is foreseen in chapter 11 of EC regulation No.809/2004.

In 1994 the Cabinet of Ministers appointed a working group to develop a securities market conception. This conception was developed by the Ministry of Finance together with Riga Stock Exchange and broker associations of commercial banks. On November 22, 1994 the Cabinet of Ministers approved the Securities market development conception, which was based on the analysis of Western European and US securities markets, research on the newly created Eastern European securities markets, as well as international standards and suggestions, which regulate the securities markets in the world. In the West two securities market conceptions are dominant: Anglo-Saxon and Continental Europe systems.

The main signs of a Continental Europe System are:

- Centralized market – centralized depository, Stock Exchange is serving as a central securities market spot;
- Brokers and banks are acting as intermediaries in the market;
- The market is accumulating the orders of buyers and sellers, executing them in a stock exchange.

Riga Stock Exchange in July 21, 1994 signed a cooperation agreement with Paris Stock Exchange and France Central Depository, which foresaw the creation of a modern and regulated Stock Exchange and depository in Latvia. In the framework of this agreement French government allocated significant financing, and French securities experts together with Riga Stock Exchange elaborated suggestions for the creation of securities market structure.

As the main components in the securities market development conception were determined:

- The creation of securities market legislation;
- Creation of securities market settlement system;
- Creation of trading system;
- Creation of securities market supervision institutions;
- Coordination of Latvian securities market with the rest of Baltic countries and other European stock markets.

In carrying out these basic propositions, a securities market has been created with all the most important institutions for effective operations:

- Financial and Capital Markets Commission has been created, which until July 1, 2001 was known as Securities Market Commission;
The use of financial instruments for enterprise financing in Latvia

- Riga Stock Exchange has been formed in accordance with Continental Europe stock Exchange conception according to the so called Order driven securities trading model;
- The formed Latvian Central Depository is booking, accounting for and storing all Latvian securities in public circulation, as well as is ensuring settlements for securities deals.

As intermediaries in the securities market are operating only licensed intermediaries (banks, broker companies). [1]

The financial instruments market in Latvia is being regulated based on the Financial Instrument Market Law. The goal of this law is to ensure the functioning of financial instruments market, fostering:
- Protection of the rights of investors;
- Stability and reliability of the financial instruments market;
- Information availability and equal rights to all participants of the financial instruments market. [3]

The financial instruments market law is regulating the making of public offer, public turnover of securities, investment services offering, the order of licensing and supervision of securities market participants, is determining the order of financial instruments market participants licensing and supervision, their rights and obligations, as well as the responsibility for breaking the law.

The financial market instruments law is regulating only the public turnover of financial instruments, determining the primary and secondary circulation of securities [3]. This means that there is also a primary and secondary turnover of financial instruments, not regulated by the law, as the main task of the Financial Instruments market law is defending investors who invest in securities in public circulation. We can thus conclude that there are publicly and non-publicly offered financial instruments. This means that in the case the emitted financial instrument is not being publicly offered and included into the secondary market, the primary and secondary circulation of this financial instrument from the viewpoint of legislation is not regulated. The world practice is that a large share of financial instruments is being distributed by the means of private placements, as public offer is meant for the cases when the round of potential investors is not known. However, if the range of potential investors is known, there is no need for the financial instrument emitter to pay additionally for preparing a public offer.

Similar situation is also with including the financial instrument in the regulated market in the case the owner of the financial instrument does not need high liquidity, then also in this case the emitter of the financial instrument does not have to uselessly pay for the public placement. The abovementioned can be attributed not only to Latvia, but also to the European Union, as since July 2005 the public placement of financial instruments in the secondary turnover in Latvia is being regulated in accordance with the requirements of European Commission regulation No. 809/2004.

In order to facilitate the development of the debt securities market, the authors offer:
- To change the law „On securities market“, where enterprise payments for publicly attracted resources have to be written down in expenses, equaling it to banking loan interest payments;
- To change the law „On individual income tax“, where the income from public securities investors physical persons would not be taxed with 25% income tax, as this makes enterprise debt securities less attractive compared to state securities, mortgage securities and bank deposits, whose income is not being taxed with individual income tax and creates conditions of unequal competition.
- To make changes in the Riga Stock Exchange regulations decreasing the financial instruments service costs at least by 50%. RSE has lost economic gain from nonexistent market instruments.
- Latvia has to fully ratify the European municipality charter and to do consequent changes in the legislation allowing the Latvian municipality free and unlimited participation in Latvian and international financial markets.
- Latvian credit institutions, in analogy with Russia, have to start the issue of securitized assets, which on the Latvian securities market would create a new possibility for enterprises and securities issuers to release securities with a risk evaluated by a bank. This can significantly increase and diversify the resource base of the bank for further credit operations.
- The Latvian state (Ministries of Finance and Economics, as well as the Bank of Latvia) have to inform entrepreneurs on alternative ways of capital attraction compared to loans in the European Union (including Latvia), which will enlarge their financing opportunities and decrease their direct dependence from the influence and instability of lenders.

References

FOOD POLICY IN HUNGARY

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ABSTRACT

Hungary has recently become a member of the European Economic Union (EU) and most of the economic benefits are expected to come from expanded trade with other EU nations. While some variation in agricultural policy continues to exist between EU members, all countries generally benefit from lower tariffs and expanded trade opportunities. However, Hungary must also be able to compete on the basis of quality and price in order to maintain current domestic markets and sell more to other EU countries. In order for the Hungarian agriculture and food industry to contribute to economic development it must continue to focus on efficiency and competitiveness. Hungary benefits from many natural features which provide favourable conditions for agriculture: fertile plains, an advantageous climate and production experience which makes possible a total yearly agricultural and food products trade surplus fluctuating between 1.5 and 2 billion US $ for the last 12 years. But after the EU accession the Hungarian internal market has become fully open and domestic products have to compete with the products of other EU members. This is why the renewal of food regulation and policy was indispensable. This article examines the Hungarian food policy (1) before the transformation to a market oriented system, when the policy was quantity orientated, (2) during the pre-accession period, when quality policy became more important, and (3) after accession to the EU where food safety has become more important.

The effect of transformation on the Hungarian food industry

The Hungarian food industry plays an important role in foreign trade. Agriculture and food policy prior to the transformation to a market oriented economy in 1990 consisted of high levels of state subsidies and protection from import competition. The rapid collapse of traditional agricultural and food policy in 1990 led to a sharp decline in domestic purchasing power and a sharp increase in competition from imported agricultural products. As a result, a number of traditional food producing and processing companies were placed in a difficult financial position. Transformation resulted in two radical changes in the food sector: privatisation started and the number of small enterprises operating in the food industry increased from several hundred to more than ten thousand.

Transformation to a market oriented economy allowed for privatization of firms within the agricultural and food system. This allowed agricultural producers obtain ownership shares in food processing companies. This was intended to reconcile the interests of agricultural producers and food processors, much like the Danish cooperative model. In practice this goal was not achieved, because the agricultural producers were not financially capable of improving the economic position of food industrial plants, so the buying of shares in food industrial plants for vouchers did not lead to a capital inflow into the food industry. As mentioned above, the majority of Hungarian food processors were rather unfavourably placed, and so the ownership change would have made the economic situation of agricultural producers even worse [Buday, 2001].

Hungarian privatisation was unique in Central and Eastern Europe. Since 1989 a significant change has occurred in the structure of Hungarian agriculture that will impact future production and trade. Privatisation brought real owners to Hungary, those who invest, which brings the necessary financial means for restructuring. In addition, approximately half of the foreign direct investment to Central and Eastern Europe is in Hungary, and those are mostly medium or long-term investments. So the foreign direct investment (FDI) has increased substantially, and state ownership of businesses has declined to approximately two percent. International companies that have acquired stakes in the Hungarian food sector during privatization have brought with them modern practices in production and processing. Just as significant is the superior expertise they have brought in marketing and new product development. Foreign direct investment has also stabilized many companies that were in bad financial shape and helped regain export share that was lost in the early 1990’s.

In 1998 the share of companies with majority foreign ownership accounted for 51% of total food sales, and 68% of equity in the industry. These firms only accounted for 14% of the firms in the industry. Firms with majority foreign ownership control production and processing of vegetable oil, sugar, beer and tobacco. Foreign ownership is insignificant in the milling and wine industries. Countries with the largest direct investment are the Netherlands with 58 billion Hungarian Forints (58 bn HUF), Austria (24 bn HUF), Germany (23 bn HUF), Switzerland (18 bn HUF), USA (15 bn HUF) and the UK (14 bn HUF).

In 2000 Hungarian investors owned one third
of the firms with the remainder being owned by foreign investors outside the EU. The firms remaining in Hungarian hands tend to be smaller and more inefficient. In 2000 foreign ownership accounted for 61% and state ownership of businesses has declined to approximately two percent (figure 1).

![Ownership division](image)

Source: Central Statistical Office

**Figure 1. Ownership division within called up share (1st January, 2000)**

The number of enterprises operating in the food industry was 9300 in 1999, and 8070 in 2002. But 80% of the added value was produced by 180 major companies. Small and medium sized food producers struggle with weak financial status, insufficient development resources and structural difficulties. The number of medium sized companies shows a decreasing tendency.

Structure of the food industry according to income generated is as follows (Table 1):

<table>
<thead>
<tr>
<th>Amount of income (billion)</th>
<th>Number of enterprises</th>
<th>%</th>
<th>Net income billion Ft</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>over 20 bn.</td>
<td>18</td>
<td>0,6</td>
<td>541,3</td>
<td>28,8</td>
</tr>
<tr>
<td>between 10-20 bn.</td>
<td>33</td>
<td>1,1</td>
<td>469,2</td>
<td>25,0</td>
</tr>
<tr>
<td>between 5-10 bn.</td>
<td>29</td>
<td>1,0</td>
<td>204,4</td>
<td>10,9</td>
</tr>
<tr>
<td>between 3-5 bn.</td>
<td>47</td>
<td>1,6</td>
<td>99,6</td>
<td>5,3</td>
</tr>
<tr>
<td>between 1-3 bn.</td>
<td>136</td>
<td>4,6</td>
<td>400,5</td>
<td>21,3</td>
</tr>
<tr>
<td>under 1 bn.</td>
<td>1696</td>
<td>91,1</td>
<td>165,0</td>
<td>9,7</td>
</tr>
<tr>
<td>total</td>
<td>2959</td>
<td>100,0</td>
<td>1880,0</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Source: Central Statistical Office

**Table 1. Size structure of food industry**

Characteristics of food policy before transformation

The most important aim of food policy is to provide the Hungarian citizens with a sufficient amount of food. Contrary to the situation in most Central and Eastern European countries the food shortage in Hungary was eliminated from the beginning of the sixties. Because of good production conditions Hungary developed a food surplus, which went to the Eastern European markets. Hungary became a major supplier of processed foodstuffs to the socialist countries before 1989 and developed a well established food industry. Very little competition from non-Soviet Bloc nations was permitted, so a general and continuous development in food quality was not required. Companies were involved in quality selection instead of quality assurance. For example, the best quality products went to the Western markets, products with medium quality stayed in the internal market, and the rest went to the Eastern markets.

Enterprises exporting outside of the Eastern Bloc had subsidies to earn hard currency. Therefore, even before the end of Communism, many companies were used to meeting Western quality standards.

During the period between 1989 and 1992 Hungarian companies switched their foreign trade
Quality as the main factor of competitiveness

Quality control and quality assurance in the Hungarian agriculture and food industry was considered adequate for more than a hundred years. But since Hungary joined the EU, the issues of quality have come into prominence. For the Hungarian food industry, improvements in the level of product quality is important in order to maintain both domestic and international markets.

In 1991, Hungary began the process of working to bring food safety and quality control programs in line with EU requirements. Prior to 1989, most Hungarian exports were shipped to other Former Soviet countries, and those countries did not always impose the more stringent quality and safety standards of the EU. Another concern of the Hungarian food industry was the increased competition from EU imports after Hungary joined the EU. The opportunity for domestic consumers to purchase a wider variety of high quality foods at competitive prices could have a serious impact upon the ability of traditional Hungarian firms to survive [Tomcsányi, 1998].

In terms of Hungary’s accession, it is significant that the enterprises operating in the food industry meet the requirements of food law, food trade and consumer needs. To meet the strict food safety rules is not just a question of government control. It is the main condition for maintaining competitiveness and growing market share.

Competitiveness involves a number of important elements, such as: development of quality, the improvement of the regulating environment, the development of education and training, and the redistribution of research and development resources. Accordingly, it is essential for the small- and medium-sized enterprises to apply food safety and quality systems which meet strict requirements of food safety and hygiene. Beyond that, applying quality management systems and following quality strategies is necessary in order to have improved profitability.

So the majority of food processing companies in Hungary have implemented up-to-date systems of quality assurance in order to ensure uniform food quality. By the end of 1997, more than 122 food processing companies applied the ISO quality management system. With the growing importance of food safety, in 1996 more than 50 companies applied several elements of Hazard Analysis and Critical Control Points (HACCP). This is especially true for food likely to deteriorate [Biacs&Váradi, 1999].

Quality policy before the EU accession

The Hungarian food industry has become economically fully integrated into the EU’s food industry. Investors from the EU hold more than half of the food industry’s registered capital, and in the EU, the destination of around 80% of the exports of companies with a majority foreign ownership.

In the pre-accession period, the primary aim of the food industry was to comply with the European Union regulations. This involved establishing the technical conditions required for compliance with food safety and hygiene regulations; the modernisation of environmental protection and waste management; implementing the provisions of the EU’s animal welfare regulations; technological development; and improvements in the level of product quality.

The renewal of food regulation was indispensable not only because of the country’s entry into European Union, but also because of the necessity of adaptation to technical and economical development, and for the sake of improving the competitiveness of Hungarian food industry [Tomcsányi, 1998]. Without successful quality-oriented development Hungary could not have been integrated successfully into the European Union [Láng&Csete, 1999].

In order to assist and orient those companies which apply ISO systems, the Agricultural Ministry started to work out quality policy for the agri-food sector in 1997. This document listed all necessary measures of quality improvement essential to assure maintaining the good position of Hungarian products in the Single Market.

The quality policy is defined as:
- the establishment of the framework of harmonisation and declaration of the methods of harmonisation;
- those quality assurance principles and methods which can help food producers to meet the new quality requirements;
- those continuous measures which ensure that these methods are used in the food sector;
- tasks and methods of food control.

The main aims of quality policy are the following:
- quality policy should be built on the basic principles and food policy of the EU;
- give a helping hand to the agri-food sector to develop its own quality control systems;
- set an examples for food producers and professional associations to work out their own quality
Food policy in Hungary

policy;
• assist and improve the competitiveness of the food industry;
• harmonise with the principles of consumer protection [Bálint&Fehér, 1999].

Tasks of the implementing food policy
The tasks of the implementing food policy can be divided into two groups: one of them is the group of direct, the other one is the group of indirect state tasks.

Direct state tasks in the short run (in the middle of 1990’s):
• implement the Regulations of Act XC of 1995 on Foods;
• adopt technical regulation of the EU into the Volume I. of the Hungarian Food Codex (Codex Alimentarius Hungaricus);
• work out the Volume II. and III. of the Hungarian Food Codex;
• work out special quality infrastructure alignment with other national systems.

Direct state tasks in the middle run:
• revision of those Hungarian rules, which are not in the same as EU food rules;
• promote the application of Good Hygiene Practice in agri-food sector;
• involve several representatives of the economy and society (consumer protection associations, chambers) in the preparatory work.

Continuous state tasks:
• keep up with changing EU regulations;
• prepare for an active role in the EU legislation.

Tasks of the administrative control:
• work out common regulations and tariffs according to the food law;
• insure that companies apply HACCP food safety and ISO9000 quality management systems;
• authorities have to use risk analysis;
• fulfill the accreditation of laboratories;
• pay more attention to risk management and risk communication;
• join the administrative control system of the EU and its Member States;
• risk communication: prepare national statistics on the data of authorities and inform the inhabitants [Keleti&Racz, 1999].

Indirect state tasks:
• assist the preparation of methodological books for establishing and applying quality assurance systems;
• organize technical assistance campains to disseminate information on the implementation of quality assurances systems and tools of ISO9000, HACCP and TQM systems;
• these campaigns have to target at representatives of agricultural producers, and food companies, with special regard to SME’s in the vertical products chain [Szabó, 1998];
• assist the principles and methods of TQM;
• give direct state support on the implementation of quality assurance systems.

Results and principles of implementation of food policy
In 1991 Hungary started its EU harmonization programs for food safety and quality control [Szaby, 1999]. The following steps were made: become acquainted with the mechanism of the EU, collection and analysis of the EU food legislation, studying the EU regulatory system, the establishment of the framework of harmonization and declaration of the methods of harmonisation. The purposes of harmonisation were first to improve the competitiveness of Hungarian foodstuffs in the market-place. Second was to prepare the industry for EU accession, giving sufficient time for the economy to study and apply the necessary regulations and changes.

In these tasks, the main Ministerial responsibilities were to prepare and publish the Parliamentary and Ministries Acts. Furthermore, three ministries (Agricultural and Rural Development, Public Welfare, and Economy) had the duties of implementing the regulations. In fact, The Hungarian Office of Standardization had the full responsibility in the field of food standardization. Furthermore the different civil organisations were involved in the work of the Food Safety Advisory Board, managed by the Ministry of Public Welfare who organised the National Food Safety Program [Hungarian Food Codex, 1999; Act XC on Foods, 1996].

The third Food Act, come into force on 1st January 1996. This is the most recent Act and the most important. It determined the conditions for the production and marketing of raw, semi-processed and processed food intended for public consumption. The Act has the following aims: to protect consumers health interests, to develop fair market competition and to promote the free movement of goods. The Food Act was established as a framework for further harmonization with EU food legislation and it time incorporated a number of EU documents. For example the labeling and official control of foodstuffs [White paper on the food safety, 2000]. The legal framework has three levels: law, regulations and Hungarian Food Codex.

The Hungarian Food Codex (Codex Alimentarius Hungaricus) is a collection of obligatory provisions and recommended guidelines concerning raw and processed foods. Volume One of the Hungarian Food Codex adopts about 130 detailed (technical) regulations of the EU. The provisions of Volume One are
mandatory. Volume Two of the Codex sets out guidelines for various foods and groups of products, which are not regulated by the EU but which are important for Hungarian producers or customers. Application of the guidelines is voluntary – but, if the product is sold under the name indicated in the Hungarian Food Codex it should be in accordance with the description contained in the Food Codex. Volume Three of the Codex – the Official Food Testing Methods – contains the methodology to be used by inspectors in enforcing the rules set out in the first two volumes. This methodology can be adopted from EU rules, Hungarian inspection regulation or can be independently drafted.

Adoption of the EU food legislation was completed in Hungary by the end of 1998, but the task remains to keep up with changing EU regulations. The EU Commission evaluates how well Hungary complies with EU food legislation. [Fehér, 2002].

Joint Decrees on administrative control, 35/1996 FM-NM-IKIM and 45/1999 FVM-EüM-GM are in force.

Effects of the legislation show that the quality management in the food chain has improved in more than 4000 food companies. The Hungarian government has partially financed the implementation of the HACCP in more than 400 companies and ISO in 300 companies.

In 1998, the Ministry of Agriculture and Rural Development launched an application system for the „High Quality Hungarian Food“ trademark, to support Hungarian producers offering quality products. The trademark indicates not only the Hungarian origin of the products, but also that it complies with EU norms, has been regularly inspected during the production process, and possesses at least one outstanding characteristic in comparison with other similar products. At present, about 200 products of 73 companies have the right to use the trademark, and these numbers are expected to grow yearly.

It is widely known that the impact of food quality and safety improvement in the Hungarian economy has an important role to play because the cost of public health care and absenteeism from work decreases, as the health of population improves. The production and efficiency within the country will improve and will show positive benefits to Hungarian society. Thankfully, in the food industry the loss caused by bad food is decreasing and employment, revenue and welfare are increasing. Much of this improvement in quality can be traced directly to those steps required to comply with membership in the European Union [Fehér, 2002].

Food policy after the EU accession

Hungary joined to the European Union on 1st May, 2004. Since that time, Hungarian food policy has been determined by the EU food policy and legislation. EU rules and regulations that have been put into force are more stringent than the previous Hungarian Food Acts. The EU food law aims at ensuring a high level of protection of human life and health, taking into account the protection of animal health and welfare, plant health and the environment. This integrated “farm to fork” approach is now considered a general principle for EU food safety policy. Food law, both at national and EU levels, establishes the rights of consumers to safe food and to accurate and honest information. The EU food law aims to harmonise existing national requirements in order to ensure the free movement of food and feed in the EU. Hungary as a Member State has followed the EU legislation from the time of accession.

Food policy of the European Union

The agro-food sector is of major importance to the European economy. The food and drink industry is a leading industrial sector in the EU, with an annual production worth almost 600 billion, or about 15% of total manufacturing output. An international comparison shows the EU as the world’s largest producer of food and drink products. The food and drink industry is the third-largest industrial employer of the EU with over 2.6 million employees, of which 30% are in small and medium enterprises. On the other hand, the agricultural sector has an annual production of about 220 billion and provides the equivalent of 7.5 million full-time jobs. Exports of agricultural and food and drink products are worth about 50 billion a year. The economic importance and the ubiquity of food in our life suggest that there must be a prime interest in food safety in society as a whole, and in particularly by public authorities and producers.

The main aim of processing and marketing food products is to create conditions for adequate and healthy human nutrition. Marketability and market competitiveness of foodstuffs are determined by the quality of products. But the lack of hygiene or safety of products set a limit to marketability. According to the Codex Alimentarius Commission of FAO/WHO: „Food safety means the assurance that food will not cause harm chemically, microbiologically or physically to the consumer when prepared or eaten according to its intended use.“

During the last years several food safety problems have been connected to foodstuff produced and marketed in the EU. This has resulted in a shock to consumer confidence. These emergencies have exposed weaknesses which call for action by the responsible authorities (Commission, Member States and the Parliament), to re-enforce, improve and
Food policy in Hungary

The food produced on their territory, but to all citizens of the EU and third countries for enforcement above all should remain primarily a national responsibility: each Member State has a duty towards not only its own citizens in line with the principle of subsidiarity. Responsibility for enforcement above all should remain primarily a national, regional and local responsibility. However, the most comprehensive system in line with the principle of subsidiarity. Responsibility for enforcement above all should remain primarily a national, regional and local responsibility. However, the most comprehensive system cannot function without the full collaboration of all parties involved. The proper functioning of any system depends on the commitment of the Member States and operators, as well as third countries. Consumers should be offered a wide range of safe and high quality products coming from all Member States. This is the essential role of the Internal Market.

An effective food safety policy must recognise the inter-linked nature of food production. It requires assessment and monitoring of the risks to consumer health associated with raw materials, farming practices and food processing activities; it requires effective regulatory action to manage this risk; and it requires the establishment and operation of control systems to monitor and enforce the operation of these regulations.

Each element forms part of a cycle: thus, developments in food processing can require changes to existing regulations, whilst feedback from the control systems can help to identify and manage both existing and emerging risks. Each part of the cycle must work if the highest possible food safety standards are to be enforced.

These facts therefore demand a comprehensive and integrated approach to food safety. This does not mean that the EU should be exclusively responsible for all aspects of food safety. However, it demands that all aspects of food safety are addressed at the EU level. For example, EU legislation has to be enforceable in an efficient way in the Member States in line with the principle of subsidiarity. Responsibility for enforcement above all should remain primarily a national, regional and local responsibility. However, the Internal Market means that these are not exclusively national responsibilities: each Member State has a duty towards not only its own citizens but to all citizens of the EU and third countries for the food produced on their territory [Molnér, 2001].

Consumers are greatly concerned by the risk of chemicals in food. In particular they are concerned with pollutants, chemical additives, agrochemicals and veterinary drugs. The EU introduced its new and improved food safety policy a few years ago through the EC White Paper on Food Safety (12 January 2000 Commission (1999) 719 Final). The White Paper contained a list of risky chemicals and an improved risk assessment procedure, together with the establishment of the European Food Safety Authority. The Regulation EC 178/2002 made the White Paper compulsory This Authority was entrusted with a number of key tasks embracing independent scientific advice on all aspects relating to food safety, operation of rapid alert systems, communication and dialogue with consumers on food safety and health issues as well as networking with national agencies and scientific bodies.

The Hungarian Government issued the Decree No. 66/2003 on the establishment of the Hungarian Food Safety Office (hereinafter referred as Office) on 15 May 2003. The Office began on 30 of May 2003, under the supervision of the Minister for Agriculture and Regional Development, and Minister for Health, Social and Family Affairs (MHSFA). The Office is helping to make the operation of the institutions and authorities in the food safety process more efficient. Among other professional tasks, the Office is responsible for collecting, analysing and, if necessary, publishing the results of food and feed safety monitoring tests carried out by the authorised laboratories. The Regulation EC 178/2002 establishes the principles of risk analysis in relation to food and establishes the structures and mechanisms for the scientific and technical evaluations which are undertaken by the European Food Safety Authority (EFSA).

Depending on the nature of the measure, food law, and in particular measures relating to food safety must be underpinned by strong science. The EU has been at the forefront of the development of the risk analysis principles and their subsequent international acceptance. Regulation EC 178/2002 establishes in EU law that the three inter-related components of risk analysis (risk assessment, risk management and risk communication) provide the basis for food law as appropriate to the measure under consideration.

The guiding principle throughout this White Paper is that food safety policy must be based on a comprehensive, integrated approach. This means throughout the food chain (‘farm to table’); across all food sectors; between the Member States; at the EU external frontier and within the EU; in international and EU decision-making fora, and at all stages of the policy-making cycle. The pillars of food safety contained in this White Paper (scientific advice, data collection and analysis, regulatory and control aspects as well as consumer information) must form a seamless whole to achieve this integrated approach.

The roles of all stakeholders in the food chain (feed manufacturers, farmers and food manufacturers/operators; the competent authorities in Member States and third countries; the Commission; consu-
The traceability of feed and food and their ingredients is important for the safety of food. The traceability of feed and food and their ingredients is important for the sake of food safety and quality, which have to be trace during the whole food chain. The food production chain is becoming increasingly complex. Every link in this chain must be as strong as the others if the health of consumers is to be adequately protected. This principle must apply whether the food is produced within the European Community or imported from third countries.

This comprehensive, integrated, approach leads to a more coherent, effective and dynamic food policy, which is the aim of Hungary. It needs to address the shortcomings which flow from the current sectoral, rigid approach, which has limited its ability to deal rapidly and flexibly with risks to human health. The policy needs to be kept under constant review and, where necessary, be adapted to respond to shortcomings, to deal with emerging risks, and to recognise new developments in the production chain. At the same time, the development of this approach needs to be transparent, involving all the stakeholders and allowing them to make effective contributions to new developments.

By implementing the aims and basic principles of national food policy, which is built around high food safety standards, the production and consumption of food has economic and social consequences. It results in improving the competitiveness of the Hungarian food industry. It also strengthens the good reputation of foods and improves international trade. In addition, the state and quality of the environment, in particular the ecosystems, may affect different stages of the food chain. Environment policy therefore plays an important role in ensuring safe food for the consumer.

Basic principles of the Hungarian National Food Policy

1. Traceability: comprehensive food safety from the farm to the table

The traceability of feed and food and their ingredients is important for the safety of food products. This principle is parallel with the principle of „from farm to the table”.

Food safety has a high priority in the European Union and has played an important role in the accession preparations. The new Member States need
to ensure that they apply all food safety rules and that they have the appropriate control mechanisms in place. Consumers must have the guarantee that only safe food will circulate freely in the enlarged Union.

2. Focal point is on the consumer

Food production is a profit oriented activity which can lead to conflicting goals between producers and consumers. But the primary concern must always be the protection of consumers’ health.

3. Transparency

Food safety and the protection of consumer interests are of increasing concern to the general public, non-governmental organisations, professional associations, international trading partners and trade organisations. Therefore, the Regulation establishes a framework for the greater involvement of stakeholders at all stages in the development of food law and establishes the mechanisms necessary to increase consumer confidence in food law.

This consumer confidence is an essential outcome of a successful food policy and is therefore a primary goal of EU action related to food. Transparency of legislation and effective public consultation are essential elements of building this greater confidence. Better communication about food safety and the evaluation and explanation of potential risks, including full transparency of scientific opinions, are of key importance.

4. Risk analysis

Risk analysis (risk assessment, risk management and risk communication) provides the basis for food law as appropriate to the measure under consideration. Scientific assessment of risk must be undertaken in an independent, objective and transparent manner based on the best available science.

Risk management is the process of weighing policy alternatives and, if required, selecting the appropriate actions necessary to prevent, reduce or eliminate the risk to ensure the high level of health protection determined as appropriate in the EU. In the risk management phase, the decision makers need to consider a range of information in addition to the scientific risk assessment. These include, for example, the feasibility of controlling a risk, the most effective risk reduction actions depending on the part of the food supply chain where the problem occurs, the practical arrangements needed, the socio-economic effects and the environmental impact.

5. Integrated multisectoral approach

The issue of food safety is affected by science and technology. Agricultural and food production and distribution is directly connected with environmental and agrarian branches of science, plant and animal hygiene, food technology, microbiology, veterinary science and public health. It has connection with the economic science, monetary and social policy, lobbies and governmental and non-governmental organisations.

6. Consumers and producers responsibilities

Consumers must also recognise that they are responsible for the proper storage, handling and cooking of food. In this way, the farm to table policy covering all sectors of the food chain, including feed production, primary production, food processing, storage, transport and retail sale, will be implemented systematically and in a consistent manner.

Hungarian National Food Safety Program

The World Health Organisation (WHO) and the EU urge the working out and implementation of national food safety programs. WHO and FAO continuously draw the attention to the importance of food safety. In the USA the new national food safety program has started in 1997, it was the „Food Safety from Farm to Table: a new strategy for the 21st century”.

According to the international recommendations Hungary has started the implementation of its own national program. On the issue of food safety almost in every field of science has very useful research results. The Food Science Committee of the Hungarian Academy of Sciences started to work out the study of „Recommendation for the implementation of Hungarian food and nutrition policy” in 1993.

Based upon international examples, the Joint Safety Advisory Board of Agriculture and Rural Development and Ministry of Health was established in 1997. The 14 members are the representatives of ministries, specialist of national institutes, Hungarian Academy of Sciences, food control authorities, food R&D organisations and products councils [Fehér, 2002].

The main tasks of this Board were the following:
• to analyze the food safety status in Hungary;
• to develop food safety strategy;
• to define basic principles and aims of food policy;
• to give scientific advise to the government.

Priorities and fields of Hungarian National Food Safety Program

1. development of microbiological food safety;
2. development of chemical food safety;
3. application of new technologies;
4. coordinated operation of monitoring and surveillance systems;
5. assistance of food R&D activities;
6. modernization of legislation and institutional development;
7. improvement of administrative control;
8. improvement of education about food safety;
9. effective application of food safety and quality assurance systems;
10. controlling of special food products;
11. decreasing the manifestation of food allergy;
12. maintenance of good quality and safety of drinking water in Hungary [Hungarian National Food Safety Program].

There were significant changes in the Hungarian Food Policy during the last decades. Before the 1990’s quantity policy was the top priority for the nations. In the pre-accession period it was obvious that without successful quality oriented development Hungary could not be integrated succesfully into the European Union. So quality policy came into prominence. With the EU-membership, adopting the relevant EU rules for food safety as a condition of market presence and competitiveness has come into the front. Two things have been important throughout the history of Hungarian food policy: to ensure consumers’ health and preserve the good reputation and trademarks of Hungarian foods.

References

Articles in Journals


Books and articles in edited books

Acts and directives
SELECTED ISSUES AND TRENDS IN HUNGARIAN DAIRY CHAIN

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Introduction

Food consumption patterns in Hungary have greatly changed over the past forty years, exhibiting two different trends before and after the end of 1980s. In the long run the consumption of all products except cereals and potatoes, has increased. From the 1950s to the late 80s the consumption of meat, dairy, fats and oils, sugar and eggs increased dramatically. Since the 1980’s due to both income and price effects, consumption of food either decreased rapidly (meat, dairy and eggs), continued to decrease (cereals), or stabilized (potatoes, fats and oils and sugar). In real terms, per capita income decreased by about one-fourth since 1990. The share of food products in the average household budget has remained stable, at about 27 percent, while the share of other products like beverages, clothing, durable goods have slightly decreased and the share of energy and services have increased.

In the food retail sector Hungary is a quite well developed almost mature market especially compared to the other countries in the CEE region. With the appearance of retail chains the relationship of producers-traders considerably changed the partners are usually not equal. One of the main problems that SME suppliers are not able to supply in sufficient quantities even to a small chain. Small-size enterprises have chances in particular in those fields where small-scale production and special products are characteristic and when these products satisfy niche markets. In these fields they are more flexible than a large-scale enterprise but can only stay in game with good quality.

The food chain as a process can be divided into four main vertical components: agricultural production, processing, distribution and consumption. Processing covers the set of activities starting with the purchase of agricultural produce and ending at the point of transportation to the distributor. Traditionally in Hungary the measurement of the competitiveness in food production has been narrowly defined. But nowadays, it is contended that competitiveness is best defined as the ability to meet the requirements of all the actors in each vertical component of the food chain including, importantly, the upstream components. Acceptance of this concept places a much heavier ‘burden’ on processing enterprises.

Based on the general approach, it is recognized that the most important factor of the product chain is the retail/ consumer part, which influence more the all players of a given chain. There is another element which has play an important role, which is the possible options for diversification of the existing product structure.

Among the requirements which affect the processing industry price is constantly the most important one, however, quality requirements and other requirements of the distributors and consumers have all to be identified and effectively addressed.
At present those Hungarian food-processing enterprises which are able to meet the requirements of both the distributors and consumers at least at a minimum level required are considered viable.

The decisive management and meso-level policy question refers to the degree of vertical coordination and/or integration since the food industry signals through these agricultural production and the factors of quality and quantity. In Hungary, due to the political and economic transition, the earlier (and highly developed) vertically integrated structure was destroyed. This caused many of the largest problems in agricultural production during the last transitional decade; it also negatively affected the bargaining power of agricultural producers.

This study has mainly analysed one of the most important sectors of Hungarian animal product chain which is the dairy sector. The analyses of the links and relations are useful to have a vertical approach in a given product group, to show the changes in the vertical links and divided the channels into three stages: production, processing and wholesale and retail/consumer part. The source of data for the dairy sector is mainly the Agricultural Statistical Yearbooks 1998, 2002; the experts of CSO; Food98 Foreign Trade Database and on the retail formats a report of GFK Hungary.

Dairy products demand patterns

The per capita food consumption has fallen until mid nineties and then rather stagnated in the second half of the period in question. The share of food in total household expenditures increased in the first half of last decades, and then increased slightly at the end of analysed period, it was 29.6 percent in 2002. This stems from the abolishing consumer support, increasing consumer prices, falling real income, the newly introduced kind of taxes, infrastructure development based on households’ investments.

Recent study shows that consumer habits differ by socioeconomic strata (Vági, 2001). Older people and households with more children usually buy foods in traditional shops, while young single and couple prefer supermarkets and shopping malls. Traditional shops are dominant in rural areas, while supermarkets and shopping malls play important role in. Households with low educated head of households, older age and less wealth buy in traditional shops, while households with young highly educated head of households prefer supermarkets and shopping malls.

There are two clear trends in the food consumption of the Hungarian households:
- The increasing importance of consumption out of home, but still low more growth ahead.
- Decreasing share of consumption from own production, but still high more decline possible.

The share of food consumption from own production decreased with almost 20% in the analysed period. The decreasing trend started in the middle of the nineties and reached the lowest value in 2000 (76 USD/person) then increased until 2002 but the whole expenditure on food increased more and thus the share of own production from the consumption decreased from 23% to 16%.

To draw a clear picture of the recent trends in the consumption of dairy products we have to clear some methodological difficulties. When we analyse consumption we can use two types of data sets both having advantages and drawbacks. We can use the food balances of the CSO which means that we have complete data in raw material weight but only aggregated. Or we can analyse the Household Budget Survey and have more detailed data for example on the different vegetables but only from the products consumed at home and we do not have the raw material equivalent of the processed products.

According to the Food Balance dataset the consumption of milk1 constantly decreased in the first half of the nineties, then from 1995 to 2000 started to increase again. This process stopped in 2001 when the consumption of milk declined significantly with 10.2% and in 2002 although slightly but again decreased (-0.8%). The yearly consumption per head was almost 8 litter less in 2002 then in the average of 1996-2000. The Household Budget dataset shows similar tendencies though, the decrease starts already in 1998. The most important changes in the last years were the decrease of both analysed categories and the growth of yoghurts and kefir consumption increasing from 9 to 12% of the whole dairy category.

These tendencies are even more evident if we look at the milk domestic sales in raw milk equivalent. The CSO does not have such calculations so we have to use a different source, the dataset of Milk Produce Council this is the reason why we does not show the absolute volume only the percentage/share of the different categories.

The figure 1 shows the same tendencies, decreasing milk consumption, growing soured product (yoghurts, +30%) and cheese and curd (+2%) share

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1 which means milk and milk products together in raw material equivalent thus the change in the inner structure of milk consumption can significantly change the whole consumption trends. This is a problem because milk is a staple food but cheese is much more price and income sensitive.
from the domestic sales:

- The decreasing milk consumption can be explained with unfavourable general and international consumer trends for milk: the growing popularity of other drink categories such as beverages, mineral waters and fruit juices, “milk-like” products and by the growing consumer prices.
- The increase of cheese consumption is helped by the fact that cheese is much more sensitive to income than price changes thus growing incomes can further increase the consumption even with growing prices.
- The fermented products (yoghurts) developing market share is mainly the result of the ever widening and evolving quality supply of flavoured (mainly fruit) yoghurts and the changing consumer habits. This category seems to be the winner of these tendencies being able to satisfy the growing demand for desserts (fruit yoghurts) and the healthy eating trend at the same time.

After analyzing the changes in the volume of consumption we look at the figures of household expenditures to understand more the reasons of these changes and tendencies. The share of food from the whole expenditure decreased from 40% to 34% between 1993 and 2002 with stagnating share until 1998. The decrease is not caused by decreasing food expenditure but the result of more rapid growth in non-food consumption.

The expenditure on dairy products gives only 11 per cent of the whole food consumption. milk (48%) takes smaller share from the expenditure of their own categories dairy products than from the volume of consumption. This is not surprising because both milk is a staple food. Expenditure on milk grew more (20%) between 1993 and 2002. The difference in expenditure growth was even more evident in the last four years because the expenditure on milk increased with almost 40% the main cause again was the consumer price of milk growing more rapidly than inflation.
Looking at the consumption in different income categories the difference between the highest and the lowest deciles is around 40% higher by milk. In case of milk the volume of consumption decreased in the last four years while the expenditure increased in both deciles.

Source: Calculation from yearbooks of the Central Statistical Office (CSO) 1993-2002

Figure 3. Milk consumption in the first and the tenth deciles (1998, 2002)

The consumption character of milk differs, milk is a staple food - milk consumption is much more sensitive to price and income changes. Thus in spite of the decreasing international tendencies as the Hungarian consumption is still quite below the developed countries’ or our own previous level we think that there is a possibility of increasing consumption.

The main characteristics of the food retail sector

The political and economical transition at the beginning of the nineties and the privatisation had significant effect on food trading. Food trading was attractive for investors, especially foreign investors. Several international supermarket chains started operating in Hungary, by reconstructing the old supermarkets or with green field investments. Some supermarket chains of Hungarian ownership were also created, some of them developed very quickly, expanding also abroad. In spite of this, most of the Hungarian trading businesses are small- and medium-size enterprises, and short of capital. Concerning the changes in the Hungarian food trade we have distinguished four periods:
4. Accelerated concentration 2001 -

The period of spontaneous privatisation happened in 1989-1990, when the smaller shops were privatised, but when a significant number of private shops were established as well. Therefore the number of food retail shops started to grow. Figure 4. shows the changing number of food retail stores in the decade of the nineties.

During the period of privatisation (from 1991 to about 1995-96) the owners of the larger food retail chains have been changed (e.g. KÖZÉRT). Most of the shops in the favourable areas have become the properties of multinational chains. Some of the small private shops continued to develop, but some of them went bankrupt. The first part of the period is characterised by the launch of so-called “forced” enterprises, lot of them only remaining in business for a short time. Therefore at the beginning of the nineties a big jump happened in the number of food shops. Within this, the number of shops operated by sole proprietors also grew. Their share in the total was the highest in the middle of the decade.

Since the second third of the decade (1996-1997), in the second phase of the privatization, the characteristics of concentration have started to appear. But in the first few years of the concentration period, until 2000 the number of shops and even the number of stores operated by sole proprietors still increased.

Regarding the number of food retail stores the “break” of 1997 was due to the new system of census introduced. In the first half of the nineties the registration of new stores was obligatory but no information was available on the closing down of

3 After the change of political system unemployment increased drastically thus thousands of people started their own small businesses mostly employing only themselves or the members of the family.
stores. In 1996 the Hungarian Central Statistical Office (KSH) carried out a census on retail stores. From 1997 on it is the task of local governments to keep continuously a register on the shops located on their area.

Only around 30-40% of the large number of stores sells food products and the growth in the number of stores could only be detected in the non-food sector. More than 50 thousand food stores and mixed retail businesses operated at the end of 2003 which indicate a decrease from 2000 and also show only a slight increase taking into account the last five years. The later decrease was due to the rapid growth and diffusion of large food chains and strengthening competition.

Based on 2003 data of the Central Statistical Office the value of sales of the food and mixed retail business was 2 263 billion HUF (10.1 billion USD). The sales of the retailers almost doubled in the given period while in the number of stores only a mild increase could be detected. This tendency apart from inflation and growing purchasing power of the Hungarian consumers may indicate an increase in the size of the stores which can be interpreted as a form of concentration.

Although the 90% of sales with 20% of stores data means quite high concentration level and the last few years decreasing store numbers prove a similar tendency still the number of retail shops remained surprisingly high in the examined period especially compared to other countries. According
to statistician experts a part of the rapidly growing concentration can be explained by the fact that the larger and more stable companies with consolidated market presence are more willing and precise in data provision.

The absolute winners of the last decade were hypermarkets (2500 nm²). From the Top-10 retailers in 1997 not one company operated hypermarkets (Tesco at that time only had supermarkets) but in 2003 already three (Tesco, Auchan and Cora) companies had hypermarkets from the Top-10 companies, Tesco being the first on the list. In 1997 only 5 hypermarkets existed (Auchan, Cora) which gave approximately 5% of the food retail sales, in 2003 the number of hypermarkets was 64, Tesco had 33, Spar 16, Auchan 8 and Cora 6 giving 24% of the total food sales.

The positive trend of this large size format is the main reason for the concentration tendency described by sales/store index (showed on the second figure) growing from the 120 000 USD/store level of the nineties to 197 000USD/store in 2003. This assumption is backed by two other analyses one prepared by the Hungarian Statistical Office on shopping centers and hypermarkets: the report concluded that an increasing share of the food business is concentrated in large stores (hypermarkets and shopping centers) with a 2-3% increase in the last five years reaching approximately 18% in 2001. According to another report (GFK Hungária Market Research Institute, 2002) in 2002, hypermarkets had a 19% share of the turnover of food and household chemicals (this means a significant growth compared to the previous year).

The hypermarkets according to GFK Hungary are characterized by medium (65.4%) penetration low frequency of shopping (17.9) but the consumer spending per shopping is three-four times higher (3900 HUF) then by the other formats. The typical consumer is the whole family mostly together, going to the shop by car on weekend and/or during evenings. The over represented groups are the high-middle income large city under 40 years of age consumers. This retail type showed a very dynamic increase in the last few years and still has a significant growth potential.

Table 1. Places of shopping for milk and dairy products

<table>
<thead>
<tr>
<th></th>
<th>Hypermarket</th>
<th>Supermarket</th>
<th>Discount</th>
<th>Food store</th>
<th>Small shop</th>
<th>Dairy shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>5</td>
<td>10</td>
<td>40</td>
<td>58</td>
<td>35</td>
<td>8</td>
</tr>
<tr>
<td>2002</td>
<td>37</td>
<td>18</td>
<td>34</td>
<td>51</td>
<td>29</td>
<td>8</td>
</tr>
</tbody>
</table>

Base: those who buy the category (%)

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4 C + C companies like Metro are registered as wholesalers thus are not part of the retail statistics of CSO
Hypermarkets are again the absolute winner of the last years becoming the second most favoured retail source of vegetables after food stores. The importance of general food stores, small shops and discounters declined the most (6-7%) between 1998 and 2002.

**Food processing industry**

The Hungarian food industry plays an important role in foreign trade. Agriculture and food policy prior to the transformation to a market oriented economy in 1990 consisted of high levels of state subsidies and protection from import competition. Transformation resulted in two radical changes in the food sector: privatisation started and the number of small enterprises operating in the food industry increased from several hundred to more than ten thousand.

Transformation to a market oriented economy allowed for privatization of firms within the agricultural and food system. This allowed agricultural producers obtain ownership shares in food processing companies. This was intended to reconcile the interests of agricultural producers and food processors, much like the Danish cooperative model. In practice this goal was not achieved, because the agricultural producers were not financially capable of improving the economic position of food industrial plants, so the buying of shares in food industrial plants for vouchers did not lead to a capital inflow into the food industry. As mentioned above, the majority of Hungarian food processors were rather unfavourably placed, and so the ownership change would have made the economic situation of agricultural producers even worse.

Hungarian privatisation was unique in Central and Eastern Europe. Since 1989 a significant change has occurred in the structure of Hungarian agriculture that will impact future production and trade. Privatisation brought real owners to Hungary, those who invest, which brings the necessary financial means for restructuring. In addition, approximately half of the foreign direct investment to Central and Eastern Europe is in Hungary, and those are mostly medium or long-term investments. So the foreign direct investment (FDI) has increased substantially, and state ownership of businesses has declined to approximately two percent.

Foreign direct investment played a dominant role in Hungarian food industry. Although the number of foreign owned companies has decreased between 1995 and 2002, their role in owners’ equity is more than 70 per cent, and their share in net sales exceeds 50 per cent. International companies that have acquired stakes in the Hungarian food sector during privatization have brought with them modern management practices in production and processing. Just as significant are the superior expertise they have brought in marketing and the technology modernisation for new product development. Foreign direct investment has also stabilized many companies that were in bad financial shape and helped regain export share that was lost in the early 1990’s.

The competitiveness of the Hungarian food processing industry is paramount to the success of the agricultural policy. The competitiveness of food processing depends heavily on the level of development of raw material production. Food processing requires a solid agricultural base capable of producing high volumes of top quality raw material. The reverse side of this influence is also play.

For Hungary to establish a truly competitive food processing industry, further restructuring is required. The concentration and specialisation in food processing has continued at a faster than many observers expected. It is interesting to analyse a product chain in Hungary in terms of both economies of scale and degree of specialisation remain in a disadvantageous competitive position compared to the successful enterprises of the European Union. Further restructuring will make it possible to meet the requirements above and to establish viable structures.

**Influence of changes on the dairy industry**

The milk production fluctuated around 2 000 million litre per year response to changing economic and political conditions between 1993 and 2003. The efficiency of milk production has grown in natural term; the milk production per cow has increased continuously over the period. However, the FADN data shows that profitability of milk production differs by farm types between 1999 and 2002. The private farms were more profitable than agricultural enterprises according to two income indicators. However, these results should be interpreted only with care, because wages, to be paid own labour inputs, are not included in production costs of private farms. Standard gross margin is higher in agricultural enterprises than private farms.

The dairy industry increased its gross production value (+39%) in the analysed period. Dairy industry gave evenly around 12% of the whole gross production of the food industry. The net sales of the dairy industry grew by 5% between 1998 and 2002 reaching almost 900 million USD. The export sales increased more (+50%) in the period thus the share from the net sales became more than 10%. The dairy industry in general had deficit in 1998, the situation improved until 2002 and the branch achieved 14 million USD profit (1.6% of the net sales value).
The concentration in the milk processing sector started in the middle of the nineties but the number of processors still almost reached 80 although the Top-10 companies gave almost 80% of the net sales and the Top-5 57%. The concentration in the dairy export already reached quite high level, the largest ten processor gave 89% of the whole export thus in the previous years there were no more changes.

As a summary we can say that although lot of structural changes already happened in the dairy processing sector our EU accession bring more challenges in the future. Those processors who are not able to comply with the EU hygiene standards or not able to accommodate the growing competition will get out of business while the importance of the large (even multinational) companies are continue to grow. Although large processors are already having enough production capacities most of them even surplus thus they are only interested in the markets of the middle and small size processors. The small and middle size processors have only two alternatives: regional or more likely product specialization.

The gross production in dairy industry continuously increased at current prices between 1996 and 2002. The sales of dairy industry are based mainly on domestic markets, its share on total sales varied between 94 and 88 per cent. The productivity index is also shown a growing trend, but the growth rate in last two years is stopped. The gross income in dairy industry reports an aggregate loss in 1998 and 1999, after it realised an increasing profit.
The role of FDI is predominant in Hungarian dairy industry, its share in owners’ equity exceeded 90 per cent and their proportion is above in number of companies. It must be noted that the share of FDI in dairy industry is higher than in the food industry as whole. Foreign ownership in the dairy industry is concentrated in larger enterprises and these enterprises increased their share of the market. The new foreign owners have had a dramatic effect on milk chain in Hungary. These changes can be divided five parts: internal restructuring of production and marketing, procurement and quality control, performance and likely trends after accession to the European Union.

Foreign owned dairies have also introduced internal systems to aid quality control in contrast to smaller dairies that have been unable to introduce ISO systems due to lack of capital. This has limited the latter’s ability to export and they will face increasing difficulties on the domestic market as Hungary adopts EU food laws as part of the process of accession.

Agricultural production framework

In the pre-reform period Hungary has had large farm dominated agriculture. Some half of agricultural output was produced by cooperatives, one third of production came from small scale farming, mainly household production of members of cooperatives and, less than one fifth of output was produced by state farms. Small scale production had been deeply integrated by cooperatives where the latter provided their members with inputs and marketing the products at cost price level. Small producers did not have to deal with marketing of their products as it has been taken over by production coops and in some cases by marketing cooperatives. Large firms, in addition to crop production and animal husbandry activities, were allowed to run so called non-agricultural activities (services, and industrial production) as well in order to produce enough profits. Industrial activities have been more profitable than agricultural production was and used as source for further investments in plant and animal production.

The agricultural policy during the transformation phase focused on building up the legal and institutional framework for the market economy. The second, consolidation phase of agricultural reform concentrated on two issues. First, agricultural policy have stabilised the domestic agricultural market by establishing a market regulation office, improving activity of such institutions, and increasing production support. Second, they harmonise the legal environment of agriculture to the EU accession.

The relative growth of GDP in agriculture, industry and the economy as whole, over the period, is shown in Figure 5. The GDP decreased in the first years of nineties for both industry and agriculture. After 1994 the manufacturing continuously increased, and its growth rate exceeded the growth rate of total GDP. However, agriculture shows only solid signs of recovery during this period, contrast to total and manufacturing GDP, its level was below the level of 1991.

Between 1991 and 2002, agriculture’s share in total GDP fell from 7.8 % to 3.3%, whilst its share in total employment fell by almost 50 per cent from 11.9% to 6.2%. In the food industry, which in terms of both GDP and employment is smaller than agriculture, the share of GDP also fell by a quarter from 4.6% to 3.3%, whilst the share of total employment fell by more than one sixth, from 5.1% to 4.1.

The combined but differential effect of these falls has been to alter the sectors’ relative labour...
productivity, which can be approximated by the percentage contribution to GDP divided by the percentage contribution to total employment. This measure, though higher in the food industry than in agriculture, is less than one in both sectors, i.e. the share of employment is higher than the share of GDP.

**Milk Production**

Before the political and economic changes, the state and collective farms dominated milk production.

The structure of dairy production has changed considerably during the last 14 years. The number of dairy farms decreased between 1996 and 2003 dramatically by 45 percent for private farms, the fall was modest for agricultural enterprises, 12 per cent. Surprisingly, during the analysed period, the average herd size decreased from 326 to 298 in agricultural enterprises, whilst it grew from 2.9 to 4.4 in private farms. In 2003, agricultural enterprises accounted for 69 per cent of output in terms of herd number, whilst the share of private farms was 31 per cent. The reason for the decreasing number of cows in Hungary is that the agricultural enterprises keep less and less cows each year while the number in the private farms is heavily changing from year to year according to the market situation.

The number of farms with milk production is also reducing every year. Nowadays around 700-800 agricultural enterprises and 20-25 thousand private farmers are keeping cows. The regional dispersion of the agricultural enterprises is quite even, while the private farms are concentrated mainly in the Northern Great Plain region.

The milk production on the other hand shows a slightly increasing tendency in the last ten years. The production in 2003 was 2 023 thousand tons which means that the average yield per cow was 6,168 kg. Compared to the EU-15 countries our yields are still 5-20% lower but higher with the same percentage then in the other NMS (New Member State) countries. The concentration tendencies in Hungary illustrated with the above tables are in line with the production trends of the leading European countries, decreasing cow numbers but increasing yields are providing the stable milk production level (increase is not possible because of quotas).

### Table 2. Number of dairy cows by farm types in Hungary (1998-2003)

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<tr>
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</thead>
<tbody>
<tr>
<td><strong>Stock (thousand heads)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural enterprises</td>
<td>266</td>
<td>254</td>
<td>261</td>
<td>238</td>
<td>240</td>
<td>233</td>
<td>88</td>
</tr>
<tr>
<td>Private farmers</td>
<td>141</td>
<td>145</td>
<td>119</td>
<td>130</td>
<td>122</td>
<td>117</td>
<td>83</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>407</td>
<td>399</td>
<td>380</td>
<td>368</td>
<td>362</td>
<td>350</td>
<td>86</td>
</tr>
<tr>
<td><strong>Farm number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural enterprises</td>
<td>741</td>
<td>720</td>
<td>847</td>
<td>743</td>
<td>740</td>
<td>783</td>
<td>106</td>
</tr>
<tr>
<td>Private farmers</td>
<td>36000</td>
<td>32000</td>
<td>34079</td>
<td>30525</td>
<td>27490</td>
<td>23642</td>
<td>66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>36741</td>
<td>32720</td>
<td>34847</td>
<td>31743</td>
<td>28230</td>
<td>24425</td>
<td>66</td>
</tr>
<tr>
<td><strong>Average sectoral size (head/farm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural enterprises</td>
<td>359</td>
<td>353</td>
<td>308</td>
<td>320</td>
<td>324</td>
<td>298</td>
<td>83</td>
</tr>
<tr>
<td>Private farmers</td>
<td>3.9</td>
<td>4.5</td>
<td>3.5</td>
<td>4.2</td>
<td>4.4</td>
<td>4.9</td>
<td>127</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11.1</td>
<td>12.2</td>
<td>10.9</td>
<td>11.6</td>
<td>12.8</td>
<td>14.3</td>
<td>129</td>
</tr>
</tbody>
</table>

Source: Calculation from yearbooks and monthly bulletins of the Central Statistical Office (CSO) 1998-2003

### Table 3. Average yields and production of milk in Hungary and in some European countries (1999-2002)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hungary</strong></td>
<td>2 106</td>
<td>5 469 100%</td>
<td>2 130</td>
<td>6 179</td>
<td>100</td>
<td>2 130</td>
<td>6 179</td>
<td>100</td>
<td>103</td>
<td>108</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>28 334</td>
<td>5 909 108%</td>
<td>27 874</td>
<td>6 229</td>
<td>106</td>
<td>27 874</td>
<td>6 229</td>
<td>106</td>
<td>98</td>
<td>105</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
<td>4 655</td>
<td>7 274 133%</td>
<td>4 590</td>
<td>7 309</td>
<td>124</td>
<td>4 590</td>
<td>7 309</td>
<td>124</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>12 284</td>
<td>3 992 73%</td>
<td>11 873</td>
<td>4 052</td>
<td>69</td>
<td>11 873</td>
<td>4 052</td>
<td>69</td>
<td>97</td>
<td>102</td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td>1 163</td>
<td>4 438 81%</td>
<td>1 162</td>
<td>5 052</td>
<td>86</td>
<td>1 162</td>
<td>5 052</td>
<td>86</td>
<td>100</td>
<td>114</td>
</tr>
</tbody>
</table>

Source: Own calculation from yearbooks and monthly bulletins of the Central Statistical Office (CSO) 1998-2003
In the analysed period in Hungary 85-95% (in 2004 reaching 98%) of the purchased milk is extra quality which is the only category for human consumption according to the EU regulations. Analyses show that the difference between the small and the large scale farms in the milk quality is not present at the production phase, the difference appears during cooling, storing and transporting.

| Table 4. The distribution of milk-cow stock by the farm size in Hungary (2000) |
|-------------------|----------------|-----|-----|-----|-----|-----|-----|
| Size (head)       | < 9         | 10-19| 20-29| 30-99| > 100| Total |
| Private farms     |             |      |      |      |      |       |
| Share from the farm number (2000) | 95.41 | 3.23 | 0.7 | 0.6 | 0.06 | 100   |
| Share from the cow number (2000)   | 71.21 | 12.64| 5   | 8.43| 2.72 | 100   |
| Agricultural enterprises           |        |      |      |      |      |       |
| Share from the farm number (2000)  | 7.6   | 3    | 2.9 | 12.5| 74   | 100   |
| Share from the cow number (2000)   | 0.1   | 0.1  | 0.2 | 2.4 | 97.2 | 100   |


The dairy farm structure is different in agricultural enterprises and private farms (Table 4). 95 per cent of private farms have less than 10 cows, while 74 per cent of agricultural enterprises have more than 100 cows. The share of farms below 10 cows in herd stock is 71 per cent for private farms and 0.1 per cent for agricultural enterprises. The emerging share of medium size dairy farms is only 13 per cent. In short, polarised structure of Hungarian dairy farms has not changed considerably during the analysed period.

As a summary in Hungary the structure of milk production can be divided into three main groups differing in concentration, technology and in some respect in market segmentation as well:

- The agricultural enterprises and a minority (3-7%) of the private farmers mostly keeping more than 100 cows (300-600 on average) producing and selling to the processors.
- Around 17-20% of the private farmers having 10-20-30 cows trying to produce for the processors.
- And finally, most of the private farmers (71%) mainly having less than 10 cows:
  - Large number of private farmers keep 1 or 2 cows, they are producing mainly for own consumption and for direct sale to consumers.
  - Number of private farms having 3-10 cows is quite high they sell through milk collecting businesses produce for own consumption and direct to consumers.

The agricultural enterprises of the first category can be viable in the future their success depends on their ability of investing in technology and improving the management of the dairies to comply with the strict EU hygienic standards. Although the extremely low procurement prices of the last months are not favouring further development and question the profitability even of these enterprises.

Intensive milk production at least in the short run is not promising. According to the calculations the agricultural enterprises due to the increasing cost of production and the low procurement prices will have in 2004 around 6.5 HUF/kg losses on milk. Because of the increasing direct subsidies the position of the sector will improve a bit in 2005 but it will stay in “minus”. In the short run reducing production is probable.

As far as we can see the problem area in case of the future viability is the second group of farmers with 10-30 cows. They are too big for direct sale and at the present procurement prices too small to be profitable with processors as their main market. On the other hand they already invested significant amounts in the development of their dairies so they are too much involved in production to stop it. It is a segment of the dairy farmers facing serious problems and challenges in the future.

The third group most probably will loose the processors at least the large ones as market, the way of viability more and more seems to be direct consumer sales. These changes are already present the importance of direct sale is increasing. Growing demand can be explained with two tendencies:

- The price is still lower than the processed milk.
- People living in cities and having preferences for wholesome, natural products not manipulated by food processors (we had some scandals about “milk-like” products which were extremely cheap but the consumers were not really aware of the content or more precisely the lack of content)
Critical issues and challenges for the future

Production phase: The production of milk mildly grew from 1998 to 2002 (+1%, 23 ml) mainly because of the increasing milk yield. The sale to processing did not change significantly from 1998 to 2002 (79%-80%). Consumption from own production was very low (28ml) and even had a declining trend (3% to 1%) due to the decreasing number of small holders (with 1 or 2 cows). A stagnating 4% of the production goes to other sale.

Wholesale phase: Export increased in the examined period (+16%; 67 ml). Hungary always produced more milk then it used and compared to the domestic production base, import has a stable 7% share. From the three channels (sale to wholesalers, sale to retailers and other sale) the processors sale to retail sector is by far the most important (ca 60%).

Retail level: The structural changes in the last years are the most evident in case of the retail phase. We only had estimations in case of HORECA share from the consumption so we can only write that according to our assumptions the share of HORECA from the milk product consumption probably increased to 12%. Important trend is the absolute and relative decline of the consumption from own production (-40 ml; -2%) to 1% and direct sale to consumers (-70ml; -4%) to 4% between 1998 and 2002. But in case of direct sale for consumers the negative trend of prices paid by processors indicated the stop of declining and in 2003-2004 this marketing channel again started to gain importance.

The share of modern and traditional retail formats also grew from sales but not as much as in case of onion because the importance of retail sale is basically more important in the dairy sector. The inner structure of the retail sector is shown in Table 6.

Table 5. Costs and profit of intensive milk production in agricultural enterprises (2000-2005)

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Production cost (HUF/ha)</td>
<td>59 922</td>
<td>65 203</td>
<td>67 593</td>
<td>73 033</td>
<td>73 740</td>
</tr>
<tr>
<td>Production value (HUF/ha)</td>
<td>69 266</td>
<td>77 456</td>
<td>80 331</td>
<td>64 372</td>
<td>65 506</td>
</tr>
<tr>
<td>Profit I. (HUF/ha)</td>
<td>9 344</td>
<td>12 253</td>
<td>12 738</td>
<td>- 8 661</td>
<td>- 8 234</td>
</tr>
<tr>
<td>Direct nation. sup./Top-up (HUF/ha)</td>
<td>619</td>
<td>2 329</td>
<td>2 402</td>
<td>2 196</td>
<td>5 155</td>
</tr>
<tr>
<td>Production value II. (HUF/ha)</td>
<td>69 885</td>
<td>79 785</td>
<td>82 733</td>
<td>66 568</td>
<td>70 661</td>
</tr>
<tr>
<td>Profit II. (HUF/ha)</td>
<td>9 963</td>
<td>14 582</td>
<td>15 140</td>
<td>- 6 465</td>
<td>- 3 079</td>
</tr>
<tr>
<td>Average yield (t/ha)</td>
<td>6 080</td>
<td>6 144</td>
<td>6 515</td>
<td>6 515</td>
<td>6 515</td>
</tr>
<tr>
<td>Average sales price (HUF/t)</td>
<td>63 329</td>
<td>71 719</td>
<td>75 045</td>
<td>64 372</td>
<td>65 506</td>
</tr>
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</table>

Table 6 shows that share of industry price in retail price has slightly increased at the expense of farm price between 1994 and 2002. The proportion of farm price in retail price has decreased from 55 per cent to 46 per cent.

The future development of the sector depends on the two main elements, all connected to the domestic market:
- The participants of the supply chain would be able to keep their competitive positions against the technologically more developed western countries, or against the presently still more cost competitive other accession countries.
- Fulfilling the most probably growing domestic demand – increasing consumption – with domestic products.

Conclusion

Hungarian companies in the food sector are operating in an increasingly competitive domestic and international environment. These competitive forces will gather strength upon Hungary’s further integration into the European Union. Increasing performance, quality enhancement, cost effectiveness and timely response to signals of (for Hungary) a huge market are of primary interest to every Hungarian business.
that wishes to be successful.

High quality and efficient food processing capable of producing goods that meet world market requirements is a major driving force in the improvement of the competitiveness of agriculture. The position of agricultural producers and conditions of their operation being basically determined by the processing industry.

The future of Hungarian food processing, based on the dairy sector studied, depends on attaining higher levels of competitiveness. This requires continuous improvement of the performance of these sectors and the related production of raw material. Increasing competitive capacity in the marketplace hinges on the level of understanding and meeting consumer requirements, on implementing best practice solutions in production, on improving productivity and on developing innovative products and cost saving methods of processing.

Large chains of super and hyper-markets have emerged in the early 90s, soon after the launching of economic reforms. Entrepreneurs in the food industry already know the demands of the retail industry. The absence of trade barriers for food products between Hungary and the EU after accession now calls for an even more pro-active new strategy to be developed by Hungarian food processors.

The prospect for competitiveness is limited since the decisive factors of the structure of the Hungarian milk processing industry are similar than the other EU member countries. There is no realistic chance for Hungary to establish milk processing enterprises owned by cooperatives playing a decisive and competitiveness role in processing.

In Hungary small-scale enterprises may have a chance for being competitive by targeting market niches or by meeting the requirements of some specific markets, for example, cheese, flavoured dairy products, organic products or dairy desserts.

In the search for new strategies, two criteria will play an even more important role they do now; the total cost along the various elements of the marketing chain from production to consumer; and the differentiation of strategies to attract consumers to specific brands or kinds of products that no other producers have developed yet. In both cases, not only must there be a permanent search for innovative solution through research and technology development, but also new marketing strategies crucial for the future of Hungarian food products on the EU and non-EU markets.

The producers have to undergo fundamental changes in mentality, economic policy has to provide this progress with the necessary enabling environment and regulations, such regulative elements can be: support of Production-Sales Organizations; ensuring the stability of the regulation system of the agrarian market; change of competition regulations and support of education and consultancy.

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**Statistical Sources:**

FOREST-RELATED EDUCATION FOR A SUSTAINABLE DEVELOPMENT.
NEW CONCEPTS OF FOREST EDUCATION IN GERMANY

Beate Kohler

ABSTRACT

The present publication analyses the demands forest pedagogy is confronted with within the discussion about "Education for Sustainable Development" and tries to point out the potential and deficits of forest-related educational work according to these demands.

Up to now, forest pedagogy aimed at generating forest-related knowledge and a positive attitude towards forest and forest use. The demands of ESD are far more comprehensive by postulating that “Gestaltungskompetenz (inducing transformation competency)” should be fostered. Forest-related educational work boasts a lot of topics and a large methodical-didactical potential to implement the approaches of ESD. Moreover, those who are active in educational work are prepared to deal with the ideas of ESD and to put them into practise.

Deficits manifest a) in understanding the term “sustainability” in its complexity, b) in being informed about the central issues of ESD and their implementation and c) in a continuous, interdisciplinary cooperation of educational actors according to the criteria of “Reinität (reticulation)”. With regard to quality management, forest-related educational work should strive for preparing an interdisciplinary collection of teaching and learning material for forest-related ESD and should seek for cooperation within the existing structures of forest administration as an ideal multiplier and distributor.

Since 2005, when the UN proclaimed the decade of „Education for a sustainable development” (ESD), the requirements and the implementation of “ESD” are being discussed and have become significant for environmental education in schools and other institutions. Focus and contents of scientific conferences1 and journals2 indicate that actors in the field of forestry are aware of this trend and prepared to meet its demands. The following contribution shall clarify which demands “forest pedagogy” has to face in the actual discussion about “education for a sustainable Development”, which potential it has at its disposal, and which deficits can be made out, always referring to the actual state of forest pedagogy in Germany.

Forest Pedagogy

The term „forest pedagogy“ dates from the 1980ies and describes a broad spectrum of forest-related educational activities e.g. the well-known forest tour guided by the forester, forest-kindergarten and forest school camps, educational and experimental tracks as well as forest related exhibitions. (Dühr, 2006; Stichmann, 2004). In the middle of the 1990ies in many federal states forest pedagogy was legally assigned as duty to the forest administrations3. This new task boosted the number of forest-related educational actors and resulted in a comprehensive supply of forest pedagogical education all over the country.

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3 Federal State Forest Law e.g.. Baden-Württemberg, Brandenburg, Bayern, Hessen, Niedersachsen, Thüringen, Schleswig-Holstein; Kabinettsbeschluss, Koalitionsvereinbarung, Betriebsatzung./Erlass u.ä.:z.B.: Berlin, Rheinland.-Pfalz, Sachsen, Mecklenburg.-Vorpommern
The main target of forest-related education has been, up to now, children attending elementary school. (Kohler, 2001). The average activity lasts a couple of hours. The main goals of forest pedagogy are: a) to impart knowledge about forests, b) to enhance the positive attitude towards forests and their use and c) to foster nature-experience. (cf. fig.1) (Kohler, 2001; Kohler & Vogl, 2005; Katz, 2007).

Forest pedagogical activities are based on different didactical concepts; the following two have become established in this field.

a) the approach of nature experience focusing on sensory perception and associated emotions which are considered to be the basic requirements for understanding nature. (Janssen, 1988; Trommer, 1988, 1991)

b) the approach of ecological learning, in which learning processes are triggered by natural experiences and subsequently expanded by explorative-analytical activities. (Stein, 1994).

Current surveys on forest pedagogical activities found out about positive effects concerning the field of imparting knowledge. An effect upon the attitude towards forests, initiated by forest pedagogical activities, could not be verified. (Bogner, 1998; Slotosch, 2001; Kohler, 2001; Bittner, 2002).

Education for a sustainable development

Recent trends demand an orientation of environmental pedagogy and educational theories according to the model of sustainable development currently launched by the UN for the decade of “Education for a sustainable development”. (UNECE, 2005; Kohler et al., 2005)

Main goal of this is to cover the present social needs without affecting the requirements of future generations. (cf. Hauff, 1987).

There are controversial discussions about the main goals of the model, nevertheless, the following consent is unquestioned: (Brand, 2000; Scott & Gough, 2003),

- the inter- and intragenerational equity i.e. the claim that every human being (global dimension), including future generations (future dimension), should have the chance to make a living (dimension of future) (WCED, 1987) and
- the „Retinitätsprinzip“ (principle of reticulation) (SRU, 1994) which comprises the ecological and economical conditions and the goals of human acting.

The latter is an essential innovation in the field of ESD. It describes the idea, corresponding to the model of sustainable development, of cross-linking economical, ecological and social issues. Apart from an interdisciplinary approach, the necessity of communicative, social and methodical key qualifications is postulated. (Fischer, 2000). Based on these goals, the so called “Gestaltungskompetenz (Inducing transformation competency)” by De Haan & Harenberg (1999) has come to prevail in Germany.

Previous goals of environmental pedagogy aimed at boosting the sensibility for the environment by imparting scientific knowledge, creating a pro-environmental attitude and fostering an appropriate environmental behaviour. (De Haan & Kuckartz, 1996).

The approach of “Gestaltungskompetenz (inducing transformation competency)” exceeds these aims by complementing the competences necessary for recognizing environmental problems as well as those which are necessary to solve problems and to stay capable of acting. (De Haan, 2002a). It describes the eagerness and ability to participate in modelling the society and to steer its social, technical and ecological change corresponding to the idea of sustainable development. (De Haan, 2004).

“Gestaltungskompetenz (inducing transformation competency)” can be structured according to De Haan into eight part competencies, which can be fostered individually but only have an effect if they show up together. (De Haan & Seitz, 2001a,b).

### Table 1 The part competencies of “Inducing transformation competency” after De Haan & Seitz ((2001a,b)

<table>
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<tr>
<th>Part competencies (PC) after De Haan und Seitz (2001a,b)</th>
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<tr>
<td>pc 1 &quot;The capability to think in a future-orientated way and to design future-scenarios&quot;</td>
</tr>
<tr>
<td>pc 2 &quot;The capability of an interdisciplinary approach to solving problems or boosting innovations&quot;</td>
</tr>
<tr>
<td>pc 3 &quot;The capability of cross-linked thinking&quot;</td>
</tr>
<tr>
<td>pc 4 &quot;Open-mindedness and capability of transcultural communication and cooperation.&quot;</td>
</tr>
<tr>
<td>pc 5 &quot;Capability of participation&quot;</td>
</tr>
<tr>
<td>pc 6 &quot;Capability of empathy, compassion and solidarity with the poor, the unprivileged and the suppressed&quot;</td>
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</tbody>
</table>
| pc 7 "The capability to motivate people to pay attention to the model of Sustainable Development."
| pc 8 "The capability to reflect individual and cultural models" |
It has been ascertained that strategies for solving problems as well as decision-making competencies concerning sustainable development will only meet the complex requirements of the model if they are developed under interdisciplinary approaches. Interaction between scientific disciplines is crucial for communicating a comprising understanding of sustainability. (JÖDES, 2001; DE HAAN, 2002, 2002a; SCOTT & GOUGH, 2003). This is why politicians and researchers, who deal with educational questions, postulate the constitution of educational networks. (DEUTSCHER BUNDESTAG, 2002; drs/14/8651; DE HAAN, 2002a, b).

The potential and the deficits of forest pedagogy with regard to an education for sustainable development

It is obvious that the model of sustainable development faces the actors in the field of forest education with substantial demands. Crucial for efficient ESD is to find appropriate examples and activities to illustrate the complexity of the subject without neglecting the overall idea. Moreover, it is important to pass on the competencies necessary for shaping sustainable development. KOHLER ET AL. (2005) Forests can be considered as an especially suitable vehicle to transport these issues e.g. to demonstrate the interdependencies of global resources (e.g. biomass, soil, water, air) and their significance for mankind. Forests are part of biomass and can be managed in a sustainable way if heed is paid to the spatial potential, the choice of trees being adequate to the site and the amount of yielded goods not affecting the resource as such (SCHMIDT, 2002).

Forests depend on the resources soil, water and air. Any damage to only one of these automatically affects the others and thus mankind.

There are other central aspects of sustainable development as the „Retinitütsprinzip (principle of reticulation)“, this can be illustrated by taking forests as a basic principle too. Being simultaneously an ecosystem and the foundation of an economic branch forests harbour an ecologic and a social dimension, and as places for recreation, protectors of soil and water and bases for earning a living they manifest a profound social dimension as well.

Apart from this, for over two centuries forestry has been practising the principles of sustainability i.e. the use of a resource should be consistent with its regeneration, a request which perfectly complies with today’s central demands for a sustainable development.

In addition, forest pedagogy possesses a remarkable potential for building up “Gestaltungskompetenz (inducing transformation competence)”. In a recent survey KOHLER & VOGL (2007) held interviews with experts from the field of forest education in order to find out about the potential of the eight “part-competencies of “Gestaltungskompetenz” (inducing transformation competency) with respect to forest-educational work.

The results reflect that some part-competencies are considered to be implemented easier than others. The former read as follows:

pc 1 “The capability to thinking a future-orientated way and to design future-scenarios”

pc 2 “The capability of an interdisciplinary approach to solving problems or boosting innovations”

pc 5 “Capability of participation”

pc 7 “The capability to motivate people to pay attention to the model of Sustainable Development.”

Examples to foster pc 1 “to think in a future-orientated way” arise from every opportunity to influence forest-use (or non-use) as long as future aspects are taken into account. Or, to get more practical, if the importance of individual political engagement (e.g. NGOs) for the preservation of forests is considered or the effects of consumer behaviour are taken into account. E.g., buying non-certified wood products can cause the following “chain reaction” = > unsustainable way of forest management ending up in an overuse = > extinction of species, loss of the protective function (water, mountain slopes, climate etc.) ending up in complete soil degradation = > climatic change. The function of forests as a central resource and a means to make a living indicates that this issue is not solely forest-related.

Fostering pc 2 “to think in an interdisciplinary” can be achieved by working on theoretical examples or by offering special methodical-didactical activities. Examples come from the field of “functional diversity” (use, protection, recreation) or from the field of “Reticulation” (crosslinking of economical, ecological and social aspects). Moreover, the whole range of (social) sciences can contribute relevant forest-related issues (biology, chemistry, geology and (cultural) history). As methodical-didactical means serve roleplay, practical work and explorative-analytical activities. According to the findings of KOHLER AND VOGL (2007) the potential of fostering pc 5 “capability of participation” mainly relies on methodical-didactical elaborated activities, e.g. group-work with explorative-analytic activities or managing a school-owned forest. Authentical nature experience (a standard within forest pedagogy,) combined with knowledge about the significance of managing resources in a sustainable way, seem to be crucial for motivating oneself and others to pay attention to the model of sustainability (cf. BÖGEHOLZ,
Experts judge the chance of a successful implementation of the following part competencies within forest pedagogy as less promising but possible (cf. Kohler & Vogl, 2007):

pc 3 “The capability of cross-linked thinking”
pc 4 “Open-mindedness and capability of transcultural communication and cooperation.”
 pc 6 “Capability of empathy, compassion and solidarity with the poor, the unprivileged and the suppressed”
 pc 8 “The capability to reflect individual and cultural models”

In general, these ideas can be passed on by using forest as an example. However, it is important that insights gained in the vicinity forest can be transferred to the situation elsewhere. Thus, cross-linked thinking can be triggered by looking at examples from different points of view (e.g. coppice as a cultural-historical result of human needs and the circumstances given at that time (social crosslinking) or dead-wood forests and natural regeneration as a consequence of pest calamities (ecological crosslinking)).

Even for the reflection of individual and cultural models forests provide examples (e.g. sustainable (extracting energy from renewable resources (wood)) or unsustainable behaviour (depositing waste “fly-tipping”).

As soon as global aspects are focused on, educational actors become sceptical about implementation although examples show that this is possible (e.g. the effects of product choice on how forests are managed (cf. to think in a future-orientated way (pc 1))). To foster open-mindedness, empathy, compassion and solidarity examples can be taken from the field of climate policy by pointing out the interdependencies of CO2-output in the industrial nations causing natural disasters in the third world. To achieve these goals it is crucial to integrate theoretical learning into forest pedagogical work.

Apart from forest-related issues providing examples for ESD and the vast potential of forest pedagogy, the established structures of forest administrations with their legal assignment for carrying out forest pedagogical measures on a broad basis can be considered as an effective contribution to ESD. All this and the fact that the topic “forest” is one of the most frequently requested issues in extra school education5 indicates a broad effect of ESD-orientated forest pedagogy.

Nevertheless, forest pedagogy harbours some deficits regarding the demands of ESD. Unfortunately forest educational instructors often reduce the demands of ESD solely on the forest-related idea of sustainability and especially on the idea of a sustainable forest use. (sustainability of resources) (Kohler & Vogl, 2006). However the model for sustainable development and thus ESD require, that economic, ecologic and social issues are equally taken into account. Moreover, in order to meet the requirements of ESD, forest pedagogy should preferably foster those competencies which enable people to design features for sustainable development (e.g. “Gestaltungskompetenz und die notwendigen Teilkompetenzen” inducing transformation competency and necessary part competencies). The potential available has already been laid out in detail.

Up to now, the following forest pedagogy has been pursuing the following goals a) to pass on positive attitudes towards forests and b) to impart knowledge about forests and their use. Although these aspects form a necessary basis, they do not sufficiently meet the demands of ESD. Apart from this, forest educational instructors tend to orientate themselves according to the traditional approach of nature-experiencing-pedagogy as well as ecological learning. (cf. e.g. Cornell (1991a,b); HIERE FORSTBEHÄRDE WESTFALEN-LIPPE (1997); Bayerisches Staatsministerium für Landwirtschaft und Forsten (2001)). This approach aims – corresponding to the goals of environmental education during the 1980ies and 90ies – at experiencing nature and imparting scientific knowledge only in a descriptive way (Bolscho & Seybold, 1996; Kohler et al., 2005).

In order to comply with the complexity of the model of sustainable development, the methodical didactical approach has to be thought over and enriched by a variety of methods (e.g. scenario-technique, workshops focusing on future, business games, open-space) (e.g. Barth, 2006; Rode, 2006).

It has been shown, that forest related educational work can pass on the idea of sustainable development by means of an interdisciplinary approach as requested by ESD. However, politicians and researchers claim that a variety of disciplines and patterns of thinking – preferably from the field of economy, ecology and sociology - should be bound in to create new educational concepts. (e.g. Deutscher Bundestag, 2002, drs/14/8651; de Haan 2002a,b; Scott & Gough, 2003, Bittner & Bögeholz, 2002).

As a matter of fact, first interdisciplinary cooperations between teachers and persons in charge from

4 findings which confirm the influence of (environmental) knowlegde and nature experience on the motivation to act in a sustainable way (Rost, 1999; Bögeholz, 1999).
5 Giesel et al., 2002
the forest side have been made out. (WETZEL, 2004, VAN DER MEER, 2004). To make ESD a success it is crucial to extend these networks by involving actors from the nature protection side, the church, social work and economy in order to start a durable and consistent cooperation.

Conclusions
Forest pedagogues who try to integrate the demands of ESD in their work face a great challenge. Nevertheless the current development is promising. Forest-pedagogy boasts a lot of topics and a large methodical-didactical potential to implement the ideas of ESD.

Moreover, the increasing number of those who are active in forest-educational work as well as the broad range of activities offered, reflect a significant impact of ESD.

Presently, deficits manifest concerning a) understanding the term “sustainability” in its complexity, b) the knowledge about the central issues of ESD and their methodical-didactical implementation and c) the consistent, interdisciplinary cooperation of educational actors according to the criteria of “Retinität” (reticulation). In order to comply with the demands of ESD, Forest pedagogy has to make up for the deficits. Forest-related educational work should prepare an interdisciplinary collection of teaching and learning material going beyond the idea of forest-related sustainability, paying regard to the central issues of sustainable development and the aspects of justice and “Retinität” (reticulation) as well.

Apart from this, it should clarify the central issues of ESD and make proposals for fostering “Gestaltungskompetenz” (inducing transformation competency) on forest-related issues, which, depending on the topic, could possibly take place in the forest. Seeking interdisciplinary cooperation with the existing structures of forest administration as an ideal multiplier and distributor of ESD and as a means of quality management because of its comprising supply of educational actors and activities should be strived for.

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ABSTRACT

From a scientific point of view comparisons of learner profiles may provide insights of the effectiveness of teaching as a whole. This paper reports some of the findings of a study aiming to investigate the differences in views and attitudes towards English language learning among 1st year Greek and Bulgarian students of forestry, agriculture and landscape architecture. Through statistical analysis some significant differences are identified between the profiles of the Greek and Bulgarian learner. The paper analyses the findings, and makes implications for teaching English as a Foreign Language (EFL) at universities of agriculture-related fields where the emphasis is on teaching English for Special Purposes (ESP) or English for Academic Purposes (EAP).

Key words: EFL, learners’ profile, English for agriculture-related sciences

Introduction

This paper reports part of the findings of a study aiming to investigate the differences in views and attitudes towards English language learning among 1st year Greek and Bulgarian students of forestry, agriculture and landscape architecture. With this study we attempted to compare the students’ needs and opinions on English language learning issues in an academic context. The current paper focuses on the learner profile which is constructed both on the basis of the survey conducted and description of the practice of teaching English as a Foreign Language (EFL) in Greece and Bulgaria. In particular, the students were asked about their educational background in English language learning, they were asked to self-assess their general command of English and to express their needs and their learning preferences for the English language courses during their academic studies. The present study can be considered significant in that it is the first attempt to carry out an analysis of the EFL educational profile and the target needs of Greek and Bulgarian students of agriculture related sciences taking ESP/EAP tuition at university. By providing a statistical analysis of the differences in the students’ specific language background and their expressed views on EFL issues, this study could be of some value for Greek and Bulgarian ESP/EAP instructors and act as a first step in developing common ESP/EAP course material.

Therefore, the research questions we considered for the current paper were as follows:

1. Do 1st year the Greek and Bulgarian students of agriculture and forestry related sciences differ in their English language background?

2. Is there a significant difference between Greek and Bulgarian EFL learner profile?

EFL teaching in Greece

Greek is the official language in Greece with 98% of the population speaking and writing it. However, Greek people are multilingual and so English, French and German are also widely understood and spoken, especially by young people since foreign language teaching has been integrated in the Greek education system for many years now. According to official sources, until the introduction of English in 1955-1960, only one foreign language, French, was taught at the secondary level. In 1992/93, foreign language teaching was included in the primary school curriculum (comprehensive 6-year curriculum for the teaching of English to pupils from the 4th grade of primary school to the 3rd grade of secondary school (Gymnasio) and English became compulsory. A second compulsory foreign language (French or German) was introduced in the secondary school in 1993. In 1996/97, German was introduced in the Lykeio (upper secondary level). In 1998/99, a foreign language chosen among the three on offer at this level (English, French, or German) became compulsory in three final grades of Greek secondary schools (the Eniaio Lykeio).

In addition, English is widely taught outside the official state education system by private language centres (the so called “Frontesterio”) which are officially authorised by the Greek Ministry of...
Education. The institution of private language schools has been considered an integral part of foreign language education in Greece. It is said there are 7,600 language school centres in Greece (Kristou, 2002). The schools traditionally operate from 2 p.m. till 10 p.m. daily and teach elementary through to proficiency levels. Students attend regular classes (up to 6 or more hours weekly) at these institutions and the courses lead to a variety of EF Language Certificates. The most popular EFL exams include the USA Michigan English Tests (ECCE, ALCE, ECPE,), the UK Cambridge Examinations (Cambridge ESOL FCE, CAE, CPE certificates), locally developed exams (until recently the PALSO exams for levels ranging from basic, elementary, to standard and higher) and the State Certificate of Language Proficiency, known as K.P.G., an examination and certification system implemented on the basis of a 1999 law, by the Ministry of National Education and Religious Affairs of the Greek state.

As EFL teaching is greatly exam oriented there is a wide range of teaching materials in the Greek market specifically for the Greek student.

The institutions of higher education in Greece offer EFL courses on a compulsory or an optional basis depending on the policy of each university.

Leaving secondary school, students who enter the Agricultural University of Athens are expected to have a good command of English (B2 level) but English is not a prerequisite for their admission. It is a compulsory subject and is taught during the first six semesters of studies.

**EFL teaching in Bulgaria**

The processes and reforms in EFL teaching in Bulgaria have been very dynamic for the last few years. In 2003/2004 a project was launched by the Ministry of Education for a first compulsory foreign language for 2nd grade students and a second compulsory foreign language for 5th grade students. But it should be noted that a common practice for many schools is to offer English language teaching for 1st graders as a stimulus to attract students. However, according to the same official source quoted earlier in this paper (see footnote 1), studying a first language are the so called “foreign language secondary schools” which depending on the major language taught are called “English secondary language school”, “German secondary language school” and etc. These are state owned schools where 8th graders, after sitting an entrance exam, have one year of intensive language learning with 17 hours of foreign language per week. There are also specialised secondary schools (in computer sciences, mathematics and etc) which offer intensive language learning with 15 hours of foreign language per week in 8th grade. At university these students usually have very good language skills, through levels may vary depending on school, aptitude and other factors.

Outside school English and other foreign languages are taught in private language centers which also organize certification exams. However, obtaining a worldwide recognized certificate such as the Cambridge certificates and the Michigan certificates are very expensive for the average Bulgarian learner. Just for comparison, as of the present moment, ECPE can be taken only at one location in Sofia at one exam session per year, whereas in Greece there are numerous locations with more than one exam session per year.

The institutions of higher education in Bulgaria offer EFL courses on a compulsory or an elective basis depending on the policy of each university. Leaving secondary school, students who enter the University of Forestry, Sofia are expected to have a good command of English, so that they can study English for Special Purposes; however, English is not a prerequisite for admission. It is a compulsory subject for the first four semesters of the studies, and an elective subject for some of the faculties for the 5th and 7th semesters, of for the master degree students.

**Method**

**Context**

This research was conducted by the EAP/ESP instructors at the Agricultural University of Athens and the University of Forestry of Sofia, and it was carried out in the English ELT freshman classes offered to the students of both universities.

**Questionnaire Design & Structure**

We designed the questionnaire after having identified the similarities and differences of the ELT courses offered in both universities. We negotiated on the phrasing of the questions so that they can all be comprehensible to the respondents. Still, we thought that the questionnaires had to be translated and distributed to the students in their mother tongue for the purpose of better understanding.

The Questionnaire contained 15 questions: 5 questions on demographic information (collecting data on learner’s identity, language background and language usage), 2 questions on the participants’ abilities (self-assessment of general language command and main language skills), 2 questions on their expectations in EFL during their academic studies
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(acquisition and improvement of specific skills), 6 questions on learning preferences and needs (learning and assessment issues). Most of the questions were of closed type - ticking of given answers or rating according to 1-4 scale. There were some open type questions, too. In this paper we focus on the first part of the questionnaire; in other words we analyse the students’ profile and their general English language command.

The Participants

**Greek sample.**
Participants were 88 1st year students of the Agricultural University of Athens in the academic year 2006-2007 (37 male and 51 female) coming from all six faculties (see Table 1). The ages of the participants ranged from 17 to over 20 years of age, with the majority being 18 years old (60%).

**Table 1. Profile of the Greek sample: students of the Agricultural University of Athens.**

<table>
<thead>
<tr>
<th>AGRICULTURAL UNIVERSITY OF ATHENS DEPARTMENTS</th>
<th>No of respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Science</td>
<td>31</td>
<td>35%</td>
</tr>
<tr>
<td>Animal Science</td>
<td>6</td>
<td>7%</td>
</tr>
<tr>
<td>Agricultural Biotechnology</td>
<td>6</td>
<td>7%</td>
</tr>
<tr>
<td>Rural Economics &amp; Development</td>
<td>16</td>
<td>18%</td>
</tr>
<tr>
<td>Food Science and Technology</td>
<td>25</td>
<td>28%</td>
</tr>
<tr>
<td>Natural Resources Management &amp; Agricultural Engineering</td>
<td>4</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>37</td>
<td>51</td>
<td>42%</td>
</tr>
<tr>
<td>Female</td>
<td>51</td>
<td></td>
<td>58%</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Bulgarian sample.**
Participants were 85 1st year students of the University of Forestry in Sofia in the academic year 2006-2007 (45 male and 38 female) coming from four faculties (see Table 2). The ages of the participants ranged from 18 to over 20 years of, the majority being 19 years old (74%).

**Table 2. Profile of the Bulgarian sample: students of the University of Forestry in Sofia.**

<table>
<thead>
<tr>
<th>SOFIA UNIVERSITY OF FORESTRY DEPARTMENTS</th>
<th>No of respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry</td>
<td>30</td>
<td>35%</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>28</td>
<td>33%</td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td>18</td>
<td>21%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>9</td>
<td>11%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>46</td>
<td>9</td>
<td>54%</td>
</tr>
<tr>
<td>Female</td>
<td>39</td>
<td></td>
<td>46%</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results and discussion

**Student English Language Background and Profile**
First of all, the demographic questions together with the questions on students’ background education in English language learning revealed some quite interesting results.

Looking at the number of years the students were taught English before they entered university (Table 3) we can see that the answers of Greek and the Bulgarian students differ a lot. Out of 88 Greek students, only 8 (9%) were taught English for more than 10 years, a total of 71 students (81%) were taught English for 6 to 10 years, and 9 students (10%) were taught English for 5 years or less. Out of 85 Bulgarian students, 15 Ss (18%) - (double the Greek number) – were taught for more than 10 years, 36 students (42%) (almost half the Greek number) were taught English for 6 to 10 years, and 34 Ss (40%) (just above 4 times the Greek number) were taught
English for 5 years or less. This could actually be attributed to the different educational systems of the two countries and the number of years that tuition of English lasts in each of the countries. This is also apparent from the answers given to the question on where the students were taught

Table 3. Years of English tuition of Greek and Bulgarian students.

<table>
<thead>
<tr>
<th>How many years have you been taught English?</th>
<th>GR</th>
<th>% of total</th>
<th>BG</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>more than 10 years</td>
<td>8</td>
<td>9%</td>
<td>15</td>
<td>18%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>71</td>
<td>81%</td>
<td>36</td>
<td>42%</td>
</tr>
<tr>
<td>5 years or less</td>
<td>9</td>
<td>10%</td>
<td>34</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>Total 88</td>
<td>85</td>
<td>Total 85</td>
</tr>
</tbody>
</table>

English (Table 4). Very few Bulgarian respondents were taught English in the private sector besides school (16% were taught English at foreign language centres and 13% had private lessons) while the majority of Greek respondents, along with the English tuition they received at school, attended English courses at foreign language centres or/and had private lessons, too. The institution of Private Foreign Language Centres has been quite prevalent in Greece for decades now. The reason is that English was not taught at Greek schools in the past (with French being the only foreign language included in the curriculum) and it was not until the 1980’s that English was introduced into the official Greek Education Curriculum; since then English has become a compulsory subject and the first foreign language to be taught (along with French and German). So it became traditional for young learners to have English courses (usually evening classes) privately besides their schooling.

On the other hand, in Bulgaria it is especially worrying that 40% of all students questioned reported that they had studied English for 5 years or less. These are students from technical schools who usually explain that they only study a foreign language in the 9th and 10th grade. It will be interesting to examine the development in the future. It can, however, be expected, and the practice has proved it, that these students do not have the required level to be taught English for Special Purposes, and it may even be more meaningful for them to receive general English classes.

Table 4. Place where English language training occurs for Greek and Bulgarian students.

<table>
<thead>
<tr>
<th>Where have you been taught English?</th>
<th>GR</th>
<th>% of total</th>
<th>BG</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>school</td>
<td>62</td>
<td>70%</td>
<td>79</td>
<td>93%</td>
</tr>
<tr>
<td>Foreign language centre</td>
<td>65</td>
<td>74%</td>
<td>14</td>
<td>16%</td>
</tr>
<tr>
<td>private lessons</td>
<td>41</td>
<td>47%</td>
<td>11</td>
<td>13%</td>
</tr>
<tr>
<td>abroad</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other (TV)</td>
<td>2</td>
<td>2%</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>Total 88</td>
<td>85</td>
<td>Total 85</td>
</tr>
</tbody>
</table>

The third question on the students’ language background concerned the English Language Certificates (Table 5). The answers of the Greek Students differed quite a lot from those of the Bulgarian ones. Most English language courses in the Foreign Language Centres in Greece are exam oriented and this accounts for the great number of Greek respondents having obtained a Language certificate, mostly of B2 level (45%). What is interesting, as far as the Greek students are concerned, is the total number of no certificate holders (28 out of 88 respondents (32%) which means that maybe these students’ needs regarding English Language Learning at university might be different from those of the certificate holders (they may need more emphasis on grammar or reading and writing but not in an academic context).
However, the scene in the Bulgarian case is completely different. Ninety-one per cent of the students do not have any certificates. This may be attributed to the fact that obtaining internationally recognized certificates has started in early 1990s, and there are no nationally recognized English certificates. However, people who have graduated from an English language secondary school (see the part on EFL teaching in Bulgaria above) are regarded as having a sufficient level of knowledge of the English language. For a better representation in a future similar survey it will be expedient to specifically asked Bulgarian students if they graduated from the type of schools which have intensive English language learning.

Now, as part of the students’ background in English, we looked into the ways that they make use of it in their daily lives. So we asked them what they use English for. As it can be seen from Table 6 both the Greek and the Bulgarian students make great use of English surfing the internet (97% and 89% respectively) whereas very few read English newspapers (10% and 9% respectively). Moreover, almost the same number of respondents from both samples write e-mails (41% and 46% respectively). This is quite expected in our days as the use of new technologies has reached very high rates in students’ lives, with the press being electronically accessible. However, the big difference (actually statistically significant) that can be noticed in this section is in the number of respondents who use English for travelling abroad (55% of the Greek respondents and 29% of the Bulgarian ones) and for watching English TV channels (24% of the Greek respondents and 71% of the Bulgarian ones). It can be expected that for economical reasons the Bulgarians travel less than the Greeks; however, the significant difference in watching English TV channels is puzzling. Maybe in Greece students are not interested in English satellite TV as films are not dubbed, so they listen to English from Greek TV channels. At the same time, it is highly questionable whether students in Bulgaria, even if interested, watch any films which are not dubbed or subtitled in their native language. The matter needs to be studied further if considered important.

<table>
<thead>
<tr>
<th>What English Language Certificate have you got (if any) and when did you obtain it?</th>
<th>GR</th>
<th>% of total</th>
<th>BG</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEFL</td>
<td></td>
<td></td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>FCE UCLES (B2)</td>
<td>35</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECCE Michigan (B2)</td>
<td>4</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAE UCLES (C1)</td>
<td>4</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPE UCLES (C2)</td>
<td>3</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECPE Michigan (C2)</td>
<td>4</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (STANDARD PALSO, GCIA, GCE)</td>
<td>10</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Certificate</td>
<td>28</td>
<td>32%</td>
<td>77</td>
<td>91%</td>
</tr>
</tbody>
</table>

Table 5. Number and type of certificates of Greek and Bulgarian students.

<table>
<thead>
<tr>
<th>What do you use English for? (you can tick more than one answer)</th>
<th>GR</th>
<th>% of total</th>
<th>BG</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading newspapers</td>
<td>9</td>
<td>10%</td>
<td>8</td>
<td>9%</td>
</tr>
<tr>
<td>Travelling abroad</td>
<td>48</td>
<td>55%</td>
<td>25</td>
<td>29%</td>
</tr>
<tr>
<td>Writing letters, e-mails</td>
<td>36</td>
<td>41%</td>
<td>39</td>
<td>46%</td>
</tr>
<tr>
<td>Job applications/university applications</td>
<td>9</td>
<td>10%</td>
<td>15</td>
<td>18%</td>
</tr>
<tr>
<td>Watching English TV channels</td>
<td>21</td>
<td>24%</td>
<td>60</td>
<td>71%</td>
</tr>
<tr>
<td>Listening to English radio stations</td>
<td>21</td>
<td>24%</td>
<td>27</td>
<td>32%</td>
</tr>
<tr>
<td>Surfing the Internet</td>
<td>85</td>
<td>97%</td>
<td>76</td>
<td>89%</td>
</tr>
</tbody>
</table>

Table 6. Uses of English chosen by Greek and Bulgarian students.
According to the Common European Framework (The Council of Europe, 2003), foreign language teaching works to a three tier hierarchy of level and achievement: elementary, intermediate and advanced. These three tiers are each sub-divided into two giving a six level framework as shown in Table 7.

The students were asked to assess their already acquired knowledge of English on a 1-6 scale (the respective levels of the Common European Framework) and the answers were various (Graph 1). Very few Greek respondents assessed themselves at A level (only 5% at A2) whereas 15% of the Bulgarian respondents assessed their knowledge of English at A1-A2 level. The majority of Greek students, 38 out of 88 (43%) assessed themselves at B2 level, which is close to the number of respondents who have obtained a certificate of B2 level. On the other hand, the number of Bulgarian students who assessed themselves at B2 level is quite high (31 out of 85 (36%) which may mean that although they do not possess a language certificate their knowledge of English is quite satisfactory). Generally we can see that the vast majority of both samples fall into the B1-B2 level area. The teaching implication is that we can have agriculture-related materials of B level suitable for both the Agricultural University of Athens and the University of Forestry in Sofia. As for C1–C2 levels, there seems to be a difference (a statistically significant difference) in the number of Greek and Bulgarian students. Twenty-four out of 88 Greek respondents (27%) assessed themselves at C1-C2 levels, whereas only 8 out of 85 Bulgarian respondents (9%) assessed themselves at C1-C2 levels. This can be also related to the number of Greek respondents who have obtained a certificate of C1 or C2 level (13%) (see Table 5).

### Graph 1. Level of English - self-assessment made by the Greek and Bulgarian students.

**Statistical analysis**

Seeing that there were differences in the answers given by the two samples we focused on the most striking answers and in order to see whether statistical inference about the two population proportions can be made. We performed a statistical hypothesis testing technique on the proportions (a two-tailed test). We found that some results were statistically significant, which means that there is a difference between Greek and Bulgarian 1st year students of agriculturally related sciences concerning some issues of English Language Learning (See Table 7)

As a result of the statistical analysis the following conclusions can be drawn:
- the Greek and Bulgarian students study English for statistically significant different lengths of time and at statistically significant different places (school, language centers and etc.);
- there is no statistically significant difference
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between the number of the Greek and Bulgarian students who self-assessed their knowledge at B2 level;
- there is statistically significant difference between the number of the Greek and Bulgarian students who self-assessed their knowledge at C1 and C2 levels;
- there is statistically significant difference between the Greek and Bulgarian students on the following preferred uses of English: (1) for traveling abroad, and (2) for watching English TV channels.

**Implications for language teaching**

Based on the survey conducted some implications can be made for the practice of language teaching at both the Agricultural University of Athens and the University of Forestry in Sofia:

1. The teaching materials at the universities should be developed at B1-B2 levels;
2. There are students who do not have the required level of knowledge to take a course in ESP or EAP;
3. The Bulgarian students need certification of their language skills.

**Concluding remarks**

What was explored in this paper is the profile of 1st year Greek and Bulgarian university students of agriculturally related sciences and their English

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Table 8. Showing the Null Hypotheses and the Z-statistic values

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Z-statistic*</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who were taught English from 6 to 10 years before they entered the university of agriculture</td>
<td>5.34</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who were taught English for more than 10 years before they entered the university of agriculture</td>
<td>2.04</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who were taught English for 5 years or less before they entered the university of agriculture</td>
<td>-4.60</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who were taught English at school.</td>
<td>-3.93</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who were taught English at private language centres</td>
<td>7.73</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who learned English by private tuition</td>
<td>4.92</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who self-assessed their English command at B2 level</td>
<td>0.25</td>
<td>Null is not rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who self-assessed their English command at C1 level</td>
<td>1.48</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who self-assessed their English command at C2 level</td>
<td>2.72</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and that of BG Ss who use English for travelling abroad</td>
<td>3.49</td>
<td>Null is rejected.</td>
</tr>
<tr>
<td>There is no difference between the number of GR Ss and the number of BG Ss who use English for watching English TV channels</td>
<td>-6.26</td>
<td>Null is rejected.</td>
</tr>
</tbody>
</table>

Level of significance a = 0.05           Critical value = 1.96
language learning background. The Greek and Bulgarian ESP/EAP instructors were given some valuable insight regarding their students and the English courses at university in view of further cooperation among the Agricultural University of Athens and the University of Forestry in Sofia. It is hoped that further research on a greater scale, based on more detailed questionnaires and/or interviews could illuminate other subtle differences between Greek and Bulgarian students and raise better awareness of EFL pedagogical issues for the ESP/EAP instructors.

References


РАЗВИТИЕ РОССИИ И МИРА: ПЕРСПЕКТИВЫ В КОНЦЕПЦИЯХ И СЦЕНАРИЯХ В УСЛОВИЯХ УСТОЙЧИВОГО РАЗВИТИЯ

Андрей Блинов
Всероссийского заочного финансового экономического института, Москва, Россия

В первом десятилетии XXI века ключевые игроки, определяющие динамику мировой ситуации, расширяют сферы применения теории и методов стратегического анализа. Применение стратегического анализа, обусловлено серьезными причинами и уже имеет свои вполне конкретные последствия. Современная стратегия стран определяется качественными аспектами национальной стратегической культуры, лидерства и инициативы. В XXI в. тон задают новые реальности— глобальные центры власти, международный терроризм, геополитические комплексы, войны четвертого поколения. В странах, которым принадлежит инициатива в мировой политике и экономике, существует большой интерес к историческим, научным и практическим аспектам стратегического анализа, методам устойчивого развития. Напротив, в странах-аутсайдерах эта область знаний остается неразвитой, что обусловлено рядом причин, некоторые из которых коренятся в т.н. стратегической культуре.

С того времени, когда Советский Союз был стер с политической карты мира, потребовалось чуть более десяти лет для того, чтобы США перешли к принципиально иной стратегической концепции. В сентябре 2002 года Администрация Д. Буша представила достаточно четко сформулированную "Стратегию национальной безопасности", утвердительный ответ на вопрос о том, встретят ли Соединенные Штаты вызовы, брошенные разлагающимся миром, принимая на себя ответственность и политические атрибуты имперского государства. Жесткая "имперская" позиция состоит в том, что Соединенные Штаты воспрепятствуют наращиванию любого военного потенциала в мире, который мог бы сравниться с военной мощью Соединенных Штатов или превзойти ее. Эта доктрина "господства", отражающая установку США действовать самостоятельно, без оглядки на союзников, была названа идеологией "Новой американской империи". В США основные инструменты господства находятся в руках американских глобальных корпораций, а разработка стратегии национальной безопасности осуществляется в штабах разрабатывающего и военного сообществ. Ключевой целью стратегии национальной безопасности США является обеспечение доступа и защиты путей транспорта сырьевых ресурсов, прежде всего углеводородных, перед лицом прогноза их неизбежного истощения в течение ближайших 50 лет. Для любого государства, нахождение его политических отношений с другими государственными образованиями является определяющим фактором внутренней стабильности и безопасности.

В России отличие от США, имеют не корпоративное, а номенклатурное происхождение, и на две трети состоят из представителей партийно-комсомольской и хозяйственной номенклатуры. Новая российская номенклатура воспроизводит основные фрагменты психологии старой номенклатуры СССР, но в специфических формах, что вызвано резкой сменой их представлений о социальном порядке и применении политического насилия для достижения господства. Роль разведывательного и военного сообществ в современной России в определении стратегии национальной безопасности по целому ряду причин оказалась сравнительно слабой.

По оценкам известного американского политолога З. Бжезинского, отмечается, что все варианты стратегии России в постсоветский период оказались неуклюжими с исторической точки зрения и разработанными на основе весьма фантасмагорических взглядов на нынешние мощь, международный потенциал и интересы России за рубежом. По прогнозам некоторых американских аналитических центров, в ближайший период США будут проводить агрессивную линию поведения и начнут наращивать военной мощи на границах с Россией: усиление военного контингента НАТО в странах Балтии, установка в Азербайджане, Грузии и Молдове радиолокационных станций дальнего действия и средств радиоэлектронной разведки. Если намерения и действия США не останутся без внимания, чему есть множество свидетельств, Россия неизбежно придется к смене преобладавшей в ее стратегии национальной безопасности концеп-

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ции “отсутствия” потенциального военного противника.

Вместе с тем рассматривая сценарии будущего развития мира, нельзя не учитывать ту роль, которую играет и будет играть Россия. По мнению экспертов Европейского национального разведывательного совета, Россия все еще находится на перехватном этапе развития и поэтому остается “непредсказуемым игроком на внутренней и международной арене”. Эксперты совета отмечают, что возможность построения демократических институтов в России, дает задний ход, и Россия “возвращается к авторитаризму”. Во всех докладах разведывательных аналитических центрах, Россия признается экономически слабой страной, но отмечается, что “энергетические ресурсы страны поддерживают ее экономический рост” и, как страна богатая природными ресурсами, Россия имеет наилучшие перспективы для более глубокой интеграции в мировую экономику.

Россия переживает тяжелую демографическую ситуацию из-за низкого уровня рождаемости, плохого медицинского обслуживания. На территории России отмечается также неравномерное распределение населения: в Сибири и на Дальнем Востоке проживает только 20% населения, и необходимость миграции населения станет самой важной особенностью мира в 2020 году. Страны, принимающие мигрантов, столкнутся с проблемой интеграции новых мигрантов, которую необходимо решить, чтобы свести к минимуму потенциальный социальный конфликт.

Рассматривая внешнюю политику России, следует отметить, что наиболее вероятным является восстановление ее влияния на соседних территориях, приоритетным будет район Каспийского бассейна. В 2015 году запасы нефти и газа Каспийского моря будут использоваться максимально. Если российское руководство не предусмотрит никаких мер то, к этому времени будут открыты транспортные пути, проходящие не через Россию. Вместе с тем, учитывая, “особые отношения” с Европой, Москва, скорее всего, более терпимо отнесется к сближению бывших советских республик с Европой, чем с США.

По данным европейских аналитических центров, серьезными проблемами для России будут ее южные границы, нестабильные регионы Кавказа и Средней Азии, влияние которых (исламский экстремизм, терроризм и непрекращающиеся конфликты), вероятно, будет и в дальнейшем распространяться на Россию. Во внешней политике России наиболее вероятным является восстановление ее влияния на соседних территориях, приоритетным будет район Каспийского бассейна.

Как мне представляется, серьезными проблемами для России будут ее южные границы, нестабильные регионы Кавказа и Средней Азии, влияние которых (исламский экстремизм, терроризм и непрекращающиеся конфликты), вероятно, будет и в дальнейшем распространяться на Россию. С точки зрения экспертов Европейского национального разведывательного совета, Россия оставалась экономически слабой страной, не способна поддерживать вооруженные силы на современном уровне и разрабатывать новые виды вооружения, а, следовательно, Россия будет поддерживать статус силовой державы, опираясь на развитие ядерных программ.

Но, как крупнейший эксперт нефти и газа, Россия обладает потенциалом для увеличения своей международной роли. В качестве сопутствующих факторов российскому укреплению и устойчивому развитию следует назвать следующие потенциалы: идеологический, политический и экономический. Первые два рассматриваются западными экспертами негативно, к третьему – относительно нейтрально. Связь между укреплением и этими факторами эксперты оставляют за сокбками.

С точки зрения экспертов американских разведывательных центров, между Россией и США разгорается новая холодная война за влияние на постсоветском пространстве. Как отмечают эксперты, что в отношении России цель США проста и однозначна: добиться ее распада. Отсюда и серия тяжелых поражений, которые за короткое время понесла Москва. Но теперь у США “заняты руки”, и это давление вдруг резко ослабло.

Российское руководство мечтает о союзе с Китаем против Запада, но, как мне представляется, Пекин умело использует это заблуждение, и готовится к построению миропорядка, в котором Россия не будет играть заметной роли.

Отношения Россией с Индией останутся традиционно сильными в области военных и военно-технических связей, активно будет продвигаться и экономическое сотрудничество. При этом основной интерес Индии будет сосредоточен на усилении позиций своего топливно-энергетического комплекса на территории России.

Для противостояния США руководству России необходимо более активно ориентироваться на Восток: развивать отношения с Китаем и Индией, активно сотрудничать с ШОС, АТЭС. Вместе с тем следует отметить, что главная угроза существования российского государства заключена в росте мусульманского населения страны, а также в быстро развивающемся Китае.

Эксперты “Европа 2020” будущее России
Рассматривают с очи зрения её отношений с ЕС. После расширения Евросоюза Россия стала ближайшим соседом и характер отношений ЕС-Россия будет влиять на стабильность в регионе по всей границе. Россия рассматривается как глобальный партнер, обладающий военной мощью и с развивающейся экономикой, как общество переходного периода, крупный импортер товаров и экспортер энергии. Следует отметить, что в ближайшие десятилетия Россия не станет членом ЕС, но останется его важнейшим партнером.

Россия обеспечивает до 30% энергетических потребностей Европы, причем это более надежный источник энергии в сравнении с ближневосточным.

Россия идёт “своим курсом”. Ряд трудностей, с которыми России предстоит столкнуться, она не сможет решить самостоятельно. Без иностранных инвестиций невозможно добыться роста производительности, а государственная собственность и жесткий контроль тормозит развитие экономики. Ориентация во внешнекономических связях на торговлю, а не на инвестиции, затрудняет интеграцию в глобальную экономику. Сложная демографическая ситуация (к 2050 году население России будет менее 100 млн.), особенно на Дальнем Востоке и в Сибири, столкнётся с “азиатским демографическим давлением”.

По мнению европейских аналитиков, Россия является экономически более слабой страной по отношению к ЕС, и поэтому более заинтересована в развитии сотрудничества в области инвестиций, технологий, финансов, чем ЕС в сырье и энергии. Учитывая, что отношения ЕС-Россия определяют стабильность в Европе, ЕС, по-видимому, будет выстраивать отношения с Россией в трех направлениях. Продвигать идеи демократии, соблюдения прав человека в странах, лежащих между ЕС и Россией; развивать торговые, экономическое и технологическое сотрудничество, сдерживающая вмешательство России во внутренние дела стран-членов ЕС; развивать отношения в гуманитарной сфере, обучении, обмене студентами, сотрудничестве с неправительственными организациями. Немалая часть экспертов полагает, что Россия, благодаря своему статусу основного экспортера нефти и газа, сохранит потенциал усиления своей международной роли. Рост мировой экономики приведёт к увеличению спроса на многие виды сырья – такие, как нефть, газ. Общее количество потребляемой энергии, возможно, вырастет примерно на 50% в ближайшие два десятилетия. Эксперты Европейского национального разведывательного совета полагают: “если Россия не удастся всесторонне развить свою экономику, она сполна испытает на собственной шкуре, что такое нефтяное государство с его несбалансированным экономическим развитием, гигантским неравенством доходов, оттоком капитала и нарастающими социальными проблемами”. В то же время Евросоюз рассматривает Россию как одного из важнейших игроков на мировой арене, его экономика не может обойтись без сотрудничества с Россией. Евросоюз рассматривает Россию как своего рода тренда в вопросах энергетики, где Россия занимает ключевую роль.

Способность экономики создавать и эффективно использовать интеллектуальный капитал все в большей мере определяет экономическую силу страны, ее благосостояние. Открытость общества для импорта разнообразных знаний, идей и информации, способность экономики продуктивно их перерабатывать - вот от чего зависит успешное социально-экономическое развитие любой страны.

Характерная черта современной человеческой деятельности – наличие компонента знаний в каждом продукте и услуге. Во многих организациях все большая часть полученного эффекта становится результатом применения специальных знаний, широкого обучения персонала и сетевого взаимодействия с партнерами и контрагентами. По доле расходов на НИОКР ВВП России находится на уровне Китая и Италии. По абсолютной численности научных работников Россия традиционно удерживала первенство. Сегодня она (Россия) находится на третьей позиции после США и Японии. К России вплотную приблизился Китай. По удельному параметру численности научных работников на десять тысяч занятых Россия в 7 раз опережает Китай, в 2,6 раза – Италию, в 3 раза – Великобританию и на 20% Германию. По показателю ВВП на одного занятого, характеризующего национальной экономики, Россия примерно в 4 раза уступает США и в 3 раза Европе. По доле высокотехнологичного экспорта в товарном экспорте Россия находится на уровне Индии, уступая более чем в 5 раз Китаю и в 4 раза Италии. Анализируя целом готовность России вступить на путь развития, основанный на знаниях, можно отметить, что экономика страны имеет значительные возможности адаптироваться к новым условиям. Эта возможность обусловлена в первую очередь высоким образовательным потенциалом, значительными возможностями инновационного процесса и достаточно развитой материально-технической базой национальной инновационной системы.

Своеобразным тормозом, сдерживающим продвижение России в сторону экономики знаний, остаются нерешённые проблемы развития институциональной среды. Это, в частности, низкая эффективность государственного управления и
регулирования экономики, неразвитость венчурного предпринимательства, высокие административные барьеры. 

Несмотря на все сложности, российская экономика реализует имеющейся у нее значительный потенциал по формированию устойчивой новой демократической экономики.

RUSSIA AND WORLD DEVELOPMENT: PERSPECTIVES IN CONCEPTS AND SCENARIOS IN SUSTAINABLE DEVELOPMENT CONDITIONS

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