THE NEW STRATEGIC DIRECTIONS OF RURAL DEVELOPMENT IN HUNGARY

Szabóné Pap, Hajnalka & Bezzeg, Enikő

Károly Róbert College, Faculty of Natural Resources Management and Rural Development
Institute of Agroinformatics and Rural Development
3200 Gyöngyös, Mátrai u. 36. E-mail: phajnalka@karolyrobert.hu, E-mail: ebezzeg@karolyrobert.hu

Abstract: The notion of sustainability is the basis for our future possibilities. Local sustainability, in the centre of which can be found the livable settlement, is especially important in rural areas. Without developing rural areas, there is no developing society. The growth of the Earth’s population and the world economy has already surpassed the carrying capacity of this planet which may result in an “overshoot and collapse”. This can still be prevented today.

The population of towns and cities is rapidly increasing. Urbanization is a very fast process, even in Hungary. In large cities with millions of inhabitants crime and lumpen lifestyle pose huge problems. However, the bases of a successful economy are morals and a puritan lifestyle, which so far have characterized rural villages. 70% of the poor and needy live in rural areas in the developing countries and agriculture provides livelihood for 40% of the world’s population.

The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) was established in 2002 by FAO and the World Bank to learn more about the role of agricultural science and technology. After the positive decision some comprehensive summaries were made on all the related topics with the participation of 400 scientists. The assessment provided many lessons to learn and at the 2008 closing sessions in Johannesburg, the reports were accepted and it was proved that rural areas have a significant role in providing adequate means of earning a livelihood.

The Ministry of Rural Development composed a domestic-level study with the title of the National Rural Strategy. The objectives stated in the study can be seen as the main directions of the Hungarian rural strategy. The land policy aims to support the 50–70 hectare family farms and have the agricultural lands under national authority. The population must be provided with ample and safe food. The priority of local economy, local sale, and local markets is important. The positive exploitation of our natural resources may result in the strengthening of rural areas.

The deterioration of rural areas must be stopped. In order to halt these processes swiftly fundamental, patriotic economic and social policy changes, a strong people’s party, a short-run crisis treating and a medium-long-run strategic development and action plan are needed which is based on the respect of work and moral norms, national cooperation, solidarity, and the defense of our mutual interests rather than on speculation (ÁNGYÁN, 2010).

The greatest problem of Hungary is low employment. Workplaces may be created in the least expensive and the fastest manner in irrigational agriculture. In order to achieve this, the role of the state must be reconsidered and EU rules on state intervention must be reviewed.

Keywords: sustainable rural economy, National Rural Strategy, food safety, employment, natural resources

Introduction

In 1981, the director of Worldwatch Institute, L. R. BROWN, published a book called Sustainable Society. According to the author, there must be harmony between population growth, economic requirements, the utilization of natural resources and the minimization of environment pollution.

The first world-wide program on the protection of human environment was developed at the 1972 UN conference in Stockholm.

In 1992, The United Nations Conference on Environment and Development (UNCED – informally The Earth Summit) was held in Rio de Janeiro, where Agenda 21, the international plan of action to sustainable development and a blueprint for sustainability was accepted.

The EU Amsterdam Treaty (1997) declares the following: “DETERMINED to promote economic and social progress for their peoples, taking into account the principle of sustainable development”.

The World Summit on Sustainable Development took place in Johannesburg, South Africa at the end of August, 2002. It was established that despite all efforts the general environmental state of the Earth has deteriorated to a great extent. The risk of a global climate change has increased and the differences in the quality of life between nations and societies have amplified considerably.

The Stockholm conference created a natural-environmental pillar, the Rio Conference highlighted the economic pillar, while the Johannesburg Conference the social pillar was emphasized (MAGDA – MARSELEK, 2004).

The Stockholm Declaration contains the duty of all governments to protect and improve the human environment for the present and the next generations.

In 1984 the UN convened the World Commission on Environment and Development (WCED) whose Chair was Gro Harlem Brundtland, the Norwegian Prime Minister. In 1987, the Brundtland Report outlined a development model...
that contains both quantitative growth and qualitative development and it declares that economies can grow only by protecting the environment. In a sustainable world environment protection, economic objectives, and social justness must interlock in harmony.

LÁNYI (2010) refers to “sustainability” or development as the spread of activities that are based on local knowledge and work culture, that utilize – but do not exploit irresponsibly – the local conditions, strengthen local communities, facilitate self-sufficiency and self-support, and preserve biodiversity.

These conceptions assign an important role for rural areas since a developing society is unimaginable without it. The conception of the development of a sustainable rural economy requires a multidisciplinary and plural approach which can be shaped only by considering an utterly complex sphere of activities.

In order to preserve quality of life and livability it is expedient to apply cost efficient and economic solutions and financial incentives that take care of the environment and as a positive externality contribute to the improvement of the health conditions (e.g. air quality) of local residents, furthermore create workplaces for local experts which activate the local economy (CSETÉ M., 2009). A livable settlement can be placed into the centre of local sustainability.

Hungary has entered the era of global economy. The UN predicts that the ratio of city dwellers will be over 60% by 2025 (BIRG, 2005). Even by 2015 there will be a number of cities with a population around 20 million (Tokyo 27,9 M., Bombay 18,1 M., Sao Paolo 17,8 M., Shanghai 17,2 M., New York 16,6 M., Mexico City 16,4 M.). The growth of the number of city dwellers is also a current tendency in Hungary and this fact may threaten rural possibilities.

The world is now making its way towards unsustainability nevertheless the rural way of life is sustainable. This fact further supports the promotion of the development of rural areas.

According to MEADOWS et al. (2004), the barriers of permeability represents the barriers of growth – people need cars to maintain their lifestyle while houses and factories require a continuous energy supply and the price of energy and materials embody the barriers. Presently, the growth of the Earth’s population and the world economy has already surpassed the carrying capacity of this planet which may result in a sudden “overshoot and collapse” – probably later than indicated in the study. Problems may occur in connection with the use of global resources and the emission of pollutants.

The past cannot be altered but positive changes may be induced for the future if the indefensibility of the situation is recognized.

Life in very big cities is difficult. It can be stated and observed that the unemployed masses in large cities very often lead deviant, lumpen lifestyles; there is considerable criminal activities and drug consumption.

KOPÁTSY (1996) considers success from a moral point of view. He believes that only the most economically advanced countries were able to advance considerably because economic policy was based on morals and puritan solidarity. The industrialized, well functioning countries are characterized by thriftiness, discipline, desire for cleanliness, and a modest lifestyle compared to financial possibilities. In the large cities of western European Puritanism, morals are always rooted in the moral heritage of villages and small towns.

“If we acknowledge that economic success is based on morals then we have to examine what economic conditions facilitate the development of suitable morals.

**Strict morals may develop and survive only in relatively homogeneous societies where everybody knows everybody from all aspects.”**

In the past, villages were organized this way and even today it would be one of their most important roles.

The importance of rural areas is still growing in the EU because of the rural dominance of the new member countries. The reorganization and implementation of sustainable rural economies should have a central role amongst the goals of societies (MAGDA S. – MARSELEK, 2010).

According to CSETÉ – LANG (2005), “rural policy is the complex system of long-run interests, objectives, conditions, and operations based on principles. Rural policy is operatively implemented by rural development, which is the local chain of tasks.

From an economic point of view, the aim is to strengthen local activities and the local economy. The long-term advantages must be considered, if possible management must consider the protection of the environment. The reduction of non-renewable raw materials and energy resources is indispensable to protect the environment. The strengthening of institutions and civil societies serves sustainability. We must strive to widen and maintain the wealth of rural resources.

When analyzing sustainable development, we must distinguish between the different levels (global, regional, and local) and dimensions (natural environment, society, economy) of sustainability. In the current situation, the local programs have been the most successful ones therefore the global system can be developed by combining regional and local sustainable development (KEREK – MARSELEK, 2009).

**The state of the rural and agro-economics, international outlook**

The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) was established in 2002 by FAO and the World Bank to establish whether there was a need for the international assessment of agricultural knowledge, science, and technology. The assessment resulted in a global and five regional reports, a global and five regional summaries for decision makers, and a horizontal comprehensive report with an executive summary.
The reports were made in cooperation with hundreds of experts from all over the world who participated in the preparatory work as well as in completing the experts' report. As always in such cases success primarily depended on the efforts, enthusiasm, and cooperation of experts of many disciplines. The cooperation of related professional fields enabled IAASTD to create this unique interdisciplinary, regional, and global process.

The final intergovernmental plenary session was opened by the executive director of UNEP, Achim Steiner on 7 April, 2008 at Johannesburg, South Africa. At the plenary session the reports, the summaries for decision makers, and the executive summary of the comprehensive report were accepted by a vast majority.

The report was made by about 400 experts; however other personalities, organizations, and governments were also involved in the process.

The international assessment of agricultural knowledge, science, and technology (AKST) was also urged by talks between the World Bank and the private enterprise sector, and NGOs on their perception on biotechnology or more precisely gene technology.

70% of the poor and needy live in rural areas in the developing countries and agriculture provides livelihood for 40% of the world's population. About 3 billion people live on less than 2 dollars a day and 854 million are malnourished (IAASTD, 2008). Governmental investments in AKST are utterly important (which should be considered by Hungary), since in a favorable market situation, they can have a 50% economic rate of return.

Focusing on global development and sustainable objectives this paper must naturally emphasize the challenges of developing countries and poor rural communities where the livelihood of most inhabitants depends on agriculture and where poverty and environmental degradation is at present.

The most important ascertainments are briefly the following:

- Productivity has increased recently. As a result the supply of food per capita has grown from 2360 Kcal in the 1960s to the present value of 2803 Kcal.
- There was an improvement all over the world except Sub-Saharan Africa.
- Today about 1.6 billion people live in water covered areas, in poverty stricken regions and approximately 1.9 million hectares of land is prone to erosion.
- The bad practices in agriculture (deforestation, soil erosion, deterioration of agro-ecological functions) in connection with dire social and economic circumstances are increasing.
- Demand for food is likely to increase rapidly especially in the developing countries, on the other hand production will decrease.
- Approaching the applications of AKST from different angles will decrease starvation and poverty.
- AKST must provide a solution for the decreasing amount of water and its deteriorating quality, for soil erosion and regional destruction, for the decreasing functions of agricultural ecosystems, as well as for the deterioration of marine and fresh water ecosystems.
- AKST must strive to achieve equal rights between the sexes.
- There must be a new approach towards the handling of agricultural and natural resources and the technological possibilities must be utilized.
- The climate changing effects of agriculture must be reduced.
- Small scale producers and small enterprises may be helped by the active participation of the state, research, and the spread of knowledge.
- There must be a fight against poverty, small farms must be supported and sustained.
- Sustainable agriculture must be realized.
- The poorest developing countries are the losers of the liberalization of trade. This requires special treatment in certain cases. Many instances of intensive agriculture is unsustainable, the ecological footprint is already far too large.
- To achieve the developmental and sustainable goals is of crucial importance.
- The multifunctionality of agriculture must be taken into consideration.
- The role of the governments in research is to coordinate the cooperation between the private and the public sectors.

Agriculture is considered to be the combination of many complex production systems by IAASTD. It is a connected, dynamic, social-ecological system which is based upon the sustainability, use, and renewal of human-controlled ecosystem-services.

Analysis of correlations

Despite all achievements millions are affected by starvation, malnutrition, and the lack of food safety. Animal husbandry is likely to increase in the developing world where sustainable solutions are needed. The fish-stock – due to overfishing – is decreasing and it is unlikely to change in the future. The decrease of this protein source will promote live stock breeding.

The future of bio-fuel production is uncertain, it negative effects may surpass the positive ones (it requires a large quantity of water to produce). Worries about the appearance of gene manipulated raw materials in food and animal feed further increased demand for food safety rules and regulations and encouraged countries to create and introduce regulations to improve the situation.

Little is known about trans-gene plants, animals, and micro-organisms therefore more thorough research is needed. One of the dangers of rural possibilities is that imported food can be cheaply purchased in cities which may endanger employment in rural areas. Preference of intensive
energy consuming agriculture results in the fact that the environmental or social price of production remains unpaid which is unsustainable.

Some of the disadvantageous consequences of intensive agriculture are the following: depletion of nutritive materials in the soils, excessive use of water, unsustainable soil and water management, exploiting work conditions. Efficient agricultural production can only be achieved by experts. Governments may act in this respect. The main steps are as follows:

- renewal of the curricula, the appeal and the social recognition of agricultural sciences must be increased,
- scientific, agricultural, and management knowledge should be made more accessible,
- Cooperation between ministries and universities should be enhanced,
- improvement of infrastructure,
- capital should be provided for agricultural education,
- support the participation of universities in surveying the local and traditional knowledge and include these experts in the composition of the new curricula.

The state, NGOs, smallholders’ association, professional organizations, etc. may be the basic providers of the services, naturally involving farmers, too. The state could facilitate the organization of clusters for the above listed actors.

New national rural strategy

By the beginning of 2011 the Ministry of Rural Development created the National Rural Strategy. The main objectives stated in the report can be taken as the main directions for the future.

The comprehensive goals of the strategy are the following:

- to preserve and increase rural workplaces
- to preserve the rural population and restore demographic balance
- to guarantee food production and ensure food supply, to eliminate poverty in the country
- to increase the vitality of agriculture and food production, to improve our market position, to restore the appropriate balance between crop production and animal husbandry.
- to protect our drinking water supplies, to preserve water sources, soil, natural flora and fauna and the countryside, and to increase environment protection
- energy supply based on local resources and systems, security of energy, decreasing of energy dependency
- to improve the quality of rural life and to diversify the rural economy
- to restore the close connections between the city and its environs

The plan points out seven strategic areas:

- Sustainable regional and natural resources management
- Quality of the rural environment
- Land policy
- Sustainable agricultural structure – and production policy
- Food safety, agri- and food market
- Local economy development
- Rural settlements, local communities

In the following parts the national strategy programs will be introduced which deal with environmental protection, land use, ecological farming, local processing of raw materials, education, research, village development, etc.

The regional complex rural development programs are also significant as they focus on local development. The following programs are included:

- Program for the development of areas with detached homesteads
- Tisza-valley complex development program
- Homokhátság program
- Cserehát program
- Regional economic development complex programs
- Carpathian Basin rural development cooperation program

The program determines rural strategy for ten years with forward looking ideas; in case of successful implementation it can improve the state of rural areas.

In the following parts some of the important strategic areas will be highlighted which contain new, initiative ideas that may lead to essential changes.

ANGYÁN (2011) writes the following: Throughout its history, Hungarian society was always able to revive in difficult times by feeding on its rural roots and depending on rural communities. However, nowadays it is rural Hungary itself that has fallen into the deepest crisis and cries out for help to be able to revive. The ecological, economic, financial, and demographic symptoms, the food scandals and catastrophes make the countries of the world realize how important it is to protect the value of rural areas. National safety these days increasingly depends on the preservation of natural resources and systems, the retaining of national sovereignty, responsible management of natural resources, the development of agriculture and rural areas, food safety, energy and water supply, as well as the foundation of environment safety

However, Hungary and the changes that took place in the previous 20–25 years were not driven by these aspects. The revival of rural areas was hindered from the very beginning by the primitive accumulation of capital, which happened too late and also by the process of globalization.

Agriculture is a determining force for rural areas. The agricultural production of the world shows a continuous increase while it is decreasing in Hungary (Table 1).

Land and estate policy

As UDOVECZ (2010) explained, “maintenance of our rights over the natural resources (agricultural land, forests,
The new strategic directions of rural development in Hungary

Table 1. Agricultural production indexes of the world and Hungary

<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>Hungary</th>
<th>Hungary – the world, difference in space, percentage point</th>
<th>Previous year = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>127.2</td>
<td>86.8</td>
<td>–40.4</td>
<td>100.7</td>
</tr>
<tr>
<td>2003</td>
<td>130.6</td>
<td>82.9</td>
<td>–47.7</td>
<td>102.7</td>
</tr>
<tr>
<td>2004</td>
<td>136.1</td>
<td>102.0</td>
<td>–34.1</td>
<td>104.2</td>
</tr>
<tr>
<td>2005</td>
<td>136.8</td>
<td>93.3</td>
<td>–43.5</td>
<td>100.5</td>
</tr>
<tr>
<td>2006</td>
<td>137.4</td>
<td>91.2</td>
<td>–46.2</td>
<td>100.4</td>
</tr>
<tr>
<td>2007</td>
<td>139.9</td>
<td>80.6</td>
<td>–59.3</td>
<td>101.8</td>
</tr>
<tr>
<td>2008</td>
<td>144.7</td>
<td>100.8</td>
<td>–43.9</td>
<td>103.4</td>
</tr>
<tr>
<td>2009</td>
<td>145.9</td>
<td>91.2</td>
<td>–54.7</td>
<td>100.8</td>
</tr>
</tbody>
</table>

Source: KAPRONCZAI, 2010 on the basis of FAO

Some of the most important goals of the National Rural Strategy are the following:

- Maintaining autonomy over natural goods, solving problems of food and water supply, and also environmental security are all very important.
- The estate policy of the government does not support Roma communities? The kinds of organizations that help Roma people, but also can also deal with unmanageable families."

Leasehold – considering other factors – fundamentally determines the success of agricultural productivity. We have to try hard to adjust the system of leasehold to its own environmental potentials and constraints.

The effectiveness of the system depends on the composition of the land use and on the types of plants and the results of cultivation. Regional distribution of land use and its time-dependant changes are useful information for the inner structure of agricultural land use (MAGDA R., 1999).

Within this logic scheme the optimal land development means the determination of the most favorable relation among the leasehold subsystems in terms of competitiveness, which can be interpreted as an optimization task.

In the framework of the program of sustainable agricultural structure and cultivation policy important developments are being discussed, including:
- Program of leasehold structure change
- Damage mitigation, risk management program
- Garden-Hungary horticulture program
- Eco-farming program
- Live-stock farming development program
- Protein program
- National equestrian program
- Fish-breeding development program
- Gene preservation, gene bank program
- Programs of model farms, regional centers
- Forest program

The estate policy of the government does not support lands of any thousand hectares, nor the 1-3 hectare parcels of land. It aims at 50-70 hectares average land size, giving a chance to the youth with it. The institutional system of the National Land Fund supports small- and medium-scale
factories. Similarly to other EU member countries, the agricultural factory regulation helps to keep agricultural land in native property.

Changes in areas per farm is displayed in Table 2

<table>
<thead>
<tr>
<th>Description</th>
<th>Agricultural organizations</th>
<th>Private farms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Arable land</td>
<td>506.9</td>
<td>352.3</td>
</tr>
<tr>
<td>Grass</td>
<td>161.2</td>
<td>120.4</td>
</tr>
<tr>
<td>Agricultural territory</td>
<td>533.5</td>
<td>336.7</td>
</tr>
<tr>
<td>Cultivable land</td>
<td>653.0</td>
<td>465.8</td>
</tr>
</tbody>
</table>


### Healthy food, non gmo (GMO free), employment

The National Rural Strategy considers a sufficient, healthy and safe food supply utterly important. It preserves the country’s GMO-free status and it is also laid down in the new fundamental law. Conceptions harmonies with the summary of IAAASTD published in 2008, discussed above, addresses the problems in full detail, however, due to compactness, we can only refer to it.

Regarding ecological farming, Hungary is planning to increase the involved areas from the actual 120,000 hectares to 350,000 hectares by 2020. The most important is to give preference to local farming, local cultivation and local sale. The rate of local produce in food trade is planned to be increased to 80% from the actual 65% by 2020. Only a diverse agriculture that is based on different sectors can create workplaces.

The past 20 years of agriculture led to regression and opportunities for work have decreased as well. With the closing-downs of the big agricultural farms, a system ceased to exist as well that had ensured considerable employment.

Economic and social problems in the countryside can be traced back, in the first place, to the reduction of the roles of agriculture in income production and employment.

Referring to the ideas of those involved in the political transformation RÓNA (2009) writes the following: “Participants agreed that the national economy of the country would be based on three pillars: the competitive sector, the state sector and the co-operative sector. Behind this notion stood not only a working economic structure, but outlines of a healthy and creative society could also be seen. The state sector can not and should not compete with the efficiency of the private sector; however the procurement and preservation of public welfare can not be entrusted to the competitive sector. A sector like agriculture, which requires social collaboration and significant capital at the same time, can not be successful without the co-operative structure. The alternative, namely to concentrate property in private sector would have unacceptable consequences.”

In our opinion, increase of employment would be the fastest and most economic in the agrarian sector. The state should get back its directional, organizational and developmental roles. We have to think of a system instead of small- or large-industry. The expected food shortage and increasing prices will give us a good chance to act in accordance with this.

The area where new workplaces could be created in the fastest and most economic way would be agriculture. According to RÓNA (2009): “The essence of this task is not to create new resources of capital, but rather to utilize and classify already existing means in an effective and purposeful manner. If, for example, Hungary wanted to irrigate as many hectares of land as would meet the EU average, then in that case we should develop the system of irrigating 680,000 hectares of land. The expense per hectare of this would be around HUF 1.5 million; counting with a 5 year development program it would mean HUF 200 billion. This amount of money - that by the way could obviously be realized with the rearrangement of the resources – would create one workplace per 3 hectares meaning 225,000 new workplaces in total. Thus, the gross expense of subsidy per one workplace would be HUF 4.5 million. No other industry can show such workplace creating abilities.

The key to success lies in the creation of the abovementioned industry. Nevertheless, that is a difficult and complex ask, without any doubt.”

The other possibility of employment is energy generation. According to R. MAGDA (2011), 5-6 million hectares of relatively low-fertility land have become fallow in the Middle-Eastern European member states of the European Union due to considerable decline of live stock farming and because the agrarian population is growing old. Lands that grow wild, allergen parasitic weed, erosion and deflation do not attract people. Rural employment could be increased with a complex energetic, wood cultivation, utilization program. Concerning Roma employment it would be practical to lobby for EU sources.

Changes in employment and its critical situation are shown in Table 3.

Education should also get great emphasis beside employment. Reputation of studying and a scale of values that bounds progress and success to work and not speculative transactions should be restored. (MARSELEK 2010)

### Situation of the countryside, possibilities of state organisation

The declared aim of the European Union is to decrease differences among the regions. The idea tends to ensure equal opportunities for earning a livelihood. A similar idea is the equilibration of life possibilities of rural and urban areas. In spite of the declared aims the state of the underdeveloped
regions and the countryside is becoming worse. Demonstrating the effects of the crisis SZALAI (2010) states that countries of the centre shifts the effects of crisis to the semi-peripheries, and this deepens the symptoms of structural crisis of neocapitalism in Eastern European countries. This idea is also relevant in urban-rural relations; recessions have stronger effects in rural areas. The situation leads to fast migration.

CSÁKI (2009) considers the coordinating activity of the state an important priority. According to him: “The development of agriculture is based on the private sector. However, help from the state and effective control are also indispensable. Thus production and the market demand a more effective cooperation between the state and the private sector. The role of the state should increasingly manifest itself in direct intervention and financial support. The most important task of the state – presently when agriculture and food markets are going through transformations – is to guarantee safe and healthy food production and to gradually develop rules and institutional conditions of the market operations.”

According to the article of the Treaty on the Functioning of European Union, it has to be noted in connection with aids granted by states, that the Government – when creating and applying aid constructions operated from solely national sources – has a scope for action within the frameworks of the EU rules on existing aids. According to the article no 107 (1), aid granted by the state is irreconcilable with the internal market, thus it is forbidden.

For the 2014–2020 period we have to work hard to achieve compromise so that the ever so important state support investment for live stock farming, agrarian damage alleviation and agrarian marketing, could constitute a significant part of national agricultural sector subsidization system in the future, too.

The European Commission may give us permission for this. Investment and rural development aids are increasing constantly, however they are not enough to eliminate the backwardness of the countryside. Proportions are indicated on figure 1.

AKI (Research Institute of Agricultural Economics) calculation based on data from Ministry of Rural Development

**Preservation of natural resources**

The notion of natural resources expresses the link between nature and human economic activities, thus it involves the range of natural elements that may be used in energy generation, food production and as industrial raw materials. Furthermore, when talking about natural resources we refer to natural potentialities that humans utilize to meet their needs on their given state of development.

R. MAGDA (2010) expounds that two-thirds of our country’s natural resources and more than a fifth of the national wealth is provided by soil of distinguished significance whose rational utilization is one of the main tasks of the economy.

The quality of the soil is a determinant factor from the viewpoint of rural economy too, rational land utilization is an economic question, and thus we have to take advantage of it. When estimating land economic factors that influence the yield has to be taken into consideration.

An essential condition of life is water. Our country has outstanding possibilities in this field, but utilizes it only partially.

Mankind is constantly shaping nature with its activities. This intervention is inseparable from the usage of nature. Environmental regulation is important in order to conserve the state of nature. The aim of natural regulation is to ensure that agricultural organizations carry on their activities in a way that the state of nature remains permanently in proper quality, meaning that certain norms concerning quality of nature have to be respected by everyone.

Polluting sources have to be followed with great attention and where necessary we are obliged to intervene. Such

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**Table 3. Distribution of the number of employers according to sectors of national economy (within the population of age 15–64)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number, thousand persons</th>
<th>Distribution %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>697.2</td>
<td>15.4</td>
</tr>
<tr>
<td>Industry, construction industry</td>
<td>1711.0</td>
<td>37.9</td>
</tr>
<tr>
<td>Services</td>
<td>2107.9</td>
<td>46.7</td>
</tr>
<tr>
<td>Total</td>
<td>4516.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*To present changes of a 20 year period we used the 1990 census data and in further years the data of workforce surveys. Because of the methodological differences of the two surveys the possibilities for comparison is limited.

Source: Hungarian Central Statistic Office 2010

**Figure 1. Distribution of subsidies according to aims**

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Pollutions are air- and water pollution, and pollution caused by waste. Waste management is legally regulated. Hazardous water management requires special attention. Conversation of biodiversity is fundamental on behalf of our future. In spite of the provisions of international organizations, the EU and certain member states, dangers threatening biodiversity still exist, in fact they are getting worse. Societies transform natural habitats in order to meet their needs therefore way many species get to extreme peril. Infrastructural developments that were not thought out carefully mean the biggest dangers, because for most species of the fauna the cutting up and isolation of their habitat can be fatal.

Biodiversity is also a natural resource; its sustenance is an important element of the preservation of „ecological equilibrium”. Not even those who work in the agrarian sector can estimate the real value of natural resources, for traditional economic attitude neglects environmental damage and decrease of natural resources, and underestimates future value of natural resources.

Ecological economics as a new discipline translates the evaluation of biodiversity (that by the way was evaluated according to different views so far) to the language of economy. There are more methods available to the economic evaluation of biodiversity. Direct value is manifested at the utilization of certain natural resources, indirect value, however, shows the value they would have manifested had they not been destroyed. (STANDOVÁR – PRIMACK, 2001)

References


