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CREATING COMPETITIVE ADVANTAGES FOR RURAL AREAS BY IMPROVING THE EFFICIENCY OF AGRICULTURAL PRODUCTION: A REGIONAL PERSPECTIVE

ABSTRACT

The paper analyses the dynamics of agricultural production in the Chernivtsi region in the period 1990-2014. Following the analysis, it is revealed that the problem is the insufficient legislation on agricultural cooperatives. It is therefore necessary to amend the current legislation of Ukraine. The main directions of the development and competitiveness improvement of rural areas in Chernivtsi region are investigated. The need to provide comprehensive control over the use of agricultural land to prevent its degradation is argued. The region has an untapped potential of organic food production. The need to diversify economic activity is recognized, including the following: hunting, fishing, plant gathering, rural tourism, development of sanatorium sphere. The impact of these trends on improving the competitiveness of rural areas and the social and economic development of the region is shown. The need for legislative support of rural tourism is proven.

Key words: competitiveness, rural areas, agricultural production, Chernivtsi region, diversification of economic activity.

JEL Classification: O18, O13, R11.

1. INTRODUCTION

Rural development is most commonly considered to be linked with agriculture as the main economic activity. For each region of Ukraine, rural development and competitiveness increase are extremely important. In the current difficult socio-economic conditions, there are limited modalities to achieve this. The agricultural production growth is possible in two ways: by developing the existing types or by looking for new, unconventional farming practices. In order to ensure the competitiveness of rural areas in general, it is necessary to develop other economic activities, the social infrastructure, to solve up the problem of migration from rural areas, etc.

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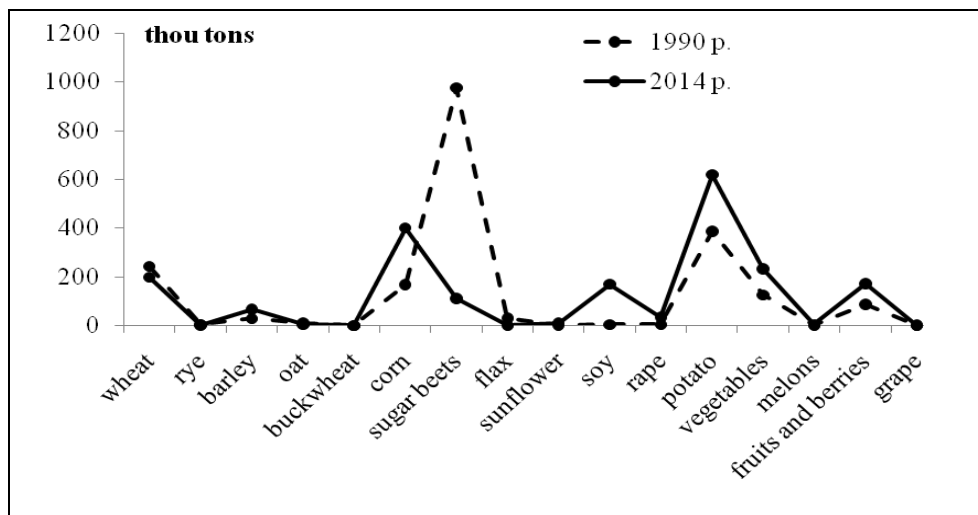
2. MATERIAL AND METHODS

The economic phenomena and processes were analyzed in order to assess the effectiveness of innovations. Various methods, such as abstraction, synthesis, monographic study and statistical analysis were used. The information sources used in the research were: Ukrainian legislation on matters relating to the topic of the article, regional regulations, official data from the State Statistics Service of Ukraine and its regional departments, as well as the literature on regional economics, agricultural economics and innovation.

3. RESULTS AND DISCUSSION

Agriculture. The total land of Chernivtsi region accounts for about 1% of the land in Ukraine, more than half of it being used for agricultural purposes (this is equal to 1% of the country's agricultural land). Accordingly, the share of agricultural products is relatively low, about 2% of the gross agricultural output, and accounts for about 30% of the gross regional product. Agricultural production per capita is equal to the average level for Ukraine, most of the products being produced by individual farmers.

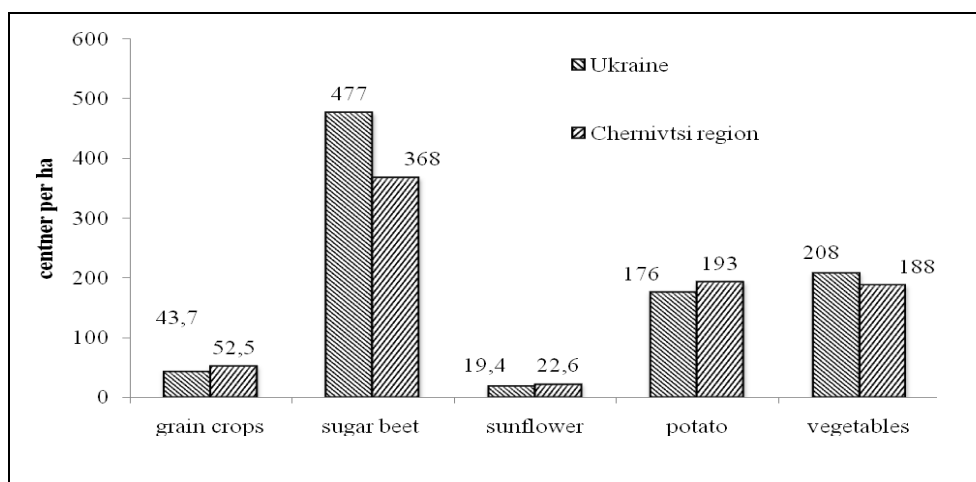
Changes in the output of major crops for the period 1990–2014 in Chernivtsi region occurred due to the transition to market economy (see Figure 1).



Source: author's own processing Zhuk I.M., 2015.

Figure 1. Dynamics of production of major crops in Chernivtsi region in the period 1990–2014, thou tons.

For example, a decrease took place in sugar beet, due to this crop productivity, which is below the average for Ukraine, despite the fact that the yields of other crops are close to the national average, and in some cases are even higher (see Figure 2). In addition, farmers made up their choice for more profitable directions, because, despite the rather large millet production in the previous periods, starting from the year 2014 it ceased to grow, and in neighbouring Romania, with similar weather conditions, it gives good yields. Farmers stopped producing millet while more and more areas were sown with rapeseed and soybean, industrial crops that are almost entirely exported.



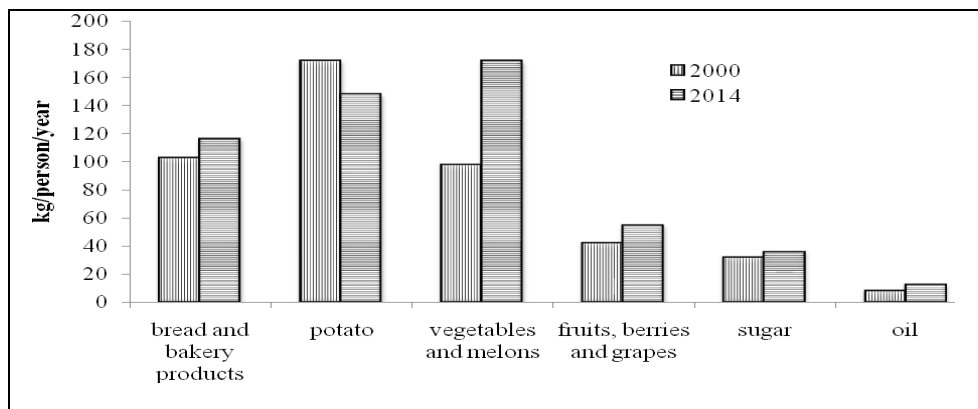
Source: author's own data processing Zhuk I.M., 2015.

Figure 2. Yields of major crops in 2014: average in Ukraine and in Chernivtsi region.

In order to determine the degree of agricultural productivity it is necessary to analyze the balance of production/consumption of food in the region. From this point of view, one person in 2014 consumed 6.0 kg of potatoes per month, and produced 56.6 kg per person per month; consumed 9.3 kg of vegetables and melons, produced – 21.3 kg per person per month; 116.4 kg of bread were consumed, and 552 kg were produced per person per year (converted from grain to bakery) (Prokopenko, 2015b). In the year 2014, 10 times more potatoes were produced per capita than consumed, almost 3 times more vegetables and melons, 5 times more bakery products and confectionery. It should be noted that over the past decade, the consumption patterns of the population in the region have changed a lot: the consumption of vegetables, fruit and vegetable oil increased while the consumption of potatoes decreased. This shift to more vegetables in the diet indicates welfare and increase in food culture. The dynamics of the consumption structure of basic food products per capita in Chernivtsi region in 2000–2014 is shown in Figure 3.

The number of cattle in the region is represented by a relatively small amount – 98 thou heads, out of which 60 thou cow heads. There are also pigs – 154 thou heads, sheep and goats – 45 thou heads, poultry – 3.305 million heads (Zhuk, 2015). Compared to 1990, the number of cattle decreased almost five times (from 448.4 thou heads). This diminution took place due to the transition to the market economy and the destruction of the collective farm system. At present, most cattle are grown on the rural households – 81.2 thou heads of the total amount. Cows (as well as pigs, sheep, goats, horses, rabbits) are raised on people’s households, totalling 56 thou heads – against 66 thousand in 1990 (Prokopenko, 2015c).

The number of rabbits doubled (from 43.8 to 81.5 thousand heads). This reflects the current market demand for this valuable dietary meat. At the beginning of 2015, the rural households in the region were breeding 80 thou heads of rabbits, while in Ukraine the number of rabbits decreased from 6161.2 to 5011.5 thousand. Given the fact that WHO is considering to include red meat on the list of carcinogens alongside alcohol and tobacco products (Macrae *et al.*, 2015), producing rabbit meat can be a promising source of export for the region, especially to Europe, where all the innovations associated with a healthy lifestyle are picked up very quickly.



Source: author’s own data processing (Prokopenko, 2015b)

Figure 3. Dynamics of the consumption structure of basic food products in the Chernivtsi region in the period 2000–2014.

By the amount of produced milk, eggs and meat, the region fully meets its consumption needs: in 2014, on the average, 3.7 kg per person per month were consumed and 3.8 kg per person per month were produced (the figures are in terms of meat). Even though it is produced a little more than consumed, meat consumption per capita is still almost twice lower than the medically reasonable standards. While egg production has increased for all types of farms, agricultural enterprises feature instability. Egg production in the region exceeds consumption

more than twice, 35 eggs/month per capita are produced and 16 eggs per capita per month are consumed.

The number of horses on individual farms (households) in the Chernivtsi region has increased almost seven times since 1990. Farmers needed cargo transport while funds to purchase new farm machinery are not available. Maintenance of old machinery is not effective and renting is often too expensive.

In the period 1990–2014, the number of bee families decreased (from 125 thou to 81.9 thou). This trend is typical for the whole country, except for some areas, such as Zhytomyr, Lviv, Mykolaiv, Sumy, Khmelnytsky, whose residents have been actively engaged in beekeeping, which meets the domestic market needs. The diminution of the number of bee colonies was reflected in the production of honey in the region, which declined by one third (by 8% on households and by 96% on the agricultural enterprises).

Despite the presence of some areas with environment pollution in the region, the honey from Chernivtsi oblast has the quality that can claim the status of organic products. This is revealed by the interest in its certification by international organizations, including the Certification Body “Organic Standard” and the German Society for International Cooperation, which organized a workshop “Organic beekeeping: requirements, certification, experience” in the village Revakivtsi (Kitsmansky district) at the beginning of 2014. Unfortunately, there are no results: at the end of 2015 not a single producer of organic honey was registered in the region.

Besides honey, the Chernivtsi region has all the necessary conditions for the production of organic products like crop and animal products. A few pilot projects were launched, a number of companies started production, but currently only two companies have the international certificate: LLC “Gals LTD” (drinks) and individual entrepreneur Golik O.M. (cereals and pulses).

In general, the region has a great potential capacity for agricultural production, which unfortunately is difficult to implement in these conditions. For example, in order to obtain a credit for the development of the farm, a collateral is required. For a farmer it can only be a house and land, but the more remote the village is, the lower the value of collateral.

The state and local governments have no right to act as guarantors for loans. To solve this problem, at the beginning of the year 2015, the State Institution “Institute of Regional Research named after M.I. Dolishniy of the National Academy of Sciences” together with the Department of Agro-industrial Complex of the Lviv regional state administration developed a draft law “On Amendments to Article 17 of the Budget Code of Ukraine”, but it is still pending.

The big problem for the individual producers is to sell production for worthy prices. It would be possible to solve it by establishing agricultural service cooperatives (hereinafter – ASC); however, due to the imperfection of the current legislation, the process stalled.

Despite the fact that individual household farms are the main producers of agricultural products, they do not have the privileges that are available for agricultural enterprises. Thus, the VAT for agricultural enterprises is transferred to special bank accounts, and they can use that money for development. This mechanism is not available for private household farms and household farms united in the ASC.

It is not enough to make changes only to VAT taxation to solve the problem. The current status of the ASC contradicts several legal acts, for example, the Law of Ukraine “On Agricultural Cooperation” (hereinafter – the Law) and the Tax Code of Ukraine (hereinafter – TC), as well as a number of subordinate legal acts. Under the current laws, the ASC is not a producer of agricultural products, is a non-profit organization, does not own the products (Art. 209 TC), it does not own the revenues from the sale of products (Art. 9 of the Law), and its activities (services) (Art. 5 of the Law) are not included on the list of activities with special tax mode (Art. 9 TC).

At present the association in ASC leads to diminishing returns of individual producers, so cooperatives are often created only when funds are provided from various grants and programs, and after such grant or program is over, ASC often stop their activities.

We can conclude that there is a conscious underutilization of the existing potential of rural areas associated with agricultural production of individual household farms. In addition to the above-mentioned reasons, we should mention that the processors buy agricultural products from personal farms (households) for prices lower than those they pay to enterprises (milk – by 30%, vegetables – by 20%, meat – by 15%). The households usually do not have their own storage and processing facilities. Therefore, in a situation where there is no organized sale of products, a farmer will produce only what he can directly sell himself for a profit. This significantly limits production or creates conditions for the emergence of shadow schemes.

Other economic activities. The rural areas in the Chernivtsi region have mainly agricultural specialization. In early 2014, about 10.3 thousand people were working in agriculture, forestry and fishing and 190.8 thousand people were involved in agricultural activities on households exclusively (Karmazina, 2014). Out of the 53.4 thou persons employed in this rural area, agriculture (with 8.1 thou people employed) comes second after education (13.8 thou people) (Karmazina, 2014). Thus, in 2014, the region ranks 16th in Ukraine by the production of agricultural products per capita (5174 UAH/capita/year) (Prokopenko, 2015a). However, by the total share of agricultural production, the region is on the penultimate place in the country (4730.9 mil. UAH/year) (Prokopenko, 2015a).

The entrepreneurial activity is also not conducive to increasing productivity (Kulish and Tsymbalista, 2015). It is significantly different in various parts of Chernivtsi region. The smallest number of businesses is registered in Gertsavskyy

(349) and Putylskyy (430) districts. These districts also have the lowest activity and individual entrepreneurship – 4 to 8 sole traders (Rotar, 2014). Nevertheless, Putylskyy district is the best by the number of businesses per thousand of population (16) (Rotar, 2014). Out of 398 villages, 131 have no business entities (Karmazina, 2014).

The European experience of rural areas development shows that there is the need for a change in the approach to rural development in Ukraine in transition from the agrarian to the multifunctional model of rural development. At the same time, the radical changes in approaching rural development requires the development and practical proceedings of a number of activities related to it, including amendments to the national legislation, in the absence of which the operation of the multifunctional model of rural areas development is impossible (Nepochatenko, 2012).

At present, there is an urgent need to improve the overall socio-economic situation in rural areas, which can be achieved through the diversification of economic activities. The rural areas in Ukraine, having quite a rich natural resource potential in recreation (water, land, forest, spa, fauna resources), should be used effectively. It should be noted that permanently in our country, the state paid more attention to industries and areas rich in mineral resources, and the exclusively agricultural territories always received less support, which led to a deterioration of their economic development (Dyshluk, 2011).

The need for such a research is confirmed by the fact that, for example, by the year 2014 in the Chernivtsi region, the majority of the registered unemployed people, i.e. 60.4%, were residents of rural areas, out of which 35.1% were former employees of agricultural enterprises (Chernivtsi Regional Employment Agency, 2014).

Forestry and hunting could become the potential areas of rural development in Chernivtsi region. Despite the fact that 43% (113.3 thousand ha) of the total forest area is occupied by the protective forests, in 2014 the region ranked 10th in Ukraine in terms of forest production – the share in the total forest production of the country is about 4%, representing 335.2 million UAH, and the indicators were stable over the last few years. The volume of timber harvesting is also stable - about 900 thousand m³ (5% of national forest harvesting). In 2014, 257.9 thousand hectares of forest areas were covered by forest operation measures (Zhuk, 2015).

On the territory of the state forestry enterprises of Chernivtsi Regional Forestry and Hunting Department there are 102 objects of natural reserve fund (over an area of 70 thousand hectares), representing 9% of the area – twice as much as the average in Ukraine (excluding the objects of natural reserve fund that are located in other forest users and not in the territory of state forest). These are the national park “Chernivetskiy” and “Cheremoshskiy”, “Vyzhnytskiy”, “Khotynskiy” zoological reserve of local importance “Zubrovtsyia”, reserves of national importance “Chornyy Dil”, “Tsetsyno”, “Lunkivskyy”, “Petrivetskiy” and other (Tkach *et al.*, 2015).

The area under hunting grounds accounts for more than 600 thousand hectares. By the number of ungulates per one hectare, the region ranks 9th in Ukraine, fur animals – 15th and wildfowl – 17th. Per total it accounts for: 6.9 thou heads ungulates, 26.1 thou heads fur animals, 111.0 thou heads wildfowl. These figures, together with the fact that in 2014 Chernivtsi region was among the three oblasts of Ukraine that avoided forest fires, indicate a high level of reserve activities. This is especially seen by taking into account that the total cost of hunting in the region ranks 19th in the country (5641.9 thou UAH), including costs for protection, reproduction and registration of wildlife and regulation of hunting areas of 1997.3 thou UAH (16th place), and the artificial breeding of game animals – 66.0 thou UAH (22nd place) (Zhuk, 2015).

The experts in hunting economy, such as M.N. Yevtushevskyy, believe that currently the development of hunting in Ukraine is negatively influenced by anthropogenic factors such as failure to conduct biological basis of hunting, widespread ploughing of lands, harmful effect of agricultural machinery and equipment, etc. After ploughing, the fields lose their productivity and safety properties for a long time. There are also other complications: in the locations that served as areas where favorable conditions for game animals are maintained there are many garden plots with a large number of people. However, the problems can be solved by maximizing the use of scientific and production potential and optimization of protective measures (Yevtushevskyy *et al.*, 2013).

Fishery has all the odds to become one of the ways to improve the competitiveness of rural areas in Chernivtsi region. However, problems with the protection of water bio-resources have become an obstacle to this. Only in 2014 on the Dnieper Reservoir (village Konovka in Kelmenetsky district), the state losses from poachers amounted to 365.3 thou UAH. To ensure an efficient use of resources, the following activities and measures are needed: innovation in keeping fisheries activity, application of the ecosystem approach to fisheries and aquaculture, justification for strengthening the organizational-economic and financial levers of state support (Kishchak *et al.*, 2014).

In the last decade, the extraction of water bio-resources increased almost three times in the region, from 423 tons up to 1051 tons per year (Zhuk, 2015); this number is relatively small in the context of the country, but we should take into consideration that this happened in the present difficult economic conditions, when many regions had reduced performance.

In order to diversify the economic activities in the rural areas, it is a must to fully utilize the available rich natural resources of the region. The development of hunting and fishing can become a source of improving the socio-economic situation, but the control system adjustment is also mandatory.

Chernivtsi region has rich mineralogical resources, including deposits of mineral waters and mud, and it is necessary to develop and use them.

Certain researchers believe that the opportunities for the development of large-scale spa economy for Bukovina are rather small (Dyshluk, 2011), but we cannot

agree to this. Due to the geological structure (mainly in Northern Bukovina), the region has almost inexhaustible reserves of medicinal mineral waters of most varied chemical composition, which are used to treat many diseases. Nowadays, there are more than 60 mineral water springs, but these are not investigated and poorly used. There is an active industrial bottling of medical-table and table waters “Bukovynska”, “Brusnytska”, “Kelmenstska” “Valya-Kuz'myns'ka”, “Novoselytsya”, “Zelenchanska” and others.

The curative mud reserves, which are characterized by high medicinal properties are quite promising for recreational use, being found near the villages Chereshenka (Vyzhnitsky district), Kostyntsi (Storozhynetsky district), Brusnytsya (Kitsmansky district), Shcherbyntsi (Novoselytsky district) and Seliatyn (Putylsky district) (Kyfyak, 2003). Creating infrastructure for rest and treatment associated with the above-mentioned fields will not only contribute to rural development but will also increase their competitiveness.

The development of green and ethnic tourism is quite promising in the world today. Unfortunately, green tourism is often confused with an ordinary recreation in the countryside. The essence of rural tourism, according to one of the main principles of its founder "Worldwide opportunities on organic farms" – WWOOF, is the exchange: in return for work done by volunteers on organic farms, the owners of estates offer food, accommodation and opportunities to get acquainted with organic lifestyle (WWOOF, 2015).

The Ukrainian enterprises in agricultural, ethnic and ecological tourism mostly offer passive recreation, while global tourism industry has long ago tended to increase the share of active leisure. The development of these activities is limited due to the lack of adequate legislative support, because the concept of “ecological, green, rural” tourism is not properly identified, and the information provision and advertising is slightly developed (Kulish, 2013). In addition, there is a legislative gap: rural tourism cannot be attributed to agriculture, although is directly related to it.

There are many other problems in the development of green tourism. The most significant obstacles to the development of tourism in rural areas are transport distances to their leisure centers and poor recreational equipment (so as to comply with the modern tourist requirements). This problem can be solved by combining the efforts of regional and local authorities to upgrade communications infrastructure. The availability of private motor transport enables travellers to easily reach the areas, even those that are far from the starting point of the journey. Encouraging the development of recreational forms of small business in rural areas makes it possible to improve the existing infrastructure and improve rural standards of hospitality to match conventional “urban” hotel service templates (Korobka, 2012).

To consolidate the positive trends and provide a significant boost to rural tourism development there is a need to solve a number of urgent tasks. First of all, there is a need to: develop a regulatory framework to determine organizational conditions for the provision of rural green tourism on the rural households and family farms; provide guidelines on the voluntary categorization of housing

provided to accommodate tourists; implement a system of long-term concessional loans to the rural population on rural tourism; generate proposals for corporate identity elements for the identification of the Ukrainian rural tourism; set up information technology tools and data about customer base and information for customers on the recreation services provided in the countryside; create a state institution for the promotion of rural tourism in Ukraine abroad, including rural green tourism; continue training of specialized experts, training and retraining of farmers and of unemployed rural population to work in the sector of green tourism in the School of Rural Tourism launched by the Union of rural green tourism promotion in Ukraine at the basis of Kyiv National University of Life and Environmental Sciences of Ukraine; organize specialized classes in rural secondary schools to train the future personnel for rural green tourism; create computerized system of booking and reservation of beds and services in rural households at country and regional levels (Latynin and Prymolenna, 2012).

The cooperation between the green tourism business structures and the government agencies responsible for the development and conservation of natural reserve fund of Ukraine is very weak, although it is no doubt that it would be mutually beneficial. The Department of Environment and Tourism of Chernivtsi Regional State Administration has already started working in this direction. It would be useful for them to apply these efforts to small businesses in remote villages. It is also necessary to emphasize the possibility of using such a powerful resource in the tourism sector as there is a large variety of crafts “alive” in the Ukrainian villages. For the purpose of restoration of these crafts, significant funds are allocated from the budgets of states and their associations.

4. CONCLUSIONS

Chernivtsi region is self-sufficient in basic agricultural products and exports outside the region. There are grounds to consider that the production volumes can be increased, however a main obstacle to this is the concentration of a greater part of production on the households, which have problems with storage, processing and production surpluses. The lack of favourable terms of selling the production obtained on individual farms negatively affects the development and competitiveness increase of rural territories and this is the problem not only for the Chernivtsi region but also for the whole country. In the current difficult economic conditions, the best solution would be the creation of agricultural service cooperatives, but due to the current legislation deficiencies, they are not viable. Therefore, it is necessary that all the stakeholders, including public authorities, local governments and the public should develop proposals to amend the national legislation.

Another fact that threatens to escalate into a problem is the steady increase in the production of industrial crops, which lead to soil depletion, with a proportional decrease of the acreage under food and fodder crops. For this reason, it is necessary

to strengthen control over the use of land (crop rotation, fallow, fertilization) in order to prevent soil degradation. This control should not be only at the level of public authorities, but also the local communities should be involved in this process, because it is their wealth and source of livelihood.

There is a large untapped potential for organic agricultural production in Chernivtsi region, which could be a stable source of income for the rural population, having in the view the border location of the region, especially taking into account the presence of ecologically clean areas. The Chernivtsi region has all the prerequisites for the development of hunting, fishing and gathering (berries, mushrooms, medicinal herbs). These are the directions to which no sufficient attention is paid today. In the absence of appropriate control conditions, poaching activities emerge. In this respect, one of the tasks for the public authorities in charge should be the development of these areas and monitoring the use of natural resources.

The development of sanatorium branch is very expensive, and this represents a problem in the present difficult economic situation of Ukraine, which can be solved by attracting investments, including foreign investments. Given the neighbourhood of the European Union, it is advisable to look for potential investors there. Eco and rural tourism have all the chances to become a source for improving the socio-economic conditions, especially for the mountainous rural areas with limited opportunities. World experience in operating this type of business has shown that it is very popular and profitable since its launching does not need large investment funds – the key issue is the ability and desire to accommodate tourists. There is also no need to create special objects because farmers can use their own farm and existing natural and historical attractions.

The above-mentioned directions of diversification of economic activities, besides improving the competitiveness of rural areas and ensuring their social and economic development, will help to increase revenues to the local budget, to partly solve the problem of rural employment, and hence the outflow of young people from villages and migration, to enhance the rural people's lives and indirectly influence the development of social infrastructure of rural areas due to the development of the hotel industry, catering, transport, household objects etc.

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