

## **6 Agriculture in the Carpathian region**

### **6.1 The situation and the challenges**

Agriculture and forestry is still among the most important economic sectors in the Carpathian region, though its share in GDP and employment is decreasing. Unfortunately, not only the share, but the absolute level of production is also decreasing. With the exception of Romania and Austria, the volume of agricultural production is still lower than 18 years ago in all Carpathian countries and regions.

The mountainous character of the area determines the types of land use and agricultural production:

The share of arable land in the proper mountainous areas is lower than 20 percent. Higher situated areas and steeper slopes are absolutely unsuitable for plant cultivation. In some areas in Romania and Poland, farmers formed terraces for strip cultivation in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, but since then in many areas cultivation has been abandoned. In the transition areas and in the fore-lands of the mountains, the share of arable land is, of course, higher.

The next more important type of agricultural land use is grazing on permanent grassland, a key element of mountain cultures, often serving as a link between mountain areas, where animals graze in summer, and lowland areas, where they graze in winter. The share of grassland in land use is about 20-30 percent in the Romanian and Ukrainian Carpathians, it is less in the higher altitudes of the Slovak Carpathians.

Permanent crops occupy a substantially smaller share of land in the Carpathians. On the lower slopes of the mountains in Slovakia, Hungary, Romania and Ukraine, there are vineyards.

The largest share of land is occupied – as in other mountainous areas – by forests. 66 percent of the mountainous area in the Eastern and Southern Carpathians is covered by forest. In the Northern Carpathians, this share is even larger: 75%. Forests are the most important and valuable resources of the Carpathians. It is especially true in Ukraine, where nearly 70 percent of the forests of the whole country are to be found in the Carpathians, which occupy only 4 percent of the area of Ukraine. It is no wonder that forests are seriously threatened by over-exploitation and deforestation in this country. In Ukraine, forests were especially endangered in the 1950s, but the danger is increasing also nowadays.

In the last decade, substantial changes occurred in the land use pattern of the Carpathians:

- The land covered by forests decreased substantially. Between 1992/93 and 2000/2001 (in less than one decade) the forested area decreased by 5 percent. This 5 percent decrease is, however) very differentiated according to coun-

tries and regions. The largest decrease can be observed again in Transcarpathia (Ukraine)<sup>2</sup> (more than 15 percent) and in Romania (8 percent). This is mainly due to the changing socio-economic conditions. A large part of agricultural land (and forest) had been distributed among small farmers and in some years, the only way for survival for these new owners was deforestation. In addition, the institutions of the protection of forests had been weakened and demoralized.

- Forest area in the Carpathian regions of Slovakia, Poland and Hungary slightly increased. This increase was partly due to natural processes (increasing the atmospheric concentration of CO<sub>2</sub> resulting in abundance of vegetation), partly to institutional conditions. In Poland, most forests remained in state ownership, and generally, land ownership did not change radically. Anyway, there is a long term tendency in the Polish Carpathians, to transform pastures into forests. In Hungary, a large part of forests became private property, and clear cutting occurred more frequently than in Poland, nevertheless, there were also incentives for afforestation and these tendencies neutralised each other.
- A general tendency in the whole region is the decrease of cropland (arable area) in the Carpathians. This decrease is quite dramatic in some areas, but even in average more than 10 percent. It is closely related to the economic situation of agriculture in the Carpathian countries. In the new competitive situation a large part of the cultivated area proved to be not competitive and efficient enough to cultivate. A part of it was transformed to forest or grassland but another part has been abandoned and is not cultivated at all. It is a general phenomenon in these countries, but especially spectacular in the Carpathian mountains.

This leads us however to the general situation of agriculture in the Carpathian countries.

Agricultural production is still lower in all Carpathian countries – with the exception of Austria and Romania – than in 1989–91, in the years of change in the political and economic system. One of the reasons is the change in the ownership and farm system. The new farms are very small (less than 1 hectare) so they are not able to produce efficiently. They lack the necessary capital, and – in many cases – also the knowledge to modernize their farm (*Figure 2*).

The other reason is the market problem. In most cases the marketing system which would help to sell the agricultural products of small farmers to the domestic and external (EU and other) markets is missing. At the same time, the more efficient and better marketed food and other agricultural products of the EU15 coun-

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<sup>2</sup>Interestingly, in the other Carpathian regions of Ukraine (Lviv and Ivano-Frankivsk region), deforestation is much more limited.

tries had already captured a significant part of the domestic markets of new member states. In the case of Poland, there were years in the last decades when it became net importer of agricultural products, but at the end of the period it had a slight surplus in exports (*Figure 3–4*).

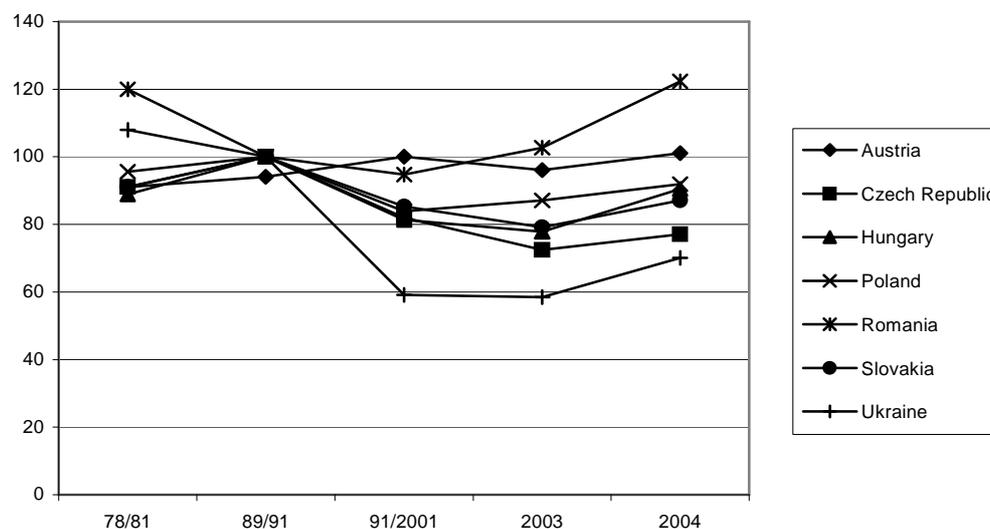
Romania which had a balanced trade in agricultural products at the end of the 1970s, became a large net importer of agricultural products in the last 2-3 decades (*Figure 5*).

The former Czechoslovakia was always a net importer of agricultural and food products, but in the last decades the gap between imports and exports increased (*Figure 6*).

And, finally, Austria, a country, which has been always a net importer of food and other agricultural products, succeeded in 2004, to achieve a balanced trade in agricultural products and ceased to be a net importer. The geographical conditions of Austria are much less favourable to achieve this balance than in any of the other Carpathian countries. Therefore, to achieve a better balance is not a matter of geographic conditions but of structural change in the economy (*Figure 7*).

Figure 2

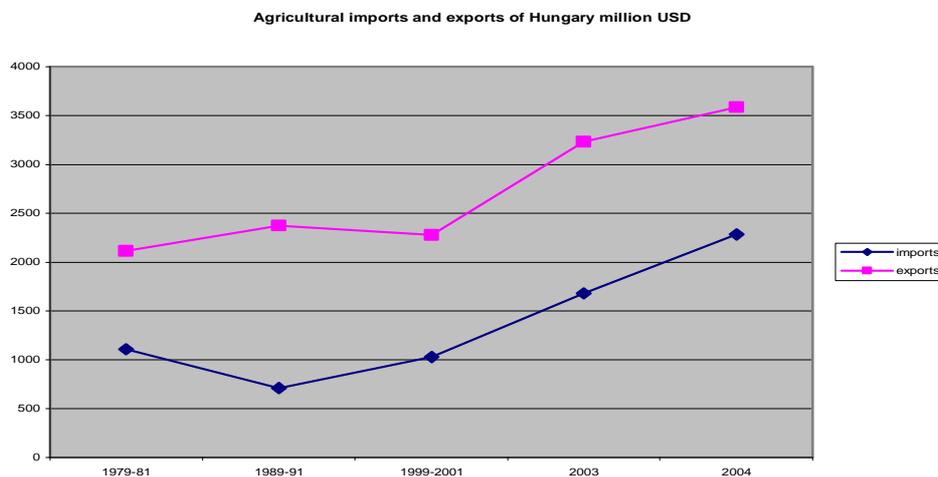
*Agricultural production in the Carpathian countries 1978–2004  
(1989–1991=100)*



Source: FAO Yearbook.

Figure 3

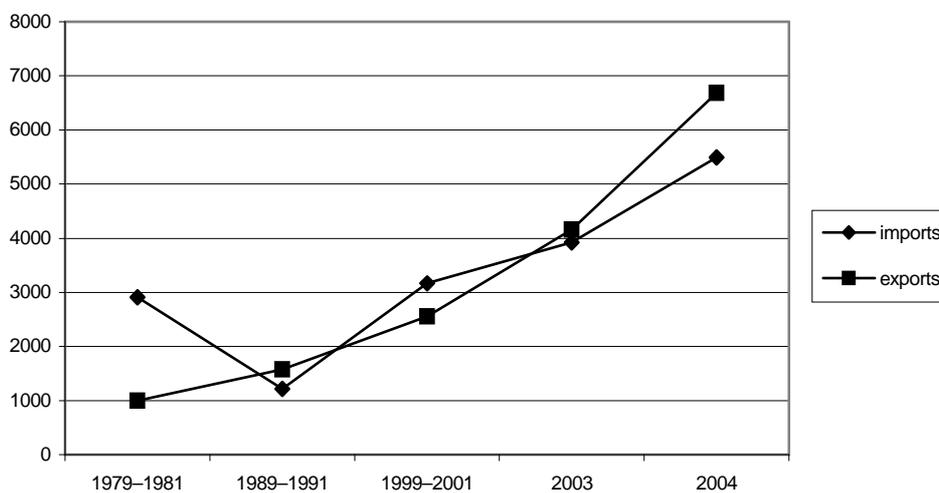
*Agricultural imports and exports of Hungary, million USD*



Source: FAO Yearbook.

Figure 4

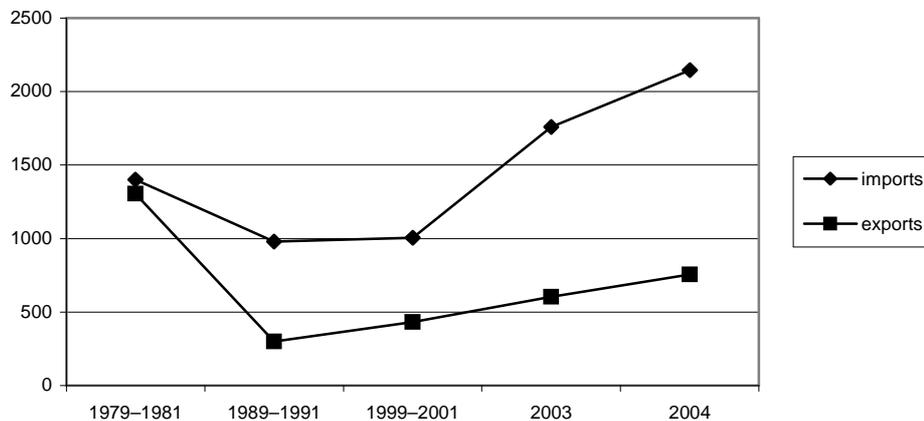
*Agricultural imports and exports of Poland, million USD*



Source: FAO Yearbook.

Figure 5

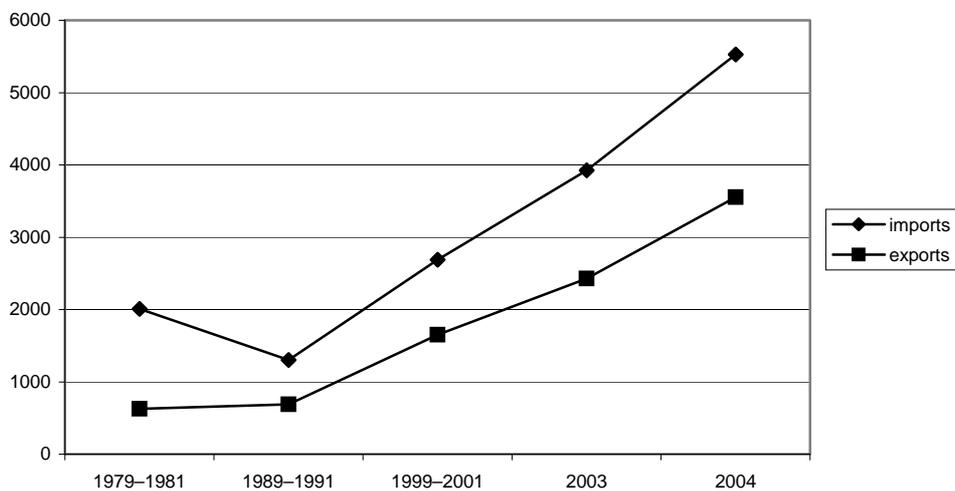
*Agricultural imports and exports of Romania, million USD*



Source: FAO Yearbook.

Figure 6

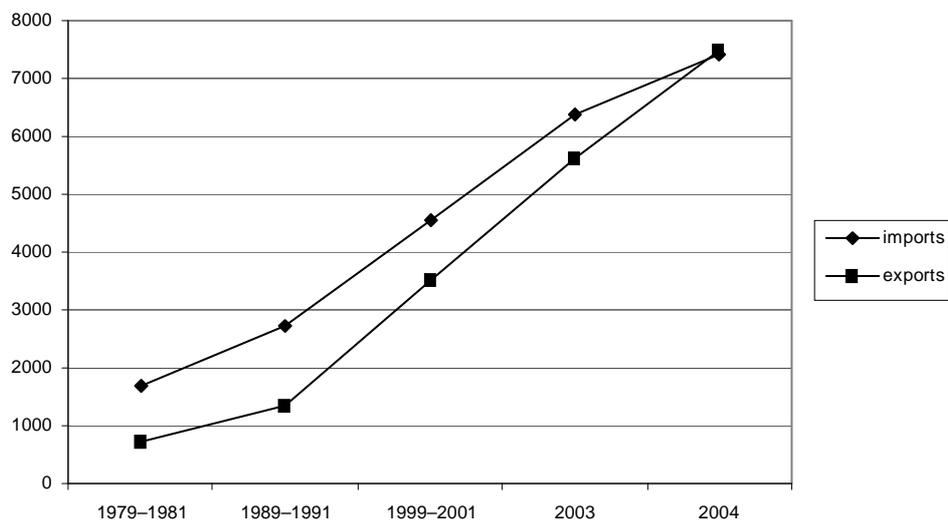
*Agricultural imports and exports of Czechoslovakia (until 1991) and of the Czech Republic and Slovakia (after 1993), million USD*



Source: FAO Yearbook.

Figure 7

*Agricultural imports and exports of Austria, million USD*



Source: FAO Yearbook.

The volume of agricultural exports of Austria amounted to 7,5 billion € in 2004, which is substantially more than the export of the other countries with larger agricultural area and more favourable natural conditions. In the same year the volume of Polish agricultural exports was 6,7 billion, the exports of Hungary 3,6 billion, of Romania 0,75 billion, one tenth of the Austrian figure, while the territory of Romania is three times larger than that of Austria.

Therefore, the reorganisation of the markets of mountain agriculture should be among the prime objectives of any development policy of mountainous regions. Within this objective, the main tasks are: the protection and promotion of mountain food products, and the reorganisation of their domestic and external markets.

## **6.2 Policy recommendations for the agriculture of the Carpathian area**

### *6.2.1 The cooperation of Carpathian countries and regions in the field of agriculture*

The Carpathian countries have very different endowments for agricultural production. While the plains are more suitable for plant production, mountain areas offer opportunities for animal husbandry and wood production. Areas with different endowments are relatively close to each other, enabling the exchange of goods with relatively small transport costs. These opportunities were efficiently utilised within the framework of the large empires (Habsburg, Russian, German) until the beginning of the 20<sup>th</sup> century. After World War I, however, the new countries pursued a protectionist agricultural policy, and the old agricultural trade linkages weakened substantially or totally disappeared. This protectionist agricultural policy survived for a very long time, just until the accession of the countries to the European Union in 2004. It happened, despite the fact that in 1992, the Visegrad countries established the Central European Free Trade Agreement (CEFTA), which provided measures also for the liberalisation of trade in agricultural products among the countries. Unfortunately, these provisions were not observed consequently. If a particular agricultural product in a partner country faced serious market problems, protectionist measures were frequently applied though they were not reconcilable with the treaty.

The application of such instruments was not any more possible after the accession of most Carpathian countries to the EU. Trade in agricultural products between the countries increased very dynamically. Nevertheless, opportunities for further increase are still very large.

There are opportunities for the division of labour and for the exchange of products not only within countries but also between regions. Before the centrally planned socialist system, the centres of agricultural trade were the small and medium – sometimes larger – towns at the foot of the mountains. Highlanders came down to the town-markets and sold their products there or exchanged for the products of the plain or industries. Agricultural market was one of the main functions of these towns and cities. Under socialism the purchase and procurement of agricultural products became the function of large state enterprises which skipped these small town-markets and practised central distribution of food products.

Maybe, these farmers' markets were not the most efficient and modern ways of food trade, but certainly more efficient than state food procurement. Suitable organisation and enterprises and revitalisation of the exchange of mountain and plain products could re-establish the market function of these towns and cities.

### 6.2.2 *The protection and promotion of Carpathian mountain food products*

It is true, that the Carpathian mountain areas are less suitable for mass agricultural (plant) production than plain areas. To cope with this disadvantage, mountain areas should specialize in those products, for which they have better conditions. Some dairy products produced in the Carpathian Mountains were well known and famous for centuries in the larger Carpathian area. Ewe milk and goat milk are traditional products of the Carpathians. Even more important are the different types of cheese (like Cas Afumat, Brinza in Coaja de Brad, Brinza in Basica, Brinza de Burduf, Cheag, Urda, Dulle, Sarata in Romania, the drink "Zinzica", the cheese types of "Ostiepký", "Parenica", "Korbaciky" in Slovakia).

The same is true for the gathering of different berries (like cranberry, blueberry, whortleberry) and mushrooms, which are to be found only in the forests of mountain areas. For many poor people in the mountains their gathering is an important source of income and living.

In order to promote the production and markets of authentic mountain products, the European Parliament proposed the preparation and adoption of a Charter to protect mountain food products in Europe. The European Charter for Mountain Quality Food Products was signed on 11 December 2005 in Strasbourg.

The Charter defines first, what can be regarded as Mountain Quality Product. Five qualities should be fulfilled:

- Raw materials must be derived from a mountain region
- Processing must be carried out in a mountain region
- Production must take into account concerns relating to sustainable development;
- Production must attempt to maintain the biodiversity and heritage of mountain regions;
- Producers must be able to guarantee at all times the transparency of information to consumers.

The Charter has two main objectives: an economic development objective and a policy objective:

The economic development objective aims to provide better identification of quality mountain products in the market and to avoid counterfeits and misinterpretation that would be detrimental to producers and consumers.

The policy objective is to recognise and promote the role of farmers and enterprises that produce benefits for society in the mountain areas of Europe and defend their interests. It would serve the objective to maintain the population in the mountains.

The definition of mountain quality food products helps to ensure accurate labeling and better protection of a niche in the European food market.

Another – and older – measure of the European Union is to ensure protection to national speciality foods. It is not restricted to mountain foods, but – obviously – mountain food products should utilise also this opportunity.

To get EU protection for a given national speciality, the application must be submitted to the European Commission. The Commission has one year for scrutinizing the application. They can ask questions from the national authorities concerning the preparation of the food to be protected. After one year, they publish the description of the food and its preparation in the Official Journal. Other countries can remonstrate against it in the next six month. If there is no serious remonstrance, the food will be registered as protected. If there is remonstrance against it, the two respective countries have to negotiate about it.

Old member countries of the EU have more than 100 registered and projected types of mountain food each. New members are just starting to apply for registration. So far, the Czech Republic achieved substantial progress, because they succeeded to include into the Accession Treaty the protection of several types of food, among them most types of Czech beer. Slovakia, Poland and Hungary made the first applications just recently and Romania did not yet apply so far for registering its food specialities. Unfortunately, there are very few mountain products among those which were submitted for protection.

Submitted applications for EU protection of foods (only those in the Carpathian regions of the respective countries)

Country	Already registered and protected	Application under investigation	Submitted by national authorities, but still not investigated
Czech Republic	Stramberk “ears” (sweet wafer)	Niva cheese, Olomouc tvargle, Moravian-Silesian sauerkraut,	Pohorelice carp, Old-Brno beer, Brno beer, Znojmo beer
Hungary	–	–	Apricots of Gönc
Poland	Podhale ewe’s cheese	Oscypek smoked cheese	Korczin bean, Carp of Zator
Slovakia	Skalicky trdelník (pastry horn)	Parenica, bryndza, ostiepok smoked cheese	

According to the table, Carpathian countries still have to make serious efforts to register and protect their special mountain food products.

### 6.2.3 Flexibility of EU CAP and national regulations in the Carpathian Area

In 2004 Poland, Slovakia, the Czech Republic, in 2007 Romania became a member of the European Union and they became eligible for the EU CAP support. Despite several similarities, the agricultural and farm structure of the Carpathian countries is much differentiated. Therefore EU intervention and regulations must be flexible to consider these important differences.

Some important indicators of agriculture in the Carpathian countries (*Table 3*).

Table 3

*Main agricultural indicators (2004)*

	Austria	Czech Republic	Hungary	Poland	Romania	Slovakia
Share of agriculture in employment, %	5	4	7	18	38	5
Average farm size ha	20	134	26	12	2	143
Number of farms	137,000	26,400	155,400	1,082,700	1,211,800	12 900
EU agricultural support 2007–2013 million €	9,117	7316	10,298	28,269	13,524	3 892
Of which 1. pillar (intervention and direct payments), %	57	62	63	53	41	49
Of which 2. pillar (restructuring and rural development), %	43	38	37	47	59	51

Source: Eurostat.

The share of agricultural employment is 4–7 percent in Austria, Czech Republic, Slovakia and Hungary, while it is 38 percent in Romania and 18 percent in Poland. The average farm size is about 140 ha in the Czech Republic and Slovakia, while it is 10–20 ha in Austria, Poland and Hungary and only 2 ha in Romania. It has to be added that in mountainous areas the share of agricultural employment is everywhere higher and farm size is everywhere smaller than the respective national averages.

Different is also the structure of EU support. In Austria, Czech Republic and Hungary, about 60 percent of it is used for direct payments and intervention (Pillar 1), this percentage is about 50 percent in Poland and Slovakia and 40 percent in Romania. The share of Pillar 2 (restructuring and rural development) has, accordingly, a reversed ranking.

Generally, the type of EU agricultural support is different in the old and new member states. New member states did not have those statistics and documentation which would be necessary to apply the system and measures of support of the old member states. Therefore in all new member states (with the exception of Slovenia) a simplified system is applied the so called “Single Area Payment Scheme” (SAPS). It means that the quantity of EU support depends exclusively on the size of agricultural area cultivated by the farmer.

The other specific feature of the agricultural support system of the new member states is that, considering the relatively low level of EU support in the first years of membership, national governments are entitled to pay a complementary support to

their farmers which has to be gradually reduced during a 10 years transition period. At the end of the 10 years, farmers of the new member states will enjoy the same EU support than farmers of EU15. The name of this national support is “Compensatory National Direct Payments” (CNDP).

Though SAPS might have several advantages, it is disadvantageous for the mountainous regions, because animal husbandry and its need for support are totally disregarded. Animal husbandry is anyway a shrinking sector of Central European agriculture: if disregarded in support schemes, it will certainly further decline. National support schemes (CNDP) therefore consider livestock of the farms and support is paid accordingly.

Recent experiences, however, had shown that this type of support favours first of all the large farms with large herds of animals in the plain regions and much less mountain areas. Therefore, a new solution has to be found for the problem. Several experts and institutions suggest that support for animal husbandry in new member states should be coupled with the so called LFA (Less Favoured Areas) support, paid in areas with unfavourable natural conditions for agriculture. This scheme would help to concentrate special animal husbandry support to areas with some natural or economic drawbacks. It would be part of the CNDP and of EU support system as well.

Simultaneously, LFA support design should be revised as well. In old member states 35 percent of LFA support goes to mountain areas, while the respective percentage in new member states is only 28 percent, though mountainous agricultural areas represent as high percentage of agricultural area as in old member states.

Another policy proposal refers to the distribution of dairy production quotas. Dairy production is the branch of agriculture where production and procurement is most strictly controlled and restricted in the EU. Nevertheless, production and procurement quotas are sometimes quite mechanically allocated to regions and farms, disregarding the geographic conditions. Mountain areas, where dairy production is one of the most important – if not the “most important” – branch of agriculture, should be preferred by the allocation of quotas. The same is true for livestock limitations. The number and size of livestock is related to the size of cultivated area. In mountain areas, however, this relationship is specific and cannot be compared to the farms in the plain areas.

#### 6.2.4 *Diversification of mountain economy*

Beyond all these policy proposals, improving the conditions of mountain farms, the basic problem is agricultural overpopulation and over employment in some, first of all mountainous areas. This is the basic obstacle of increasing productivity, efficiency and competitiveness of Carpathian agriculture. In some regions of the Polish and Romanian Carpathians, 40–50 percent of the working force is employed in agriculture and the farm area per one employed is extremely small. In some areas, “agricultural employment” even increased in the last one and half decade, because agriculture had to absorb those people who have lost their job in mining and industry. The only solution is – disregarding emigration – to establish non-agricultural jobs and diversify the economy in these areas. These possibilities will be dealt with in the chapters on industry and tourism.