

**Leonardo da Vinci
European Training for the UK
European Conservation Action Network
Visit to the Aggtelek National Park – 29 June to 16 July 2008
Report by Richard Belding**

On my application form I stated that one of my objectives for wanting to visit Hungary was to examine how its agriculture, and hence management of its countryside, had responded to changes in recent years. Unlike the UK, Hungary has not only seen its recent accession to the EU (1 May 2004) but also the break-up of its collective farm system since the early 1990's. In this paper I will look at the impact of both these factors in the development of the Hungarian agricultural system. I will outline the key changes that have occurred since 1990 and thus seek to explain the historical context of these changes. I will split this paper in to 4 parts. Firstly I will look at the importance of the introduction of Collectivisation within Hungarian agriculture during the 1950's and thereafter. Then I will address the agricultural reform that took place post 1990. I will then look at how Hungarian agriculture developed after its accession to the EU with a focus on the development of forestry. Lastly I will outline key steps I believe are necessary to maintaining and developing positive land management with Hungary.

The Introduction of Collectivisation and a brief history of Hungarian agriculture pre-1990.

During the socialist period in Hungary agricultural productivity had not significantly improved. At that time it is reported that the average Eastern European farm produced about one third as much as a peasant farm in Western Europe, yet each acre had to feed and employ twice as many people.

In Hungary there were three clear phases of collectivisation, peaking in 1953, with the death of Stalin, and 1956, with domestic political turmoil, and declining immediately thereafter. However, after a trough in 1957 and early 1958, collectivisation was brought on the agenda again and the programme was completed in 1961. Hungary succeeded in achieving collectivised agriculture at the third attempt after two failures, for a number of reasons. The peasantry had become demoralised after two attempts and grudgingly accepted the theoretical advantages of large-scale production. Furthermore, the government made a financial commitment to agriculture during this period. So it was not carried out 'on the cheap' and throughout the 1960s and 1970s there were generous programmes of aid for agriculture. Crucially, the government also made a political compromise with peasant producers. While the only successful element of the first collectivisation attempt had been the political and economic attack on 'kulaks' (according to Marxism-Leninism, the kulaks were a class enemy of the poorer peasants), at the third attempt they were allowed both to join farms and hold office in them. Farms were free to elect their own presidents; middle peasants and small peasants could form

separate farms; and there were no government quotas on the number of farms that could be formed in a given area or a given year.

Compromise also extended to the economic sphere and this saw the financial penalties for joining collective farms minimised. Farms could determine the payment to be made to members for their animals and machinery when they joined (formerly they had been obliged to forfeit 15 per cent of the value). Also land tax was not subtracted from the rent received by the members for their land. Although regulations existed on the size of household plots and the number of animals held on them, new members with no land were allowed up to the maximum holding size, and where (and this was the norm) no communal livestock facilities existed, members could keep the milk and progeny of animals temporarily held on their plots (up to the household plot limits).

Whilst Hungarian commentators in the socialist period were proud to point out that gross production scarcely fell in the final phase of collectivisation, unlike the earlier attempts, the decline in the net production index was quite marked. In the first few years of the collectives, the farms suffered from the perennial problems of an inability to attract people to work on the farm. Management could never be sure who was going to turn up to work and between 1961 and 1964 only a fifth to a quarter of nominal members ever showed up. In addition, the government was sufficiently strong to take risks and sufficiently self-confident to see them through even when this entailed losing direct control over production. The main thrusts of policy in the 1960s were:

- To give farm members high incomes in the present and security in the future by moving rapidly away from 'labour day' payments and introducing the payment of wages. This was done by providing pensions and encouraging small-scale family farms to earn supplementary incomes.
- To entrust farms with the ownership of their own land and machinery by allowing the farms to buy land from their members and by disbanding the machine and tractor stations.
- To give farms the possibility of generating high incomes by moving from 'price-centred' to 'tax-centred' controls, while simultaneously reducing the need for intervention in planning by local authorities.

Although there were experiments in sharecropping and wage payment to co-operative members as early as 1961 there extension throughout the sector mainly took place from the mid-1960s onwards. This ran in conjunction with the general decentralisation associated with the introduction of the New Economic Mechanism. Parallel with these changes there was an increase in the scale of farms. In the early years of collectivisation there were many farms to a village as 'middle' and 'poor' peasants set up independent farms. However, in the 1960s, and especially 1970s there were waves of mergers that created a situation in which the average farm size grew to over 3,000 hectares and land was farmed over a number of villages. Indeed, central government was obliged to intervene in 1975 to put the brakes on a movement that was seen to be getting out of hand.

During the 1970s and 1980s agricultural production steadily increased. Albeit with a blip experienced in 1976 that saw a decline associated with a hardening of the political line against the private sector and 'money-grabbing' peasants in particular, a policy which was quickly reversed. By the mid 1980s Hungary's per capita agricultural production was highly respectable in world terms. Hungarian agriculture became a net exporter at the end of the 1960s, and export performance continued to increase in the 1970s and 1980s despite an increasing tax burden, reduced subsidies and sharply increasing input costs. Like Czechoslovakia, agricultural reform came onto the Hungarian political agenda just before the collapse of the regime. But, as in Czechoslovakia, it was too little too late.

By the end of the 1980s, however, it was beginning to reach its natural limits. It is important to note that this was not because of an inefficiency and dependency on subsidies, as no modern agricultural system was capable of existing without subsidies, but rather the very nature of the subsidies. The then Common Agricultural Policy supported production by subsidising the prices paid for agricultural products, thereby distorting that market. Reformists argued for a clearer (more transparent) form of direct income subsidy directed at keeping the population in the countryside. In socialist agriculture, rural and agricultural communities were retained by means of subsidy, but it was an indirect subsidy on labour. Farms were encouraged to operate with a labour force far in excess of what the market dictated, using an organisational form modeled on industry that was unique and not appropriate for the innate flexibility and changeability of agricultural production. When farms made a loss (mainly because of their high labour costs) they received subsidies. Such indirect support of labour also distorted market forces, just as western support did, but in socialist Europe it did so at the locus of production. Farms experienced minimal stimulus to adjust either what they produced or how they produced it to market demands. Socialist agriculture produced expensively, just like western agriculture (although for different reasons). However, unlike western agriculture, it was not responsive to consumer demand especially when considering ecologically sustainable products.

Picture of tractor hay baling

At the end of 1986 the Land Law was modified, as was the Co-operative Law, including the Law on Agricultural Co-operatives in the Spring of 1988. Neither change was fundamental however. The only significant change in the Land Law was that socialist large-scale farms were allowed to rent out land they did not use to private farmers. This was usually because the large-scale farms could not use the land profitably. Good land, however, had to be rented in units greater than 0.6 ha, which significantly restricted the numbers that could

benefit from the change. The Law on Agricultural Co-operatives repeated existing restrictions on members 'land ownership' but introduced two new institutions. The first of these was a Co-operative of Small-Scale producers. This was a vehicle for ensuring, as far as possible, that when unused co-operative land was given over to a private partnership it could be kept under the control of the mother co-operative. This is evident from the regulations concerning internal subcontracting which had no logical place in the law but nevertheless prohibited the units from owning property in their own right. The second novelty was the measure allowing hopelessly loss-making producer co-operatives to convert into the looser 'specialist co-operatives'. However the Law did not allow loss-making co-operatives to give up entirely and give way to wholly private agriculture.

By the end of 1988 according to Pal Juhasz, in a deepening financial and scissors crisis for agriculture, two taboos were finally broken for many co-operative farm managers. First it was seen that a land market must be recreated. Second, it was acknowledged that private farmers should also be able to organise themselves commercially outside the mother co-operative farm. But with the passing of the Company Law in 1989 this would have been difficult to prohibit in any case. By this time there was explicit recognition of the rigidities of both the large-scale and the small-scale sectors. The end of this decade also witnessed a change of guard in the management of collective farms. By the 1990s some 50 per cent of collectives had presidents who had been elected between 1987 and 1990, many of them having a closer personal link with the communities in which they farmed than had previously been the case.

It is important to note that what had been created by the early 1960s in Czechoslovakia, Hungary and, on a much smaller scale, Poland was collective agriculture, or agricultural producer co-operatives, and not state farms. Most of the literature rightly plays down the significance of this difference because it was purely technical but it was a technicality with considerable legal significance. The legal position of the farms was that farmers had pooled their land in order to achieve the benefits of communal production but that land was still privately owned. The history of what happened to property rights on collective farms differs in the three countries. In Hungary, the situation was more complex. Rather than abolish the payment of land rent and asserting the primacy of land users over landowners, the Hungarian government opted for the creation of co-operative land, land actually owned by the collective farms rather than the members. Given that this was at a time where the generation that had originally contributed to the land was dying out or had migrated into the towns it seemed a reasonable way of both rationalising property relations and saving on land rent fees.

The law on land use, passed in 1967, created the new category of co-operative land. Members were encouraged to sell their land to cooperatives, and 'outside owners'. Those who were no longer members (because they did not fulfill the minimum work requirements for membership) were obliged to sell. Cooperatives also took over state land they had previously been

renting. As the generations changed and new people came into agriculture, the proportion of member-owned land gradually fell. By the time that land ownership again became an issue of some significance, only 35 per cent of collectively farmed land was owned privately by a member.

There are two main non-market systems. Firstly 'Socialist Production' and secondly 'Family Economy'. Socialist production is the process where by a labour force is employed, receiving a wage and benefiting from full pension rights. 'Family Economy' is organized towards (supplementary) income maximization. I will now look at both of these systems in relation to the development of Hungarian agricultural.

Having created collective farms, Hungary converted them into something that eventually became a 'success story' by the integration of 'peasant' and 'industrialised' agriculture within the collective sector. It did this by encouraging organisational experimentation appropriate for the technologies used. Thus mechanised sectors employed members as skilled labour in return for wages with pension rights, whilst in the unmechanised sectors members worked on an essentially share-cropping basis, receiving rewards (sometimes in a rather indirect fashion) as a proportion of the net result rather than in proportion to the amount of labour expended. The roles of these two sectors were then modified as mechanisation developed. Payment in kind was gradually replaced by a money payment related to the value of the goods produced as the un-mechanised labour organisations were squeezed into the less essential areas of production and non-agricultural activity was encouraged within farms. This became an important factor in increasing farm revenue, although it was originally introduced as a means of providing off-season employment for members.

However, the central moment in Hungary's success was the ability to integrate large-scale and small-scale agriculture. To operate large-scale wage-labour employing ventures on the one hand while integrating small-scale 'family labour' on the other. Collective farms developed rapidly into something unique in the farming world: large-scale production units with an extensive rigidly structured division of labour. From joint family farming ventures with pooled land and machinery, they became socialist land factories with management, a hierarchy of skilled and unskilled workers. They were only successful when they accepted the need to go beyond the family farm model and incorporate methods of remuneration analogous to industrial wage labour. With the development of mechanisation, both Hungary and Czechoslovakia achieved self-sufficiency on the basis of this large-scale, relatively labour intensive, method of agricultural production.

The 1970's witnessed a huge increase in white collar and supervisory jobs. By 1974 11 per cent of total farm membership was employed in management and administration. This was a 67 per cent increase on 1967, despite the fact that the number of farms fell by 46 per cent. Those in management jobs dominated the elected organs of self-government, and farm presidents had strong personal links with local government and party organisations.

There had always been dualism in the notion of the agricultural producer cooperative. Most tools and land were pooled, but not all. In the Type I and II models the amount not pooled was quite significant; but on the Type III farm what was left was the residual 'household plot'. The agricultural producer co-operative model could only be made to work in practice by developing wage labour of a socialist form in communal production, and by encouraging individualism on the vestige of private ownership - the household plot.

Hungary's agricultural success was more real and more visible because Hungarian governments were happy to live with and encourage the schizophrenia inherent in the model. Not only did it encourage private endeavor on the household plot, it took on a marketing co-operative role to sell household plot products on to the state, it took on a supply co-operative role to provide the inputs, and it took on a credit co-operative role to help purchase inputs. By thus developing the dualism inherent in the agricultural production co-operative model it discovered the 'second economy', which proved to be the saving grace of the Hungarian economy in the 1980s.

The household plot was the paradigmatic form of the 'second economy' in central and Eastern Europe and shared its general shortcomings. It made a vital contribution to the national economy. (Small-scale plots accounted for only 17 per cent of farmed land but produced one third of gross agricultural production and 40 per cent of animal production.). Yet household plot production represented an investment in labour only. It was motivated by short-term income supplementation, and could only exist as one half of a symbiotic relationship with the state sector. Because of restrictions on land ownership and, for many years, on the ownership of types of agricultural equipment, only in unusual cases was it the locus of independent entrepreneurial activity.

Hungarian agricultural reform Post-1990.

With the setting up of the Ministry of Environment and Regional Development in 1990, regional development policies gained a separate institutional system. A Regional Development Fund (RDF) was also created. In 1990 the new Conservative Government faced the task of, simultaneously, coping with the crisis of liquidating the socialist system of agriculture and building up a new agricultural system that would be able to adjust to the various market conditions. The then official aims of agricultural policy were:

- security of the high level of food availability and development of its quality,
- sustaining and increasing export performance and production efficiency,
- establishing a mixed type farm structure and developing private farms.

From 1994 to 1998 there was a Socialist-Liberal Government in Hungary, their main agricultural policy objectives were:

- developing agricultural export performance,
- security of food availability at reasonable prices,
- to ensure reasonable and foreseeable farm income,
- to develop environmentally friendly and healthy production technologies.

The next important step was in 1996 with the adaptation of the 'Law on Regional Development and Physical Planning'. This saw a new era for regional development in Hungary. This legislation was assessed by the EU as the most progressive one in CEE (Central and Eastern Europe), which is based on the most important principles of EU regulations (such as decentralisation, subsidiarity, additionality, partnership, etc.) and fulfilled the requirements for accession (Commission 1997/2). This development was 'rewarded' by the EU, through the 1996 Phare (Poland and Hungary: Assistance for Restructuring their Economies) Budget, with an ECU 10 million fund, to help the development of regional (NUTS II - Nomenclature of Territorial Units for Statistics) institutions and also regional identities through pilot programmes. The main objectives of the Act were (MERP 1996 – Ministry of Environment and Regional Policy):

- the moderation of the negative effects of the developing market economy in every region,
- to improve economic conditions and the quality of life;
- to create the conditions for self-sustaining development;
- to reduce adverse differences between the Capital and the rest of the country, towns and villages, developed and disadvantaged regions;
- to encourage initiatives by regional and local communities.

In 1997 the Government began to work out the new agricultural policy i.e. 'The Principles of National Agricultural Programme' (NAP). The first official version of the NAP was published in May by the Ministry of Agriculture. The main aims of NAP were the following.

- contribution of rural progress being hindered by depopulation and the need to link with the coordination of regional development policy,
- producing an ample supply of food at reasonable prices with good quality,
- provision of a competitive food export supply to help to solve the balance of payment issues,
- creating an opportunity for income parity for agricultural producers,
- conservation and preservation of resources within a framework of environmental policy.

NAP dealt with rural development and agricultural employment separately. The aims of rural development policy are as follows.

- Improving job opportunities and living conditions in rural areas.
- Preserving and maintaining agricultural resources and development of conditions for sustainable agriculture.

- Preserving cohesion of rural society and traditions of landscape and rural culture.

Subsequently NAP decreased the role of rural development. This was largely brought about by the large-scale agricultural lobby fearing that subsidies for rural development will decrease the direct support for agricultural. This meant that prior to joining the EU the role of rural development within the framework of agricultural policy was minimal.

In 1997 'The Law on the Development of Agriculture' was passed, which was based on NAP. According to this law the aims of agricultural policy were:

- increasing production efficiency in the interest of security of food availability
- creating proportional factor income parity in agriculture
- contributing towards the improvement of rural progress
- coordination between production and sustainable development in agriculture
- development of human capital
- to help agricultural innovation

The new Conservative Government in 1998 set similar agricultural policy objectives:

- to increase production and competitiveness
- to help family farms
- to propagate environmental friendly production technologies
- to increase agricultural export performance
- to develop R&D and education
- rural development.

Comparing the agricultural policy objectives of different governments can show continuities and changes as well. The increase of export performance, food security and development of production efficiency were important goals for all Hungarian governments after 1990. The main difference between the Conservative Government and Socialist-Liberal Government was in the case of farm structure. The former preferred family farms, whilst the latter preferred the large-scale farms. The rural development in the framework of agricultural policy appeared only in 1997 with NAP. Despite this, rural development within agricultural policy only played a limited role. In short, rural development was a relatively new and 'remote' topic in the Hungarian policy arena at that time.

The General Election of June 1998 saw a new government elected into power. As a result of political negotiations the system of regional development was reformed. The leader of the smaller party of the coalition (Independent Smallholders' Party) became the Minister of Agriculture. At the same time overall responsibility for the resources and the co-ordination of regional development was given to this department. Its name was changed

to *Ministry of Agriculture and Rural Development (MARD)*. This department was responsible for the preparation of strategic development plans on national, regional and county level. It was also responsible for the co-ordination of different ministerial departments concerning rural and regional development. Another important development was the creation of the position of the Minister without portfolio responsible for the co-ordination of Phare (Poland and Hungary: Assistance for Restructuring their Economies). In short, rural development became a part of agricultural policy.

I will now look at the development of Hungarian agriculture during the transformation period. Simultaneously with political and economic changes in Hungary, the transformation of agriculture also began. The agricultural policy reforms were part of a stabilisation programme and contained three main elements:

- price liberalisation and the cutting of agricultural subsidies;
- liberalisation of foreign trade; and
- land reforms.

The period from 1990 to 1999 can be divided into two phases: the first was the time of transformation (1990-1993) and the second, one of consolidation and solid recovery (1994-1999). The experience of agricultural policy during the transformation phase centered on building up the legal and institutional framework for the market economy. The second, consolidation phase, focused on three main problems. First, governments tried to accelerate or to complete land reforms and attempted to consolidate land ownership relations by amending land laws and co-operation laws. Second, they stabilised the domestic agricultural market, by establishing a market regulation office, improving the activity of such institutions, and increasing production supports. Finally, steps began to harmonise the legal environment of agriculture to that of the EU.

I will now look at the role of Hungarian agriculture in the economy. Before 1989, agriculture in Hungary, like other Eastern European countries, was characterised essentially by different types of distortions (Brooks et al., 1991). The structure of agricultural production exhibited extreme duality. The first group consisted of large-scale farms: agricultural production co-operatives and state farms. In 1989 in Hungary there were about 1500 large-scale farms, which used 85 percent of the arable land. The average size of the area of large-scale farms was about 5000 hectares. These each employed on average, 540 people. At the other extreme were the small-scale private farms. The average area of the 1.4 million private farms was 0.62 of a hectare.

Picture of man scything

The efficiency of this agricultural system was poor relative to industrial countries. The food processing, distribution and input supply was highly concentrated and characterised by pervasive State monopolies. Simultaneously with the political and economic changes in Hungary, the transformation of agriculture had also begun. As a consequence of this, Hungarian agriculture was not significant in terms of the National Economy, as its role gradually decreased from 1986. The performance of agriculture measured against GDP sharply declined between 1990-1993. Paradoxically the proportion of agri-food exported at that time measured against total exports was able to remain above 20 percent during the first part of this period, and moreover was actually enhanced in the critical years (1991-1992). After this it gradually declined as the Country saw rapid growth in total exports set against stagnant agricultural exports.

Agricultural employment as a proportion of total employment also declined during this time. By the mid 1990s agriculture's role in total active employment decreased below 6 percent, which was close to the level of developed countries.

I will now assess the change in agricultural structure between 1990 and 2000. As a consequence of a transformation during this period from large-scale farms employing more than 300 people to those employing fewer than 50, the majority being below 20, the former extreme duality of the Hungarian agricultural systems had been moderated considerably. Three types of farms could be distinguished.

The first are what might be termed *industrial farms and co-operatives*. They stem from former state farms (currently joint-stock companies), co-operatives, and newly established agricultural firms mainly from the break up of co-operatives into smaller units. Most corporations with above 50 employees belong to this category. The important characteristics of these farms are based on hired labour and hierarchical organisational structure. Despite transformation, these corporations have remained important in Hungarian agricultural structure. They used about 40 percent of agricultural land and they had more than 100 thousand employees. The average area of these corporations was 1332 hectares in 2000.

The second type is the *private or family farm*. They arise from: (1) the lands from former co-operative members and state-farm employees; (2) beneficiaries by compensation; (3) members seceding from co-operatives with their land; and (4) a combination of the above. These farms were based on family labour (farmers and their family members) and some of them also employed full-time and seasonal hired labour. According to the Agricultural Census (2000) there were 51 thousand private farms with above 10 hectares of agricultural land. The large and medium size private farms used about 12 percent of the agricultural land in 1998.

The third group is the *part-time farms*, which played (in 2000) a traditionally significant role in Hungarian agricultural structure. There were two main types of part-time farms. First, the agricultural households that produce basically for

the markets. Some of them had specialised in particular commodities, e.g. pigs, fruits and vegetables. In 1997, 800 thousand people registered as primary producers. According to the 2000 Agricultural Census there were 832 thousand private farms below 10 hectares. It was assumed that they were part-time farms with the majority producing a marketable surplus at that time. The rest were classed as subsistence part-time farms with their main production goal in reducing household's expenditure. However, some of the subsistence part-time farms did sell their products depending on their surplus, seasonally on the local market.

With Hungary joining the EU on 1 May 2004 the way agriculture changes continue to develop was bound to increase with the support of the EU.

The development of Hungarian agriculture after its accession to the EU.

Many analysts believed that Accession would have a negative impact on the international competitiveness of Hungarian agriculture by increasing land and labour prices. To maintain competitiveness in the arable sector Hungary needed to achieve dynamic growth in productivity to offset higher costs whilst the dairy sector will, it is likely, remain uncompetitive internationally.

Hungarian agriculture is considered to be the most varied sector in the whole national economy. The structure of farming differs from most of the rest of the European Union in that almost all forms of entrepreneurship can be found. A special feature is what is termed the bi-polar economic structure, with both large farms and smaller units. There are many co-operatives, but what is considered more important is that private household farms take part in production. Although their numbers have decreased in recent years it is believed that between a quarter and a third of Hungarian households have ties in agriculture. EU agricultural census returns identify the large number of private farms. (All producers have to be included in the statistical survey until 99% of production is covered). So, for example, a household that raises just one pig per year can also be considered a private farm). This explains the fact that the private farms differ from each other according to their goals. There are farms that:

- produce only for their own consumption (363 000 farms, 51.3%)
- trade with their surpluses (234 000 farms, 33.1%)
- produce mainly for the market (109 000 farms, 15.5 %)
- provide agricultural services (1602 farms, 0.1%)

Characteristics of Hungarian agriculture;

Agriculture is one of the most determinative sectors of the Hungarian national economy. The unique natural endowments, topography, climatic factors and the exceptionally fertile soils of the country make it potentially possible to achieve outstanding qualitative and quantitative results with most crops, as has been proved by the well-established agricultural tradition of the past millennium. Hungary has a total area of 9.3 million hectares.

In 2006, the area of fertile land, including forests, reedbeds and fishponds, was 7,689,000 hectares. The agricultural land area is 5,817,000 hectares, which represents a uniquely high proportion in Europe. 78% of this is arable land, and 17% is grassland. Kitchen gardens, orchards and vineyards accounted for 5% of the agricultural land area.

As I have reported earlier the political and economic changes in Hungary have involved radical changes of ownership, land use and operational methods. In the agricultural sector, private ownership has dominated, which is a result of land compensation, proportional disbursement, the transformation of farmers' co-operatives and privatisation of state farms.

In land use the role of individual farmers still dominates, and their landholding has increased slightly. They are responsible for cultivating almost 45% of the whole domestic land area, while 41% was used by agricultural enterprises. The remaining 14% are used for other non-agricultural purposes or consist of infertile areas.

The government operates the National Land Fund in order to rationalise land use. This institution has contributed to improving the ownership structure and helped socially disadvantaged people through the life-annuity programme, lump-sum purchases and sales, and public tenders for renting land. The **land market** was characterised by slow development in the years before Hungary joined the European Union, and this was also characteristic of the period after accession. The demand has been mainly for larger and undivided areas of land and forest. Inaccessible, subdivided, small-sized land plots whose ownership is unclear are unsurprisingly difficult to sell – this may be the saving grace for habitats and wildlife. The reviving land market is characterised by moderate price increases and by significant increases in rental prices. The rental fees for better quality land represent 3-6% of land prices. In Hungary, arable land costs HUF 388,000 (£1166) per hectare on average but the difference between regions is quite wide. For instance in West Trans-Danubia (the most expensive) land costs [HUF 756,000/ha (£2607)], but prices do not even reach half this in the Northern Hungarian region [HUF 307,000/ha (£1059)]. The land we were surveying typically costs HUF127,600 (£440) per hectare according to Sandor.

picture of field of sunflowers

There are now considerable differences in the amount of **labour** used by agricultural production enterprises and individual farms. While the employees of the enterprises are mainly employed full-time (eight hours/day), working times are irregular – sometimes more, sometimes less – on individual farms. In both cases the trend in the use of labour in agriculture decreases each year as it does in the UK. Using the annual labour unit of 1,800 working hours as a basis for calculation, agricultural production in 2006 used the labour

equivalent of 512,000 workers. However, even fewer people work full-time in agriculture. According to the 2006 labour market survey, the number of employees in the national economy was 3.9 million, of which agriculture, forestry and fishery employed 191,000 people (4.9% of all employees).

In 2006 the Ministry started to develop an **advisory system**, in line with European Community resolution 1782/2003. Groups of specialists were set up with the objective of changing the current system and formulating a new strategy. As a result of the preparatory work, the elements of the future advisory system were established:

- Area Advisory Centres;
- Regional Advisory Centres;
- Special Advisory Centres;
- The Ministry and the background institutions.

A modernised **institutional system** assists the government in undertaking its role. Paying agency duties are undertaken by an accredited budgetary organisation, the Agricultural and Rural Development Office – the equivalent of our Rural Payment Agency. The Agricultural Special Office (Mezőgazdasági Szakigazgatási Hivatal) was formed on 1 January 2007 by merging individual institutions and authorities. It inherited all the special tasks of its predecessors (animal hygiene; food safety; plant, soil, and agricultural environmental protection; vine quality analysis; and operating the single record and identification system (ENAR) etc.).

Special consideration should be given to the village management network system, which operates under the Agricultural Special Office. This network plays an important role in informing the farmers about the different conditions following EU accession, in preparing applications, and also in providing information to those in charge in the agricultural sector.

The Hungarian government supports agriculture from its own national resources, beside the **subsidies** from the European Union. A total of HUF 429.6 billion (£1481m) was paid for agricultural and rural development support in 2006, 35% of which came from national budgetary sources and 65% from the EU.

- Subsidies paid under the National Rural Development Programme (NRDP): HUF 65.9 billion (£227m) (of which HUF 15.1 billion is the amount of national co-financing);
- SAPARD subsidies: HUF 9.2 billion (£32m) (no national co-financing part in 2006);
- Subsidies paid under the Agricultural and Rural Development Operative Programme (ARDOP): HUF 51.8 billion (£178.6m) (of which HUF 12.7 billion (£44m) is the amount of national co-financing);
- EU-financed single area payment: (SAPS): HUF 93.5 billion (£322m);
- Market support paid directly by the EU: HUF 59.7 billion (£205m).

The gross output of animal husbandry decreased by 0.1% in 2004, stagnated in 2005, and in 2006 also decreased by 2.9%. The share of animal husbandry in agricultural gross output was 36%. The numbers of cattle, sheep and poultry have decreased. Fewer and fewer numbers of cattle and pigs were bred by individual farms (37%), and they maintained only half of the hen stock and 90% of the sheep stock. The numbers of cattle have decreased moderately during the three years up to 2006. There has been a slight shift towards beef cattle, presumably due to falling dairy returns as happened in the UK. The **sheep** stock was just under 1.3 million animals in 2006, with 107,000 (8%) fewer than a year before. The Hungarian sheep sector has remained export-driven, although to a reduced extent. In 2001, 23% of the EU 15's (Countries) live sheep imports came from Hungary, while the ratio was only about 16% in 2006.

Forest Management

I will now look at the development of Forest management within Hungarian agriculture. Forests provide important renewable resources and services for society. As forest management is a branch of the economy, it functions as a source of national welfare and employment. Hungarian forestry policy provides a basis for the economic utilisation of the forests, as well as conserving and improving their ecological, nature protection and welfare roles.

The main principle and objective of national forest management is to implement the long-term sustainable management of forests as a natural resource, which should satisfy the forest-related consumption, environmental protection, social, leisure and cultural needs of society. Owing to their natural habitat and ability to regenerate, forests – unlike many ecosystems – replace and reproduce assets withdrawn to meet human needs. As a significant portion of these assets are environmentally friendly products and services that satisfy basic needs and cannot be replaced by anything else, rational long-term forest management needs to be given a strong focus.

Afforestation is a criterion of this policy. More than one fifth of the total land area in Hungary (1,999,000 ha) is involved in forest management, of which 93.5% (1,870,000 ha) is woodland. Forest management is not carried on 10.6% (212,000 ha) of woodland area. In Hungary, forests represent the second biggest sector after arable land in terms of area.

The last decade was characterised by the continuous expansion of privately owned forest areas with new stock, while the size of the state and community forests has stabilised. Deciduous trees cover 85% of all forest area, while the area of pine trees is only 12%. Various kinds of species are characteristic. The ratio of indigenous tree stocks exceeds 5.7%. Acacia trees grow on 23% of the forest area, and poplar trees on 7%.

Picture of hills (from ex arable field)

Parallel with the expansion of the forest area, total wood production also increased and amounted to 342 million cubic metres on 1 January 2006. The value of standing wood stock is estimated at more than a thousand billion HUF. Timber production was also an important source of income for the sector in 2006. From the annual growth of forests (13.2 million cubic metres), the maximum timber production is 10.2 million cubic metres, according to the forest management plans. Forest managers carried out lumbering activities on 116,000 hectares, and produced seven million gross cubic metres of wood. This represents 69% of annual timber production capacity, according to forest management plans. The agri-economic policy, which is based on the utilisation of Hungary's agri-ecological potential, assists the structural changes in agriculture and the environmental condition of the country by taking over certain areas of agricultural land for afforestation – especially land suitable for that purpose and less viable agricultural land – a worry given what this probably means for some of the land we saw during our trip. The afforestation programme anticipates an expansion of 70,000 hectares between 2007 and 2013, and 6–700 thousand hectares in the longer term.

Agricultural environment management

This was opened up as part of Hungary's membership of the EU. The subsidies granted under the agri-environmental management programme have, it is reported, contributed to environmentally-conscious agricultural production, the development of sustainable countryside management and animal welfare, and reimbursing income losses incurred from these activities. The professional content of the measure did not change in 2006, but the financial resources increased by HUF 37 billion (£127.5m), which is 50% more than the earlier financial plan. Resources for 2006 amounted to HUF 68.8 billion (£237m). The agri-environmental management measures are seen as popular with producers. The intensive communication campaign also played a crucial role in this, alongside experiences from the National Agri-environmental Protection Programme and the generous subsidies.

Challenges Ahead

From an environmental point of view the challenges ahead for Hungary appear, to me, to be ones of establishing and maintaining a dynamic agricultural sector without returning to the days of high inputs and intensive systems. In reality given the current world market such a return is unlikely given the high costs of inputs driven by the oil price. Engagement with rural communities is essential to try to stimulate small to medium scale co-operative marketing initiatives to support locally produced products. This needs to be coupled with investment in extensive grazing livestock systems and infrastructure that can be used to sympathetically and sustainably manage the large areas of surviving ecologically rich grasslands – most if not all of which are unfenced. Where we stayed during our trip it was clear that it would be beneficial to forge closer links with the Aggtelek National Park to build on the work they have started to maintain the Park and its environs.

Picture of Hungarian cattle

As to forestry, again great opportunities would appear to exist to manage this resource in a sustainable and environmentally sensitive way. The possibilities to link in with and develop small-scale local community wood-fuel heat and power provision could be usefully explored. The aim to plant further woodland, in particular broadleaved, should be encouraged providing that it does not take place on land that already has a high environmental value – under EU law Environmental Impact Assessments must be carried out before any major proposed change of land use. In theory, if properly applied, this should protect the most important grassland habitats. In practice this remains to be seen.

Finally, I am sure, such developments would as a by-product lead to greater opportunities for wildlife tourism and more people having the sort of memorable experience we had.

References

(1) The Hungarian agriculture and food industry in figures 2007 - Ministry of Agriculture and Rural Development Based on the materials received from the Ministry departments, the statistical data and publications of the Hungarian Central Statistical Office and the Agricultural Research and Information Institute.

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(2) Rural Development and Transition in Hungarian Agriculture - Paper for the workshop 'European Rural Development: Problems, Chances, Research Needs' jointly organised by the International Institute for Applied Analysis (IIASA),

Laxenburg, Austria, and the Polish Academy of Sciences, Warsaw, Poland, May 7-9, 2001

(3) Hungarian Agriculture Prior to System Change Nigel Swain, University of Liverpool
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