



High Nature Value farming in the Western Balkans

Final report of

Workshop on High Nature Value farming in the Western Balkans
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Compiled by:

Koen De Rijck, WWF Danube-Carpathian Programme, Sofia
Boris Erg, Oikos, Federal Republic of Serbia and Montenegro*

With input from:

Andreas Beckmann, WWF Danube-Carpathian Programme, Vienna
Duška Dimović, Oikos, Federal Republic of Serbia and Montenegro*
Yulia Grigorova, WWF Danube-Carpathian Programme, Sofia
Sergej Ivanov, In Situ Agro-biodiversity Conservation Project, Federal Republic of Serbia and Montenegro*
Gwyn Jones, European Forum on Nature Conservation and Pastoralism
Sonja Karoglan Todorovic, Ecologica, Republic of Croatia
Yanka Kazakova, WWF Danube-Carpathian Programme, Sofia
Boris Marković, Institute for Urbanism, Federation of Bosnia-Herzegovina

As well as from other participants in the workshop (see list of participants, p. 47).

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* Note: The workshop and this report were organized and compiled in spring 2006 before the referendum on independence for Montenegro – hence reference is made here to the State Union of Serbia and Montenegro.

Contents

1.	Foreword	4
2.	Introduction: What is High Nature Value farming? Why is it important?	7
3.	Trends in High Nature Value farming	13
4.	Political context of High Nature Value farming	18
4.1	Convention on Biological Diversity and PEBLDS	18
4.2	EU policies	19
4.3	EU accession process	20
4.4	Overview of HNV farming and relevant national policies and international programmes in the Western Balkans	21
5.	Identification of High Nature Value farming	34
6.	Current status of identification and protection of HNV farmland in the Western Balkans	36
7.	Conclusions and recommendations	43
	Recommended literature	45
	References	45
	List of acronyms	46
	List of participants and organizers	47
Textbox 1	Participants' and organizers' expectations	6
Textbox 2	Clarifying High Nature Value farming (and what it is not...)	9
Textbox 3	Examples of interesting areas in terms of farmed HNV areas in the Western Balkans	35
Textbox 4	A few snapshots, thoughts and quotes from the workshop	40
Textbox 5	Actions	44
Figure 1	Population trends for common birds	7
Figure 2	General relationship between agricultural intensity and biodiversity	8
Figure 3	N-fertilizer consumption in selected Central and Eastern European countries and the EU	13
Figure 4	Percentage of abandoned arable land in Estonia	14
Figure 5	Cumulative distribution of 102 bird species with unfavorable conservation status occurring on farmland	17
Table 1	Classification of HNV farmland	12

1. Foreword

In the pan-European region, traditional agricultural systems have shaped the rural environment and created habitats for a wide range of species, many of which are of particular conservation concern. The loss of biological diversity in much of Europe's farmland is largely a result of the continuing decline in traditional, extensive and mixed farming practices, the intensification of agriculture and the abandonment of farming in certain regions.

In response to these concerns, the Ministers and heads of delegation at the Fifth Environment for Europe Conference agreed on the following targets:

- By 2006, the identification, using agreed upon criteria, of all high nature value areas in agricultural ecosystems in the pan European region will be complete.
- By 2008, a substantial proportion of these areas will be under biodiversity-sensitive management by using appropriate mechanisms such as rural development instruments, agri-environmental programs and organic agriculture, to inter alia support their economic and ecological viability.
- By 2008, financial subsidy and incentive schemes for agriculture in the pan-European region will take the conservation and sustainable use of biodiversity into consideration.

Against this background, a workshop was organised on 2 and 3 February 2006 in Belgrade by the WWF Danube-Carpathian Programme in collaboration with the United Nations Environment Programme-Regional Office for Europe and the European Forum for Nature Conservation and Pastoralism, and with financial support from the governments of Switzerland and Norway in support of the agriculture and biodiversity target in the Kyiv Resolution on Biodiversity submitted by the PEBLDS Council to the 5th Environment for Europe Ministerial Conference (2003). The purpose of the workshop was to build capacity, share experience and develop recommendations regarding the identification and protection of High Nature Value Farming (HNVF) areas in the Western Balkans countries of Albania, Bosnia and Herzegovina, Republic of Croatia, The former Yugoslav Republic of Macedonia, and the State Union of Serbia and Montenegro. The 23 participants and nine organizers and experts came from various backgrounds, representing ministries, governmental organizations, universities and local, national and international NGOs.

The workshop was successful in meeting both objectives:

- To cover the ecological and political context of HNV farming, especially the role of HNV farming in the Convention for Biological Diversity, Kyiv Resolution and within other policy instruments and processes, and the present status of the HNV farming concept definition, identification and protection in Europe in general;

- To assess the present state, identification and protection of HNV farming in the Western Balkans and develop recommendations for future action that were transmitted to the Fourth Intergovernmental Biodiversity in Europe Conference, which took place 22-24 February 2006 at Plitvice Lakes National Park in Croatia.

This final report provides an introduction to the concept of HNV farming, its trends, the political context and the status of identification and protection. It also presents information on the current status of HNV farmland in the Western Balkans, as compiled through a rough desktop-study and the input of workshop participants. This workshop report should by no means be taken as a comprehensive overview of HNV farmland in the Western Balkans, but rather as a starting point for further work.

Assessing the current status of HNV farming in the Western Balkans and protecting this heritage is pioneering work. The workshop and this report should be seen as first attempts to recognise the importance of the Western Balkans and the whole of South-Eastern Europe for HNV farming and achieving the Kyiv objectives. There is an urgency to take this work forward, both on paper and on the ground. We hope and trust that this report will contribute to this task.



Ivonne Higuero
UNEP-Regional Office for Europe



Michael Baltzer
WWF Danube-Carpathian Program



Gwyn Jones
European Forum on Nature Conservation and Pastoralism

Textbox 1: Participants' and organizers' expectations

At the start of the workshop, participants and organizers expressed their expectations of the workshop, summarized below.

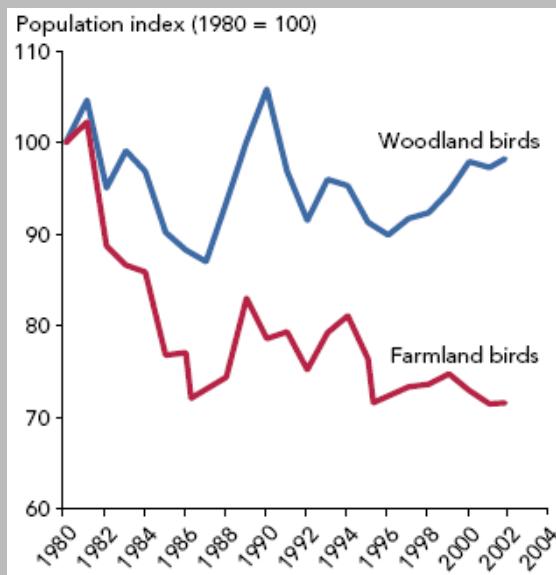
- **Basic information:** information on (the concept of) HNV farming; agree what is HNV farming.
- **Networking:** establish (needed) contacts; share experiences, achievements, challenges; get support from international organisations.
- **Development:** educate myself; establish good connections with EU; build support from international organisations; present my organisation and increase its/my capacity; use HNV farming to help my organisation and its projects.
- **Status report:** comparative overview; discuss best models and our regional differences; learn about relevant policy instruments and cases; connections to sustainable development and ongoing projects.
- **Personal/organisation actions:** make the concept more interesting and policy relevant for people in the Western Balkans; action oriented approach to HNV farming management; bottom-up mechanisms to serve farmers and communications; what is to be done, where, and by whom?; try to establish a realistic vision and scenario for promoting HNV farming in the region; make policy recommendations.
- **Actions regarding policy:** input to planning of measures; clarify mechanisms and nominations; include environmental protection and conservation into the CAP.

2. Introduction: What is High Nature Value farming? Why is it important?

The rural landscapes in Europe are strongly influenced by human activities, and especially by agriculture. As a result of its longstanding management of the land, farming in Europe has co-evolved with its ecology, landscapes and other environmental resources. Regionally differing farming practices came into being and have led to a variety of agricultural habitats. On the other hand, nature in Europe has had to adapt to human influence and interference. Today, many of Europe's species and their characteristic habitats are dependent on continued management to sustain their diversity. European landscapes are primarily cultural, heavily influenced by centuries of farm and woodland management.

This largely positive relationship between management and environmental quality has depended upon low-input farming practices, in terms of use of capital and nutrients, while labour inputs were relatively high. However, rural economies have changed radically and agricultural land use practices associated with semi-natural habitats have themselves often fallen out of use. As a result, the biodiversity of farmland has rapidly declined across Europe in the last few decades, as illustrated here for common birds of the countryside (Figure 1. See also Donald et al., 2001).

Figure 1: Population trend common birds



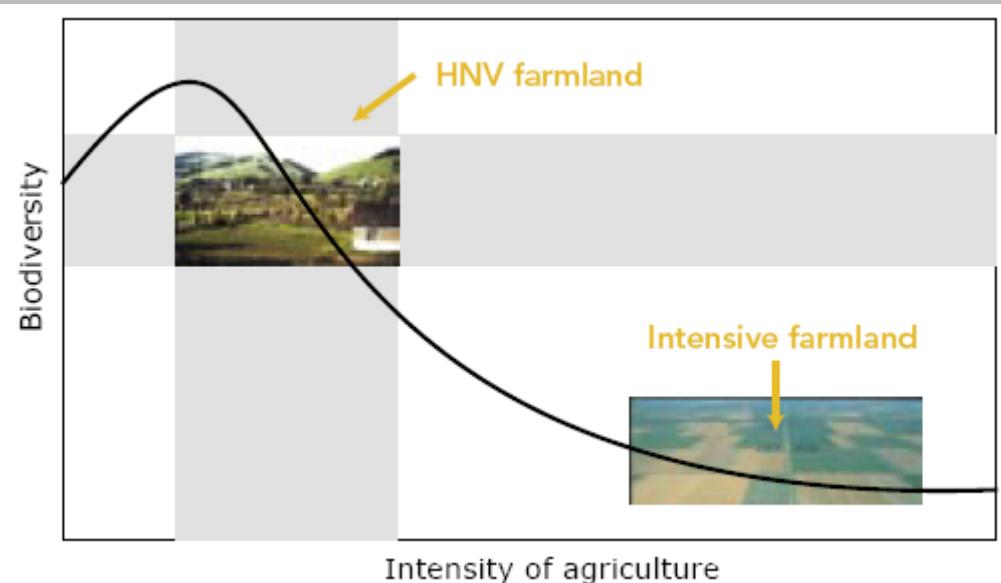
Source: *BirdLife International, 2004; in EEA, 2004*

That agriculture-related biodiversity is under relatively high pressure is also evident from the fact that roughly two thirds of the threatened and vulnerable bird species in Europe

occur on farmland (Tucker and Heath, 1994). Maintaining adequate farming practices is therefore of key importance to biodiversity conservation.

Biodiversity generally decreases when the intensity of farming increases (in terms of nutrient and pesticide inputs, use of machinery and overall productivity) (Figure 2). The most intensive arable and grassland systems are virtually monocultures. Despite their low intrinsic biodiversity, however, they may still provide wintering grounds for migratory waterfowl.

Figure 2: General relationship between agricultural intensity and biodiversity



Source: after Hoogeveen et al., 2001; in EEA, 2004

High biological diversity coincides with low agricultural inputs. Although extensive mixed arable systems may also support high biodiversity, the majority of high nature value farmland consists of semi-natural grasslands. They are the true hot spots for biodiversity. In the Dutch province of Friesland, for example, only 1.5 % of the land area is unfertilised semi-natural grassland, yet 60 % of terrestrial plants are more or less confined to this habitat (Schotsman, cited in Baldock and Bennett, 2002). In Central and Eastern European countries (CEECs), as another example, on average, about 40% of Red List plant species are connected with grassland habitats.

Baldock et al. (1993, 1995) described the general characteristics of low-input farming systems in terms of biodiversity and management practices and introduced the term High Nature Value farming systems. This new name was chosen as terms like 'low-input' or 'low-intensity' farming systems are indeed low in e.g. agro-chemical and energy input, and indeed can give lots of room for ecological processes, but had often high labour input. Moreover, low-intensity is relative to the carrying capacity of the land. Therefore, the new term 'High Nature Value' was introduced. Most of these farming

systems are characterised by low stocking densities, low use of chemical inputs and often labour intensive management practices, such as shepherding.

Typical examples of High Nature Value farmland are extensively grazed uplands in the United Kingdom, mountain meadows and pastures such as in the Alps and the Carpathians, fragile reindeer pastures of the extreme north, steppic areas in Eastern and Southern Europe, dehesas and montados in Spain and Portugal and areas important for breeding and/or migratory birds, as well as buffer zones of protected areas. Particularly important for biodiversity are small-scale agricultural farming systems in Central and Eastern Europe, responsible for creating and maintaining species-rich semi-natural grasslands.

Although they are much less widespread than High Nature Value grazing systems, various forms of low-intensity arable cropping (e.g. cereals on dry, non-irrigated land), traditional permanent cropping (mainly orchards, vineyards, olive groves) and mixed systems are also considered as High Nature Value farming and can be significant for nature conservation in Europe.

Textbox 2: Clarifying High Nature Value farming (and what it is not...)

Before gathering in Belgrade, there was some confusion among participants regarding the topic of the workshop. Most of the participants had never before heard about High Nature Value farming, but were active in environmental and agricultural issues. Some thought it probably would be similar to other issues already introduced in the region: organic farming, gene diversity conservation, agri-environmental measures, etc. In his introductory presentation, Gwyn Jones from EFNCP explained what HNV farming is and distinguished what it is not.

- **Is it organic farming?** No, but there is an overlap. Organic farming is basically just a set of rules to comply with. In terms of nature conservation, organic systems may be better than comparable non-organic systems, however it is also true that some organic systems are less HNV than other non-organic systems. Some HNV farmers even cannot be organic at the moment, e.g. when their cows are grazing together with conventional cows on common grazing lands.
- **Is it farming beautiful and/or historical landscapes?** No, but there is some overlap. The beauty of a landscape is not directly related to intensity of use. Landscape character is often related to the presence of non-productive elements. Most HNV farmland could be described as “cultural landscape +” in that historically important features are combined with a high biodiversity interest.
- **Is it about crop genetic diversity?** No, but there is an overlap. Few areas with a high level of crop diversity are not HNV, but it does not necessarily have to be so! Moreover, not all HNV areas use traditional varieties.

- **Is it about protecting rare breeds?** No, but again, there is an overlap. Certainly, not all HNV areas are managed by rare breeds, just as not all rare breeds are in HNV farming systems. Rare breeds often have physiological characteristics that make them adapted to low productivity environments, but some aspects of the behaviour of traditional livestock is 'cultural' - they are learnt during the animal's life and can be picked up by many different breeds.
- **Is it about agri-environmental measures?** No, but also here there is an overlap. Agri-environmental measures and schemes are basically just a policy instrument. They might e.g. target mainly powerful farmers. They might also ignore HNV farming systems. In principle, though, conserving such systems should be a major aim of the agri-environmental policy.
- **Is it farming on designated and/or protected sites?** No, but there is overlap. 'Old-style' designated nature areas excluded man and its practices from the area. In this vision nature should be protected against humans and e.g. farming practices. More modern designations can include HNV farmland, but HNV farmland is not limited to designated areas! Most likely designations will not cover all HNV farmland, especially in countries where it covers a large area.
- **Is it all about peasant farming?** No, but if you look to the overlap between European areas with a high-level of rural poverty and HNV areas one might argue that it is! This is an enormous challenge for HNV farmers, NGOs and governments.

Definition and classification

Despite the recent interest in the concept, producing a detailed definition of High Nature Value farming has proven difficult. Part of the problem is the loose terminology that tends to be used in the literature and policy debate. For example, "HNV farming areas" is ambiguous and might be taken to imply that the farming itself is of High Nature Value, rather than the area. "HNV areas" is also commonly used but this makes no direct reference to agriculture (either good or bad). "HNV farming systems" suggests certain combinations of farm management lead to the nature value and implies that all farms with this combination are of High Nature Value irrespective of context. Perhaps the best epithet is "HNV farmland", meaning "farmed HNV areas" – that is, the areas are of High Nature Value and they are under farm management.

In 2001, the European Environment Agency (EEA) commissioned a desk study on developing indicators of HNV farmland, recognising its increasing importance to EU agriculture policy. Whilst most previous approaches to classifying farmland have tended to focus on aspects of agriculture (specifically either low intensity or high intensity), the EEA project focused on the Nature Value. The project team pointed out that the word

"value" in HNV refers to conservation value and necessarily introduces a strong element of subjectivity that would not be there if the subject was more quantitative, for instance, biological diversity or species richness. It also introduces the question of the relative position and extent of particular habitats or species, which might be valued differently in different locations.

Three broad categories of farmland were identified as being potentially of HNV:

- Type 1: Farmland with a high proportion of semi-natural or natural vegetation
- Type 2: Farmland with a mosaic of habitats and/or low-intensity land uses
- Type 3: Farmland that supports rare species or a high proportion of the European or World population of a species.

Type 1 and Type 2 are based on factors relating essentially to biodiversity, although this is not quantified. Type 3 areas will often be significant for rare species. What is different about Type 3 is that they are only important for a few rarities and are otherwise low in biodiversity. For example, some highly valued rare bird species such as wintering geese may be associated with biologically simplified agricultural areas with low vegetation and habitat diversity.

The classification of farmland into these HNV types can be most easily thought of in the form of a hierarchical dichotomous key (see Table 1 below):

To summarise its work, the European Environment Agency project developed the following working definition:

'High Nature Value farmland comprises those areas in Europe where agriculture is a major (usually the dominant) land use and where that agriculture supports or is associated with either a high species and habitat diversity or the presence of species of European conservation concern or both'.

This does not necessarily imply causality between farming practice and the existence of HNV on farmland. High species and/or habitat diversity may exist alongside or despite farming (although for most categories of HNV farmland there would have been a positive link, at least historically).

Table 1: Classification of HNV farmland

Question 1: Is the farmland dominated by semi-natural vegetation?

(e.g. heathland, moorlands, dehesa and montados and other wood pastures, natural grasslands of various types, salt marshes, limestone pavements, maritime and sea-cliff vegetation etc.)

If yes = Type 1 HNV farmland

If no, go to question 2

Question 2: Is it dominated by either a mosaic of low intensity agriculture or a mosaic of semi-natural vegetation, cultivated land and small-scale features?

(e.g., dry arable areas and small-scale farms in southern Europe. Small scale features includes open water (e.g. on rice farms), ditches, relict grassland, field boundaries and woodland)

If yes = Type 2 HNV farmland

If no, go to question 3

Question 3: Does the area host rare species or support a large proportion of European or world population of certain species?

(e.g., areas of intensively managed wet grassland favoured by migrating geese for instance in the Netherlands, Scotland and Ireland)

If yes = Type 3 HNV farmland

If no = Not HNV farmland

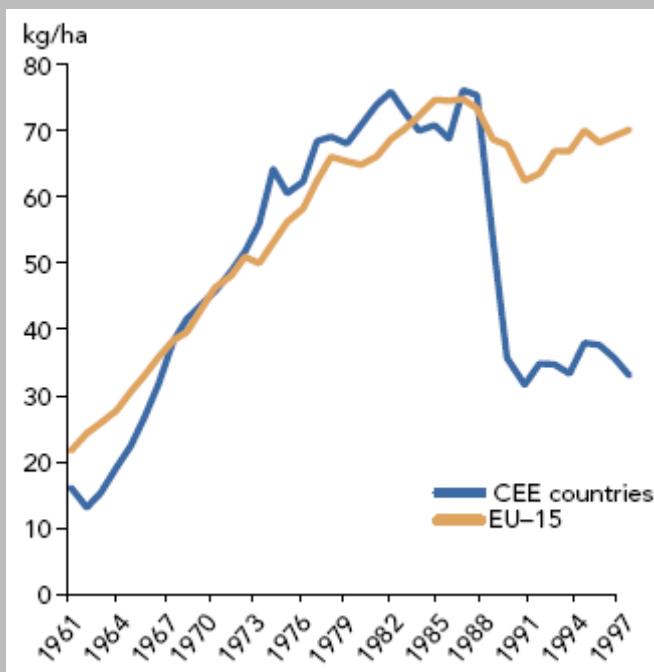
3. Trends in High Nature Value farming

The extensive, low-input character of most High Nature Value farming systems can be explained by natural conditions which prevent the use of modern techniques and machinery, general socio-economic constraints, or a combination of both. High Nature Value farmland is threatened by two contrasting trends: intensification and abandonment.

Intensification

Where natural and economic conditions allow, farming will intensify in order to increase yields and overall efficiency. This has been a continuous process in most parts of Western Europe for decades, reflected in a steady increase in fertiliser inputs and milk and cereal yields. In Eastern Europe, investment in the agricultural sector has dropped substantially due to the political and economical changes during the 1990s. This is reflected in the sudden drop in the use of nitrogenous fertilisers (Figure 3).

Figure 3: N-fertiliser consumption in selected Central and Eastern European countries* and the EU



* Bulgaria, Czech Republic, Hungary, Poland, Romania and Slovakia.

Source: FAO, 2002; in: EEA, 2004

Fertiliser use in Western Europe appears generally to have levelled off. In Central and Eastern Europe, current input rates are comparably low, but the new agro-economic

framework after accession is expected to lead to some intensification in the new EU Member States from 2004 onwards (EEA, 2004).

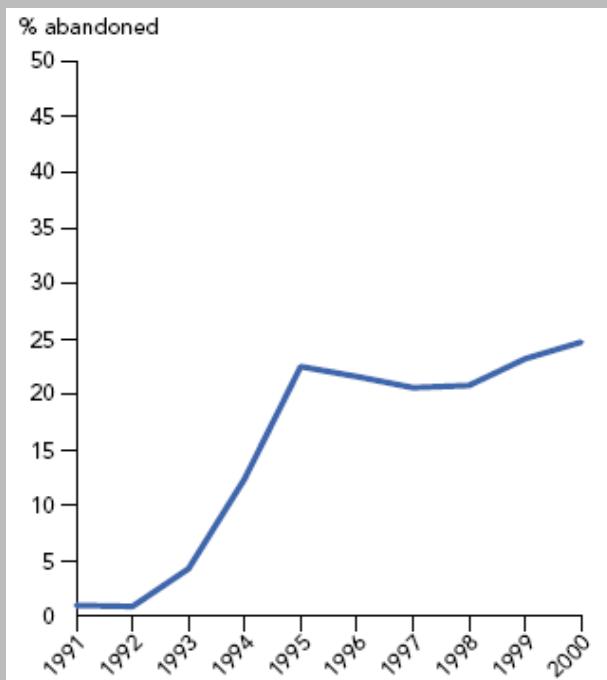
Environmental pressures are expected to decrease somewhat in Western Europe, whilst many areas in Central and Eastern Europe will experience increasing agricultural intensity. This means that some of the High Nature Value farmland will probably be exposed to intensification in the near future.

Abandonment

The socio-economic conditions in rural areas with extensive agriculture are generally unfavourable. Depopulation is occurring in many rural areas, affecting the countryside and the environment profoundly. Low incomes, hard working conditions and a lack of social services in many areas make farming a less attractive option for young people. The proportion of the elderly is already very high amongst farmers. As a result, land abandonment is to be expected (Heilig 2002a, b).

Land abandonment is already a common phenomenon in regions where agricultural productivity is relatively low (Baldock et al., 1996). The situation is particularly worrying in Central and Eastern Europe, where political and economic change has negatively affected the conditions for farming (EEA, 2004).

Figure 4: Percentage of abandoned arable land in Estonia



Source: Statistical office of Estonia, 2000; in: EEA, 2004

Figure 4 shows the trend for abandoned arable land in Estonia, where the current level is over 25 %. The corresponding figure for permanent grasslands is as high as 56 % (Mägi and Lutsar, 2001). Similar data sets for other countries are rare, since land abandonment is not easily detected in general agricultural statistics. Therefore, no picture can be drawn up for Europe as a whole, but on the basis of their generally lower viability (see Hellegers and Godeschalk, 1998) it is to be expected that extensive farming systems are most vulnerable to abandonment.

Impacts on nature value

Loss of semi-natural vegetation is a consequence of the above mentioned agricultural trends. Driven by the desire for increased production, agricultural intensification processes such as land reclamation, drainage, irrigation, mechanisation, application of fertilisers and pesticides, higher stocking densities, removal of structural landscape features, and simplified management methods all contribute to biodiversity loss. The loss is explained as the environmental conditions of the 'improved' sites represent a much higher similarity than the former "unimproved" sites. Consequently, habitats for species are lost. Intensification can also lead to fragmentation of habitats, which negatively affects population viability due to isolation.

Marginalization and land abandonment can in some cases lead to beneficial effects in intensively used, biodiversity-poor areas. However, in most cases abandonment is detrimental in biodiversity-rich, high nature value farmed areas as it can lead to the deterioration and eventual disappearance of semi-natural habitats created by low-input agriculture and labor intensive farming practices. For example, on semi-natural grasslands, succession to forest will mostly occur in the absence of grazing or mowing, but botanical values will decline much sooner after abandonment. Due to the extreme vulnerability to both intensification and abandonment, semi-natural grasslands are among the most vulnerable ecosystems.

Although many case studies on the loss of agricultural biodiversity exist (see for example Veen and Seffer, 1999), no reliable pan-European trend data are currently available for plant communities and habitats. The best data available are for birds. Farmland birds are indicative of overall biodiversity, since they depend on a variety of plant and animal food and diverse vegetation structures for feeding, nesting and shelter against predators (see for example Potts, 1986). Tucker and Heath (1994) estimate that more than 40% of all declining bird species in Europe are affected by agricultural intensification, whereas more than 20% are affected by abandonment.

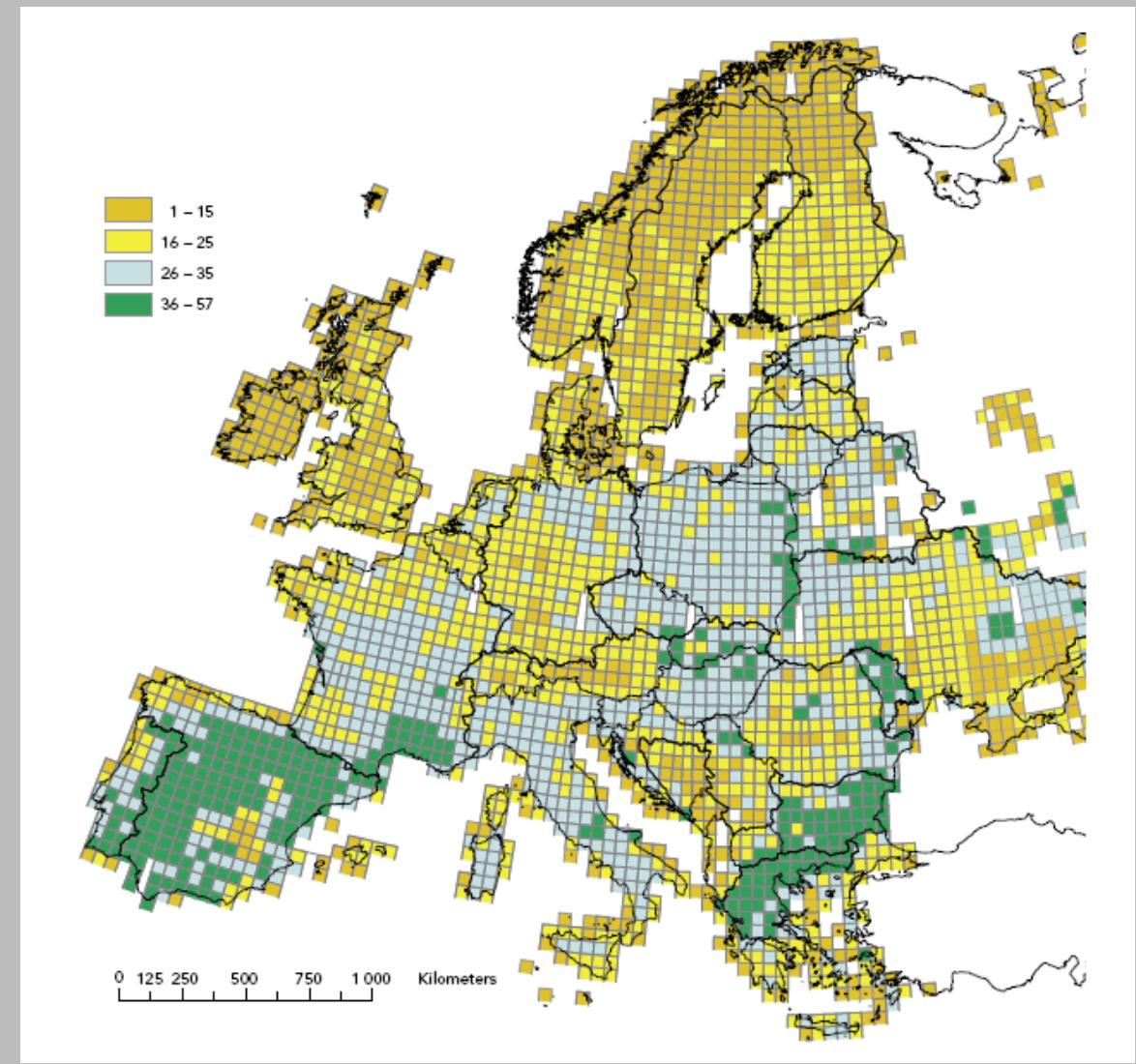
Figure 5 shows the cumulative distribution of 102 priority bird species that are connected to farmland habitats and that have an unfavourable conservation status (selection according to Andersen, 2003, based on Tucker and Heath, 1994 and Tucker, 1997). Farmland species of particular conservation concern appear to occur throughout Europe, but many of them are associated with extensive farmland, particularly in Southern Europe.⁴ The following cases illustrate the conservation issues in some of these systems.

The black grouse (*Tetrao tetrix*) occurs on grazed heaths and moorland, and is showing a rapid and almost Europe-wide decline (Tucker and Heath, 1994). Upland habitats in the United Kingdom suffer from overgrazing and afforestation, causing moderate population decline. In lowland Western Europe, this once rather common species is now practically extinct because of habitat destruction and agricultural intensification. In the Netherlands, for example, black grouse numbers fell from several thousands in the 1950s to less than 100 today (see Niewold, 1990).

Loss of extensive grassland habitat is reflected by the large-scale decline of the corncrake (*Crex crex*). Its numbers have fallen by more than 50% in 10 countries. Drainage of wet grasslands, intensification and the conversion of hay meadows into silage grasslands are the main causes (Tucker and Heath, 1994). The corncrake is most common in central and eastern Europe, but habitat loss and population decline also occurs there (Veen et al., 2000; Tucker and Heath, 1994).

The great bustard (*Otis tarda*) is characteristic of steppe habitats in Southern and Eastern Europe. The species has declined seriously throughout its range (Tucker and Heath, 1994). In Hungary, the great bustard population dropped from 2,500 individuals in 1985 to 1,100 individuals in 1990 (Fésüs et al., 1992). Reasons for this are intensified agricultural use of meadows and pastures, as well as increasing cultivation of maize and sunflowers. In the 1990s, the Hungarian great bustard population was stable (Faragó, 2003).

Figure 5: Cumulative distribution of 102 bird species with unfavourable conservation status occurring on farmland



Source: EEA, 2004

4. Political context of High Nature Value farming

4.1 Convention on Biological Diversity and PEBLDS

The need for measures to prevent the loss of high nature value farmland is widely acknowledged, also on the political level.

At a global level, an important commitment of more than 180 parties is the Convention on Biodiversity (CBD). Signed at the 1992 Earth Summit in Rio de Janeiro, the CBD has three main goals:

- The conservation of biodiversity;
- Sustainable use of the components of biodiversity; and
- Sharing the benefits arising from the commercial and other utilisation of genetic resources in a fair and equitable way.

As signatories to the CBD, the countries in Western Balkans are committed to protect biodiversity, including in agriculture.

At European level, the Pan-European Biological and Landscape Diversity Strategy (PEBLDS) concerns more than 50 countries participating in the *Environment for Europe* process (the United Nations Economic Commission for Europe (UN/ECE) acts as its secretariat), stretching from Western Europe to the Caucasus and Central Asia. The PEBLDS is a European response to the Convention on Biological Diversity (CBD) and provides a pan-European framework for promoting a consistent approach to the implementation of the CBD, emphasising in particular the importance of landscape diversity in land-use planning. PEBLDS introduces a coordinating and unifying framework for strengthening and building on existing initiatives. It does not aim to introduce new legislation or programmes, but to fill gaps where initiatives are not implemented to their full potential or fail to achieve desired objectives. It provides the opportunity to take more effective measures by facilitating the development of a common approach to the conservation of Europe's biodiversity and by helping to promote coordinated action.

In May 2003, the need for measures to prevent the loss of high nature value farmland was recognised by the European Ministers of Environment in Kyiv. In their final resolution (UN/ECE 2003), they declared the following on agriculture and biodiversity:

'By 2006, the identification, using agreed common criteria, of all high nature value areas in agricultural ecosystems in the pan European region will be complete. By 2008, a substantial proportion of these areas will be under biodiversity-sensitive management by using appropriate mechanisms such as rural development instruments, agri-environmental programmes and organic agriculture, to inter alia support their economic and ecological viability. By 2008, financial subsidy and incentive schemes for agriculture

in the pan European region will take the conservation and sustainable use of biodiversity in consideration'.

At a more technical level the issue of High Nature Value areas has been brought into the discussion on indicators for the integration of environmental concerns into the Common Agricultural Policy (COM (2000) 20) of the European Union.

4.2 EU policies

The European Union, and specifically its Common Agricultural Policy, has been an important factor in determining the development of agriculture and farming systems in EU member states. Although none of the Western Balkan countries are EU member states, all of them have the perspective of eventual accession to the European Union, with the Republic of Croatia and The former Yugoslav Republic of Macedonia having begun formal negotiations for accession with the EU. Therefore it is worth taking a closer look at EU policies related to HNV farming.

To join the European Union, accession countries must meet a set of key economic and political conditions, including a functioning market economy, a democratic political system, and adoption of the *acquis communautaire* (the body of legislation and policy instruments prevailing in the European Union). Accession countries go through a process of review and approximation of all their national legislation and policies to the *acquis communautaire*. To a certain extent, this is a moving target, as the body of EU legislation and policies are constantly evolving. In certain cases, derogations and transition periods for the adoption of EU legislation and policies can be negotiated between the EU and the prospective member states.

The EU's Common Agricultural Policy (CAP) is an essential part of the *acquis communautaire*. The original objectives for EU agricultural policy were to provide a secure supply of food and to create a common market for agricultural products as well for industrialised goods. As an agricultural support system it has been around now for over 40 years, shaping the pattern of farming and dictating policy choices, not only in the agricultural, but also in the agri-environmental and rural development fields (Potter, 2002). Until recently, agricultural output and productivity were the ultimate benchmarks of success. Re-balancing policy and reforming institutions in order to give greater priority to environmental protection and less agri-centric forms of rural development, has been a slow process. Major CAP reforms like MacSherry (1992), Agenda 2000 and the 2003 Mid Term Review acknowledged environmental protection as an important objective in the reform debate. Besides the commodity regimes as the first pillar, rural development was given the status of second pillar. This took place, however, without significant growth in the funds available, which are still around 10 percent of the CAP budget (Baldock and Bennett, 2002). Nevertheless, the unintended environmental consequences of the CAP are still large and have eclipsed efforts to manage rural environments more deliberately through the agency of agri-environmental policy.

4.3 EU accession process

In the Balkans, Bulgaria and Romania are at the moment in the last stages of the enlargement process, the Republic of Croatia and The former Yugoslav Republic of Macedonia are candidate countries, while Albania, Bosnia and Herzegovia and Serbia and Montenegro and Macedonia are potential candidate countries. Accession of Bulgaria and Romania is foreseen for 1st of January 2007, or possibly 1st of January 2008 at the latest. The first and one of the most important steps on the road to the EU is policy and legislation harmonization.

‘Agriculture’ is the largest chapter for accession negotiations, because the legislation in this field includes approximately half of all EU legislation. It consists of two parts. The first part consists of EU legislation, which regulates the CAP. This part of legislation provides for the mechanisms for regulation of market organization of individual agricultural products, schemes supporting the farmers’ income, rural development and funding.

Another part of EU legislation is linked to the functioning of EU the unified internal market. Its main objective seeks to protect the consumers in the whole Community and to ensure the necessary food safety. It is oriented towards the health protection of humans, animals and plants and environmental protection. As a structure, this part of EU legislation includes veterinary and phytosanitary issues.

The main sections included in requirements to be fulfilled by Bulgaria and Romania are the following:

- Horizontal measures, including the establishment of authorities required for this purpose, as paying and intervention agencies, introduction of integrated system for administration and control, commercial mechanisms (certification system, export subsidies, customs tariff), EU quality policy, organic farming, accounting system for the agricultural holdings, state support;
- Implementation of the CAP in relevant agricultural sectors;
- Structural policy and rural development;
- Veterinary and phytosanitary issues.

In Bulgaria, the strategy for development of agriculture includes proposals for:

- Development of economic and pricing policies;
- Development of the legislation;
- Improvement of the ecological policy;
- Improvement of the involvement of NGOs;
- Education and research programs; and
- Development of information management systems.

To prepare Bulgaria and Romania for their accession to the EU, the European Commission has provided these countries with pre-accession funding. In preparation of implementing the Common Agricultural Policy (CAP), the countries have received funding through the Special Accession Program for Agriculture and Rural Development, or SAPARD for short. SAPARD is a pre-accession fund designed according to the rural development scheme of the CAP. Like the rural development policies in the EU member states, SAPARD works as a fund that grants subsidies to third parties that apply for it.

According to the European Council SAPARD regulation (EC) no 1268/1999 the objective of SAPARD is two-fold:

1. To contribute to the implementation of the *acquis communautaire* concerning the Common Agricultural Policy and related policies; and
2. To solve priority and specific problems for the sustainable adaptation of the agricultural sector and rural areas in the applicant countries.

The specific needs and priority problems of Bulgaria and Romania have been defined in their respective National Agricultural and Rural Development Plans (NARDPs).

Agri-environment schemes offering area payments to support agricultural production methods designed to protect the environment and to maintain the countryside are an obligatory part of SAPARD and commonly seen as the most significant part of the programme. In Bulgaria, however, where the first SAPARD funds were distributed in 2000 at about €60 million annually, the agri-environmental measure is still not implemented (Janssen, 2005).

To look forward, all of these measures to meet the EU requirements and to create suitable conditions for use of EU funds for policy development, legislation and administration capacity, and adoption of new practices according to Common EU policy objectives will be translated into Rural Development Plans and National Programming, including the agri-environmental programme, for the next financing period 2007-2013.

4.4 Overview of HNV farming and relevant national policies and international programmes in the Western Balkans

The entire stabilization and EU accession process in the Western Balkans is led by principles laid out in EU policies and international agreements. Key policies and documents in this respect include Country Strategy Papers; the CARDS Assistance Programme to the Western Balkans (Regional Strategy Paper); European Council Decision on the Principles, Priorities and Conditions Contained in the European Partnership; different Action plans, other Strategy papers, etc. Most of these documents recognize the importance of sustainable development, rural development, regional development, poverty reduction, etc., but they provide general recommendations, such as strengthening capacity and co-ordination at national and local levels; implementation of legislation on environmental impact assessment; adoption and implementation strategies to further align environmental legislation with the EU *acquis communautaire*;

efforts for further implementation of international conventions in the field of nature protection, etc.

Albania

Institutional framework, strategies and programmes

Responsible ministries for nature conservation and agriculture in Albania are the Ministry of Environment and the Ministry of Agriculture and Food. The new Ministry of Environment was established in 2001, with an expanded mandate for improving environmental protection and promoting conservation and sustainable use of biodiversity. In 2002, the Ministry of Environment was successful in gaining approval of a new framework Law on Protected Areas. The new Law on Protected Areas represents an important step forward for Albania by expanding the mandate for protected areas to include environmental tourism, public education functions, and benefit sharing with local communities. The Law recognizes Protected Landscapes as a category of protected area. Additional important regulation is Law on Pastures and Meadows. The main objective of the law is restitution to former owners, rational utilization, increase of productivity and protection of ecological balance of pastures and meadows. The main bodies responsible for improvement of pastures and meadows and their protection from damage is the General Directorate of Forests and Pastures. In addition, there are several on-going and completed projects related to rural development in Albania, mainly financed by the World Bank, but they are mostly aimed at poverty reduction and alleviation.

The Strategy on Biodiversity formulated and declared in 2000 developed a new representative protected areas network in Albania comprising ca. 430,000 ha or 15% of the country's territory. The first National Biodiversity Strategy/Action Plan updated the status and trends of biodiversity threats and protection in Albania, and identified the objectives, priorities, and actions for *in-situ* and *ex-situ* biodiversity protection and use as well as the implementation and financing requirements for their achievement. Monitoring of the implementation of the National Biodiversity Strategy/Action Plan has been one of the main tasks of the National Council for Nature and Biodiversity, established in 2000.

An ongoing forestry project, supported by the World Bank includes, in addition to capacity building, development of new management plans, mapping and database development as well as selected area studies and evaluations, including the status of protected areas, habitats according to CORINE system, an "EMERALD" network study, and new representative protected areas network proposed by Strategy of Biodiversity.

Capacity building for sustainable land management project was formulated jointly by the Ministry of Environment and the Ministry of Agriculture and Food (General Directorate for Forest and Pastureland) with direct support from UNDP Albania.

The project supported by the Global Environmental Facility (GEF) will enable the country to address existing legal and policy gaps and build central and local level capacity in

implementing SLM policies and will demonstrate innovative land management practices best suited to the country's agro-ecological specifics. As such the proposed project will lead to a strengthened institutional and human resources capacity and to an improved policy and regulatory framework. Indirectly, the project will contribute to improvement to economic productivity of land, over the medium term. Moreover, in line with strategic priorities for land management by GEF, the project is designed to mainstream sustainable land management into National Strategy for Sustainable Development and regional and local plans.

Ecological features and agriculture (with emphasis on HNVF)

Albania is mainly mountainous and hilly, with river valleys and small coastal plains. There are some 0.7 million ha of arable land and permanent crops; 0.4 million ha of permanent pasture; and 1.0 million ha of forest. In recent years, wheat, maize, oats, potatoes, fruits and vegetables have shown increased production. Prior to '90, 50% of arable land was nominally under irrigation, providing the potential for two vegetable crops per year. Since then, for a variety of reasons, the irrigated land area has decreased by some 30-40%. The increase in livestock production since has led to increased forage area, whereas the production of oilseeds, sugar beet and tobacco has declined. Although pastures and meadows taking significant portion out of total agriculture land, HNVF is not yet introduced in Albania.

Bosnia and Herzegovina (consisting of the Federation of Bosnia and Herzegovina and the Republika Srpska)

Institutional framework, strategies and programmes

Bosnia and Herzegovina is a complex state consisting of two entities, the Federation of Bosnia and Herzegovina and the Republika Srpska. The General Framework Agreement for peace in Bosnia and Herzegovina, initialled in Dayton on November 21, 1995 and signed in Paris on December 14, 1995, specified the principles of state and legal structure of Bosnia and Herzegovina. Both entities in Bosnia and Herzegovina – the Federation of Bosnia and Herzegovina and the Republika Srpska – have certain responsibilities in nature protection, agriculture and rural development. Main governmental bodies in the Federation of Bosnia and Herzegovina are the Ministry of Environment and Tourism and the Ministry of Agriculture, Forestry and Water Management, while in the Republika Srpska responsible institutions are the Ministry of Spatial Planning, Civil Engineering and Ecology, and the Ministry of Agriculture, Forestry and Water Management. In addition, certain responsibilities in terms of environmental issues are at the cantonal level, both in the Federation of Bosnia and Herzegovina and the Republika Srpska. In addition to relevant authorities, expertise in nature conservation issues in the Republika Srpska is provided by the Institute for Nature Protection. Recently, a Council for Agriculture, Forestry and Rural Development has been established at the state level, aimed at development of rural areas as well as promoting sustainable rural development. The Ministries of Agriculture, Forestry and

Water Management of both entities are Council members. In practice, competences and capacities at the state level are insufficient, thus main implementation is at entity and cantonal level.

Over the past three years, the EU has helped both entities to draft new environmental legislation that is harmonized with EU directives. Set of laws consists of Framework Law on Environmental Protection and Law on Nature Protection, amongst others. The Republika Srpska adopted these laws in 2002 along with a law establishing an environmental fund. Federation of Bosnia and Herzegovina adopted them in 2003 but has yet to establish an environmental law fund. During 2005 the Spatial Plan of Republika Srpska was technically completed and is now in the process of being officially adopted. Work on the Red List of endangered species for the Republika Srpska is still ongoing.

Several important projects have been launched in Bosnia and Herzegovina aimed at supporting sustainable development of rural areas. First is a project of the Food and Agriculture Organisation (FAO) that aims at making datasets on land use and land cover following FAO classifications. Data sets made in GIS will cover the whole country. This project was prepared with co-operation of the Institutes for Agriculture in Mostar, Banja Luka and Sarajevo. The second project is *CORINE Land Cover 2000*, made by well known methodology, but unfortunately without comparison for the years 1990 and 2000.

The Global Environmental Facility (GEF) has provided support for the *Forest and Mountain Biodiversity Project*. The objective of this project, started early in 2005, is to increase the forest and mountain ecosystems that are under formal protection, and to design mechanisms to conserve these ecosystems while using them to improve livelihoods in rural areas. Building on the work of the Forest Development and Conservation Project, the project aims to expanding and strengthen the network of protected areas, enhance the capacity of national institutions and other stakeholders to manage protected areas and to preserve biodiversity, manage resources more sustainable outside protected areas, and integrate Bosnia and Herzegovina into trans-national biodiversity conservation activities.

In the agricultural sector, a project called *Linking Agriculture Markets and Producers* has been launched. This project will attempt to stimulate agriculture production initially for domestic markets before considering export potential. By providing technical assistance as well as substantial grants to producer associations and intermediary financial institutions, the project will attempt to accelerate producer responses in targeted sub-sectors, probably beginning with fruits, berries, dairy, fisheries, livestock, herbs, and spices. Many of these products originate in forest lands and sensitive landscapes. Such attention to potential partners is also likely to identify activities that may have indirect negative consequences for sensitive communities and attendant biodiversity if the scoping documents prepared by the contractor do not look beyond the immediate impacts of pesticide use and waste from agro-processing facilities.

Ecological features and agriculture (with emphasis on HNVF)

Bosnia and Herzegovina has one of the most diverse ecosystems in Europe, replete with pristine forests, fertile agriculture, ample fresh water sources, and a rich mosaic of flora and fauna. Almost half the country (47%) is covered with forests, distributed throughout the central and portions of the country. Mixed farming, including grains, horticulture, vineyards, and pasture, is concentrated mainly in the north. Inter-mountain valleys in the central and southern parts of the country support a variety of farming and grazing activities. Permanent cropland (olive, grapes, and citrus) is predominant in the south. Overall, mixed farming and permanent crop uses cover about 30% of the country and pastureland an additional 23%. Bosnia and Herzegovina has a high level of diversity in domesticated species of plants and animals. Together with the wild species, they represent a valuable part of the country's natural heritage.

Although about 54% of land holdings occupy less than 2 hectares, most small-scale farmers nevertheless produce multiple products; the mixed habitats contribute to preserving biodiversity. Very important crops are various types of wheat, barley, oats, rye, buckwheat, and corn. In gardening there are varieties of potatoes, pumpkins, cabbage, garden oraches, mangel-wurzel, and peas, as well as of decorative, medicinal, and aromatic horticultural species. There were once dozens of autochthonous types of livestock in Bosnia and Herzegovina. Today, the number is reduced to the minimum and many of these are on the verge of extinction, although they represent an immense national heritage. Today there are almost no domestic species of, e.g., cows, goats, and horses. Although significant part of population in Bosnia and Herzegovina is living in rural areas and practicing extensive agriculture measures, HNVF as such is not known.

Republic of Croatia

Institutional framework, strategies and programmes

The main governmental bodies in the Republic of Croatia responsible for the issues concerned are the Ministry of Culture and the Ministry of Agriculture, Forestry and Water Management. The Ministry of Culture is responsible for all aspects of nature protection policy and coordinates activities in protected natural areas. The State Institute for Nature Protection is the main national expertise organisation responsible for a systematic and well co-ordinated collecting and processing of nature protection data. Besides governmental institutions, Croatia has many other organisations dealing with nature conservation and environmental protection. These include universities, research institutes, associations, and environmental and nature protection NGOs.

The recently adopted *Law on Nature Protection* (NN 70/05) addresses all major aspects of nature protection. It sets out a framework for nature protection on the entire territory, including non-protected areas. It regulates the protection of flora and fauna, geological heritage, and protected areas of nature, as well as the sustainable use of nature resources. The law also defines the National Ecological Network as a network of areas that are of national and international importance.

The National Environmental Strategy and its corresponding action plan were adopted in 2002 (NN, 46/2002). *The National Strategy and its Action Plan on Biological and Landscape Diversity Protection* (NN, 81/1999) defines priorities and actions with regard to nature protection. It also deals sporadically with agriculture, mostly in relation to grassland biodiversity.

Most of the governmental support for agriculture and rural areas operates through one of the aid schemes run by the Ministry of Agriculture, Forestry and Water Management. These are regulated by *the Law on State Subsidies in Agriculture, Fisheries and Forestry* (NN 87/02).

The major contribution of the subsidy scheme to environmentally friendly farming is the payment of subsidies for organic farming and traditional and protected breeds. The Law on Organic Agriculture (NN 12/01) was adopted in 2001 and supplemented by several directives. All registered organic farmers (both in conversion and fully converted) are entitled to subsidies. Depending on the type of production, these are 30%-140% higher than subsidies made to conventional farming.

The second subsidy scheme provides support for keeping traditional and protected breeds. The subsidy is paid per head. For particularly endangered varieties whose population is less than 100 individuals, the subsidy level may be increased by 50%. In 2004, the government spent some €1.5 million on this sub-scheme.

The sub-scheme which supports the development of rural areas consists of 16 programme areas. One of these is dedicated to environmental protection of rural areas. This sub-scheme is still in its early phase of development and no concrete projects have been awarded yet. The National Programme for Agriculture and Rural Areas requires the government to develop a comprehensive Rural Development Programme. This is to define in detail all measures and aid to be provided under this sub-scheme.

In the period 2002-2004, the Netherlands Government's Pin-Matra programme funded an international project aiming to support the introduction of an agri-environment programme in Croatia. The project resulted in proposals for national and pilot agri-environment programmes. The project addressed key actors working on agri-environmental issues in Croatia, such as government representatives, scientists, farmers, environmental and nature conservation NGOs.

A CORINE land cover database has been prepared for Croatia with support from the EU's LIFE Third Countries programme. It includes databases for the years 2000, 1990 and 1980 at a scale of 1:100 000. The work on this project has established a complete and systematic land cover inventory of Croatia for the years 2000, 1990 and 1980 as well as assessment of land cover changes between these years.

Mapping of habitats of Croatia was also completed at the beginning of 2004. A total of ca 120,000 habitats have been mapped, with about 64,000 polygons classified into more than 120 habitat types.

The EU's LIFE Third Countries programme has also supported a project on ecological networks in Croatia. The State Institute for Nature Protection has implemented the project based on the "General Guidelines for Building-up the Pan-European Ecological Network" and experiences of IUCN, the World Conservation Union. The objective is to establish a national ecological network as part of the Pan-European Ecological Network and the EU's Natura 2000 network of specially protected areas. Project activities have included data collection on threatened species and habitats and determining their spatial distribution as well as the needs for a system of corridors and buffer zones. An important component of this project is the establishment of a National Biodiversity Monitoring Programme, which will ensure the systematic gathering of data and biodiversity monitoring in Croatia. The proposed National Ecological Network (CRO-NEN) will be adopted by the Government of the Republic of Croatia by the end of March 2006.

Ecological features and agriculture (with emphasis on HNVF)

The SAPARD Programme is the EU's main assistance programme for agriculture and rural development during the accession period. The SAPARD programme is intended to prepare accession countries to participate in the EU's Common Agricultural Policy and the single market.

For the SAPARD programme, Croatia has prepared a Rural Development Plan 2005-2006 identifying four measures for financing, including:

- 1) Farm investment;
- 2) Processing and marketing of agricultural and fish products;
- 3) Improvement of rural infrastructure;
- 4) Technical assistance, information and a publicity campaign.

Land use in Croatia has been strongly influenced by the process of economic transition and the exodus of the rural population caused by the war. The dissolution of a number of large state co-operatives and the failure of the state-planned economy has resulted in the abandonment of vast areas of land.

The Croatian agricultural sector has two parallel production systems: private family farms and agricultural companies. The family farms prevail, as their number (448,532) by far outstrips that of the agricultural companies (1,364). A number of the present agricultural companies are the remaining or reorganised structures of the formerly state-owned agricultural co-operatives. Some of these are still (partly) owned by the government and are soon to be privatised.

In Croatia, both intensive and extensive agriculture have an adverse impact on landscape, habitat, species and genetic diversity. Drainage of wetlands, which are among the most important in Europe, and their conversion to arable land as well as removal of hedges and trees from agricultural land has had a negative impact on biodiversity as well. Although Croatia has numerous local breeds and crop varieties,

these have been replaced by modern stock that is likely to better suit the demands of the modern market. Some less favoured areas as well as less-productive breeds and crop varieties have been neglected or removed from production all together.

Due to the lack of livestock, both organic soil matter and grassland biodiversity is in decline in Croatia. The stocking density is particularly low in areas of high natural value. This results in reforestation and the loss of species-rich grasslands and the open landscape important for migratory birds and many other species. The under-grazing also prevents the beneficial influence of animals on biodiversity, such as species selective grazing, seed dissemination, re-rooting of pasture flora, maintenance of soil organic matter, pest and disease control, etc. Still, there are farmlands and agriculture practices in Croatia that are very valuable for nature. There are several typical types of ecosystems and landscapes, including lowland alluvial areas along big rivers such as the Sava and the Drava Rivers marked by traditional grazing practices. This is predominant in Lonjsko polje Nature Park – a large alluvial plain along the Sava River. Native cattle breeds, such as Posavski horse and Podolac are preserved in this area. One of the outstanding areas in terms of traditional farming practices is Zumberak Nature Park. High mountains exist in the coastal area surrounded by typical Karstic ecosystems.

The former Yugoslav Republic of Macedonia

Institutional framework, strategies and programmes

The main governmental bodies responsible for the nature conservation and agriculture issues in the former Yugoslav Republic of Macedonia (FYROM) are the Ministry of Environment and Spatial Planning and the Ministry of Agriculture, Forestry and Water Management. The Office of Environment is a constituent part of the Ministry of Environment and Physical Planning and responsible for performing professional activities in the area of environment and nature protection and improvement. The Office of Environment is responsible among other things for the technical supervision of protected areas, technical documentation in environment and nature protection and improvement, and monitoring of the state of environment and nature. The Office of Environment consists of different Divisions, including the Division of Special Natural Heritage Protection, which is charged with the protection and restoration of natural treasures.

The legal framework for nature conservation is defined by the Law on Environment and the Law on Nature Protection. The Law on Nature Protection regulates nature protection by protecting biological and landscape diversity, and protecting natural heritage both inside and outside of protected areas. In order to protect biological and the landscape diversity, the pastures and grassland areas should be managed according to traditional practices. The manner of use and the protection of environmentally important or endangered types of pastures is prescribed by the authorities responsible for nature protection as well as agriculture and forestry. In order to protect the biological and landscape diversity of the high-mountain habitats and ecosystems, the Law on Nature

Protection forbids all activities except those related to traditional stockbreeding. Construction of facilities, except those necessary for the performance of traditional stockbreeding, is also forbidden.

Over the course of the past decade of transition, the agricultural sector has faced many problems, and has had difficulty meeting the needs of the food industry. Greatest progress over the past decade has been made in privatization of former cooperative farms and associated restitution of land, i.e. the return of agricultural land to its previous owners. The land was taken during agrarian reforms in 1945 and nationalised in 1953. One of the key measures included in the *Law on Privatization in Agriculture* refers to the possibility of the further expansion of the private sector through the release of an additional 15% of agricultural land possessed by agricultural cooperatives. This land would be transferred to individual farmers to cultivate and use under lease, but for a long term (e.g., for perennial crops).

Agricultural practices pose a significant threat to the biological diversity of the Republic of Macedonia, especially due to currently unfavourable conditions and negative development trends. A basis for the management of HNV farmland is the *Law for Management and Use of Pastures and Abandoned Fields and Meadows*. Although pastures are used in livestock production and represent the most important economic non-cultivated plant resource, their total productivity, which is directly influenced by seasonal climatic conditions, has not been calculated to date.

Pastures are managed by the Public Enterprise for Pastures at national level. Most are located in high mountains and many are not utilised. In some of these high mountain pastures on the larger mountains (Shar Planina Mountain, Bistra, Korab, Yakupitsa, Suva Gora Mountain etc.), an inventory has been undertaken for the purpose of determining carrying capacities. This process should be continued in future. The lack of significant grazing on these pastures has contributed to a change in the composition of herbaceous vegetation, the invasion of woody shrubs and degradation of humus. There are legal regulations governing pastures, but they do not provide a mechanism for obtaining a precise assessment of the current status of wild plant species. Thus, one of the priorities is to prepare new regulations defining the sustainable use of these species.

Ecological features and agriculture (with emphasis on HNVF)

Biological diversity in agriculture is one of the most critical areas of overall global biodiversity, with 75% of all food production based upon only about 100 plant species and domesticated animals. FYROM possesses significant agri-biological plant diversity due to its favourable geographic location and climatic conditions. The diversity of a large portion of the local species has not been adversely affected because agricultural production is not intensive in many regions. In such areas, indigenous species and locally-bred varieties are still grown, representing an important source of genetic material no longer appearing within the genotype of commercial species. The major portion of the total arable land is used for field and garden production (84.2%), fruit and

grape production (7.1 %) and pastures (8.5%). The trends in the production of individual crops vary by year, as evidenced by the disappearance of some crops.

As in other countries, there are indigenous breeds and varieties of domesticated animals in FYROM which are fully accommodated to local breeding conditions. During the past 50 years, however, new, more productive breeds have been introduced. Both the original imported breeds and crosses with local varieties are still present today. Crosses between indigenous breeds/strains and imported breeds are known in several species: *Busha* is a local breed of cattle found in highland and mountain areas. During the last 30-40 years, it was crossed with many imported breeds. According to official statistical data (Statistical Yearbook of the Republic of Macedonia, 2000), Bushas comprise 50% of the total number of cattle raised. *Pramenka* (sheep) is represented by three strains: Karakachanska, Ovchepolska and Sharplaninska. While the Karakachanska strain is considered to be endangered, as classified by the Food and Agriculture Organization FAO (2000), the other two strains are widely used in sheep production. With regard to the *Domestic (Balkan) goat*, although its numbers are on the increase, it is difficult to make a clear distinction concerning this breed. The goats come in different colours (white, grey and multi-colored), with outstanding long hair and sword- like horns. Local primitive pig is raised on ranges in the regions of Makedonska Kamenica, Strumica and Sveti Nikole. Although it is a very primitive breed, more field and laboratory research is needed in order to clearly define its status. Although pastures and meadows taking significant portion out of total agriculture land, HNVF is not yet introduced in FYROM.

Serbia and Montenegro

Institutional framework, strategies and programmes

The State Union of Serbia and Montenegro resulted from the constitutional restructuring of the Federal Republic of Yugoslavia in March 2002, under EU auspices, when Serbian and Montenegrin representatives signed the Belgrade Agreement on a restructured State Union.¹ The Constitutional Charter entered into force in February 2003. Under the Constitutional Charter, the State Union of Serbia and Montenegro comprised two Member States: Serbia and Montenegro. According to that Charter, joint responsibilities of the State Union were under the authority of the Council of Ministers, which is comprised of five Ministries: Foreign Affairs; Defence; International Economic Relations; Internal Economic Relations; and Protection of Human and Minority Rights. All other duties (i.e. environmental protection) were under the responsibility of the Member States.

Responsible ministries for nature conservation, rural development and agriculture in Serbia were the Ministry of Science and Environmental Protection and the Ministry of Agriculture, Forests and Water Management, while in Montenegro the Ministry of Environment and Spatial Planning and the Ministry of Agriculture, Forestry and Water

¹ Important note: a referendum organised after the HNVF seminar and completion of this report in spring 2006 voted for the independence of Montenegro.

Management. Directorate for Environmental Protection, as a part of the Ministry of Science and Environmental Protection of Serbia, is the main governmental body in charge of nature conservation policy, legal framework and its reinforcement. The Ministry of Science and Environmental Protection of Serbia was established in February 2004 and charged with overseeing the system of environmental protection and sustainable use of natural resources (air, water, soil, minerals, forests, fish and wild plant and animal species). It is responsible for formulating nature conservation strategies, plans and programmes as well as identifying potential natural systems relevant to nature protection. Both the Institute for Nature Conservation of Serbia and the Institute for Nature Protection in Montenegro are foreseen as expert institutions with different competences in the field of nature conservation. Those are, *inter alia*, valorisation and protection of nature, geodiversity and biodiversity; carrying out research and preparing proposals for designations of protected areas; revision of existing protected areas; and giving expertise for spatial plans, forest and water management plans, etc.

A new Law on Environmental Protection in Serbia was adopted in 2004, but its implementation has been delayed. Nevertheless, this law should encompass many of the regulations relevant to the Habitats and Bird Directives. According to paragraph 12 of the Law on Environmental Protection, the government is required to develop a new Strategy of Sustainable Resource Management. The mandate for this has been given to the Ministry of Science and Environmental Protection. In Montenegro, the Law on Nature Protection adopted in 1977 is still in force. The legislation should be significantly improved and harmonized with current nature conservation standards.

Serbia and Montenegro has signed an agreement with the Council of Europe regarding development of the EMERALD network of specially protected areas. This is an on-going project, aimed at harmonizing nature conservation with European and EU standards. The project is coordinated by the Ministry of Environmental Protection and Spatial Planning of Montenegro, with sub-coordinators both in Serbia and Montenegro. The project is aimed at developing a "Preliminary list of potential EMERALD sites in Serbia". The relevance of the EMERALD network for HNV farming lies in the fact that it stresses the biological diversity of each chosen area. The EMERALD network seeks to implement the Bern Convention on the Conservation of European Wildlife and Natural Habitats, and Areas of Special Conservation Interest, respectively.

Serbia is developing a national strategy for rural development that will serve as a basis for coordinated rural development policy, within the framework of the country's agriculture policy. At present, according to the National Agriculture Strategy, which came into force in 2005 as a basic policy paper for agriculture and rural development, rural development should be undertaken by inter-ministerial agreement, coordinated from the Ministry of Agriculture, Forestry and Water Management. The Ministry has regular activities supporting rural development, including a rural development grant scheme as well as extension service and advisory activities. In line with the decision to have two pillars of agriculture development, as defined in the agriculture strategy, the sector at the moment prepares a programme of measures for rural development and agri-environment for next the next four years. Decisions on the rural development grant

scheme and support for extension services and advisory activities are made on an annual basis by government decree.

Foreseen Rural Development Strategy for Serbia recognizes less favourable areas which should be categorized according to EU standards. Rural development policy in Serbia is presently guided by the following basic principles. The Strategy foresees supporting older farmers with short-, middle- and long-term bank credits, supporting entrepreneurs in rural areas with direct investments, and paying special attention to Less Favoured Areas. The division for rural development is preparing a grant scheme for supporting Less Favoured Areas at altitudes higher than 800 meters above sea level, for 2006. They are intended to provide support to underdeveloped communities in mountainous, nature and watershed protected and marginal areas of the country. They will provide greater support from the Ministry of up to 80% of the total investment to enable protection of biodiversity and of the landscape heritage in these areas through promotion of modernized traditional systems of mixed farming. Although a formal agri-environmental programme has not yet been developed for Serbia, the Rural Development Programme for 2006 includes some agri-environmental measures. The Ministry offers 50% co-financing for environmental projects in rural areas, mowing of high mountain meadows, and good agricultural practices in terms of organic farming.

Ecological features and agriculture (with emphasis on HNVF)

Serbia and Montenegro has regions characterised by different ecological features and agricultural practices. In the north is the province of Vojvodina, a flat area located at the southern edge of the Pannonian plain. The region is characterized by very intensive agricultural practices. Nevertheless, some parts of Vojvodina province, especially steppe and saline meadows, have high nature value. There is still traditional grazing, but land is greatly threatened by fragmentation, inappropriate land use, privatization (private owners usually tend to intensify production), etc. The central part of Serbia is hilly with less intensive agricultural practices than in the Vojvodina. The southern and eastern parts of Serbia, with their high mountains such as Stara planina, Suva planina, and Kopaonik, represent some of the most interesting areas in the Western Balkans in terms of HNV farmland. The mountains are famous for their pastures and grasslands. Similar to many mountain areas, the mountains in eastern Serbia suffer from depopulation, declines in livestock, lack of state subsidies, etc. The southwestern area of Serbia, especially Pester Mountain, is also a typical HNVF area, extremely rich in pastures and traditionally grazed by sheep.

Montenegro is a mountain area with a significant portion of mountain pastures, comprising more two-thirds of total agriculture land. High mountain areas covered with large pastures are typical ecosystems here. Most of these areas are rural with less developed infrastructure and increasing problems related to depopulation.

Serbia and Montenegro comprise large areas covered by mountain pastures with less extensive agricultural practices and high nature values, including high mountain

pastures and grasslands as well as traditional ways of livestock breeding. Despite this, awareness and knowledge of High Nature Value Farmland is still limited.

5. Identification of High Nature Value farming

There are several approaches possible for identifying HNV farmland in Europe, all with their own limitations and imperfect results. Knowledge regarding relationships between agricultural practices and biodiversity is important for any identification exercise.

One possible approach, the *species approach*, focuses on identifying typical species found in HNV farmlands. A major limitation to this approach is the very diversity of species found between countries. There is also great variation between the level of knowledge and data sets that exists between countries and species groups. Moreover, data are mostly only available as present/absent data, and rare species often are not good indicators of diversity.

The major approach at the moment is based on *satellite imagery interpretation*, better known as CORINE land cover. The project of the European Environmental Agency (EEA) mentioned in chapter 2 of this report established a set of criteria and standard classes giving a broad indication of Type 1 and some Type 2 HNV areas at a European scale. The basic tool for mapping was data available in the CORINE data set. By choosing the appropriate regional and national land cover categories relating to Types 1 and 2 it is possible to produce maps of HNV farming areas at both national and European (not Western Balkans) scales.

Two general maps for the EU countries have been created, according to a minimum/maximum method. Minimum means here: "What land cover classes are going to be HNV farmland most of the time?" Maximum is "What land cover classes are going to be HNV farmland some of the time?" Based on this method, HNV farmland in Europe is estimated to be about 25-40% of the territory.

The CORINE land cover approach provides a good but broad indication of the location of the largest HNV areas in most countries, and it could be improved with local data. Even with the little knowledge there is, the maps 'look good' and are thus politically useful. A weakness is that class definitions are sometimes unhelpful, especially for pastures and natural grasslands.

A third approach is a *farming system approach*. In contrast to the CORINE approach, which tends to lead to the delineation of 'HNV areas' which include some non-HNV farms and exclude others which are of high nature value, the systems method works, like policy implementation, at the level of the farm itself. By defining criteria and thresholds related to farming practices, e.g. stocking density, one is able to identify HNV on the farm level.

In a pilot to check and improve the data of the CORINE land cover, the EEA project used the European Union's Farm Accounting Data Network (FADN) data set. This data was used to identify and name a set of systems; but although the likelihood of identifying

individual farms using this method is in principle very good (in other words, 'sensible' variables can be found), the precision of actual mapping carried out by the project is very poor since the possible choice of variables within FADN is limited (e.g. FADN uses the value of inputs and not the amount), the mapping units available are so large, the sample size within them so small and since smaller farms are not included. Basically, the FADN is not meant for this kind of work.

However, the method itself is valid and appropriate data is collected in most countries in farm censuses. In the EU, another valuable source of data is the CAP Integrated Administration and Control System (IACS), which will come on line if and when countries in the region apply the body of EU law, the *acquis communautaire*.

In the Balkan context, we can take a CORINE prediction of HNV farming areas to provide a first approximation of location. We anticipate that this equates very closely, not surprisingly, to what in agricultural terms we would regard as the marginal areas. Of course within this area nature value is not homogeneously "high" nor are farms homogeneously well managed. Conversely, we know that some farmland outside of these areas also has high nature value, including of course the Type 3 farmland.

However, of key importance in identification exercises is to increase knowledge and awareness regarding relationships between agricultural practices and biodiversity. Starting with the farming system approach is both easy and potentially powerful and better makes the link with farmers in HNV areas.

An ideal scenario might concentrate on farming systems, but use CORINE and other mapping tools, ground-truthed by the farming system approach as a political tool to highlight the scale of the issue as well as significant concentrations.

Textbox 3: Examples of interesting areas in terms of farmed HNV areas in the Western Balkans

- High mountain pastures and grasslands above 1800 m;
- Biomes of stony grounds, pastures and woods on stony grounds of oromediterranean mountains at south slopes of Sara, Prokletije, Suva, Kopaonik, Rumija, Vizitor, Komovi, and Durmitor mountain;
- Biomes of steppes and woodland steppes;
- Pontic steppe;
- Dacian steppe in eastern Serbia;
- Southern Russian steppe in the northern Vojvodina;
- Coastal mountain area along the Adriatic Sea and Adriatic islands;
- Lowland alluvial plains along the rivers such as the Danube, the Sava and the Drava Rivers.

6. Current status of identification and protection of HNV farmland in the Western Balkans

At the moment, preparation for identification of High Nature Value farmlands in the Western Balkans is in its early stages or non-existent. Some related work has already been undertaken. Designation of potential NATURA 2000 sites (in Croatia) and harmonization of EMERALD, CORINE, and EUNIS classifications could be recognized as initial steps towards HNVF identification. Also, the Western Balkan countries have developed national agriculture strategies, rural development policies, laws and regulations. The Republic of Croatia has clearly stated which activities in agriculture and forestry fit into the state subsidy system.

To some extent, capacities exist for HNV identification in the Western Balkans in the form of governmental organizations (ministries of environment and agriculture), expert organizations (e.g. institutes for nature conservation, biological and agriculture institutes), educational centres (universities), protected areas authorities, NGOs, etc. Identification of High Nature Value farmlands in the Western Balkans is an ambitious task, which could be carried out only as a joint effort of different experts, governmental and non-governmental organizations and with support from international organizations.

During the second part of the workshop, country sessions gathered information on the current state of identification and protection of HNV farming in the Western Balkans including ongoing initiatives, existing and non-existing data and information, existing and potential capacities. The results of these sessions can be found below. In the first part of each session, we addressed the issue of HNVF identification, posing questions including: How much is generally known? What data or data sets exist? What capacities exist for identifying HNVF? The second part of the country sessions focused on protection and sustainable management of HNV farmland, with a closer look at existing general conditions, areas in need of greater support, existing positive mechanisms and relevant socio-economic developments.

Albania

General statistics exist, e.g. on flora species, soil erosion (Soil Institute) and many agricultural data sets. 42% of Albania is arable land, 15% is pastures and 20% are lakes. A mapping of flora and fauna took place about ten years ago (Biology Institute). There is an up-to-date land parcels map. There are also data and maps on medical plants, autochthonous resources such as fruits and vegetables, and livestock breeds. On pastures there is only very general information, e.g. ownership. In short, there is considerable data available, but not all of it is useful for HNV farmland identification. The concept of HNV farming presently is unknown in Albania.

Existing capacities are perceived as quite weak. There is no focal point existing for agri-environmental issues. Several directorates exist in the Ministries of Agriculture and Environment, as well as in state research institutes. There are botanists at the universities and Academy of Science. Restitution of land is ongoing, co-ordinated by the Directorate General for Forests and Pastures of the Ministry of Agriculture. According to Albanian law, land restitution should be accompanied by management plans, but this is unlikely to happen in practice. The few existing NGOs, such as an organic association and an agency for development of mountain areas, are relatively weak.

16% of Albania's territory is covered by protected areas. Another 8% are buffer zones, which might be interesting HNV farmed areas. The northeast and southeast mountain areas seem to be interesting for HNVF, and urgently need more support. At the moment, no subsidy schemes exist to support HNVF. Many regulations exist, but are poorly implemented. The agricultural extension service is quite well organised, but is at present focused on increasing production. While rural areas are depopulating, the number of sheep is increasing.

Bosnia and Herzegovina

The concept of HNV farming is generally unknown in Bosnia and Herzegovina. On a general agricultural level, quite good GIS data sets exist in Republika Srpska. Land ownership is generally clear, with 95% of the land in private hands. Potential capacities exist in several ministries and in the Institute for Culture and National Heritage.

Only 0.5% of the territory is protected area, but according to the policy plans, this should be increased to ca. 14% by 2015. As for HNVF, interesting areas are e.g. Bardace, near Banja Luka. Existing subsidies are focused on production, and are not related to conservation of nature values. Depopulation of the rural areas, especially related to war in the past and urbanization in the present, is causing abandonment of farmed areas, though there was some ruralisation following the industrial collapse after the war, with a focus on subsistence agriculture. A total of 200,000 ha or ca. 2.5% of the territory is mined.

Republic of Croatia

There is some confusion regarding the term HNV farming, as it is difficult to translate the term into Croatian. In general, very little is known about HNV farming in the Republic of Croatia. It tends to be connected with a certain cultural-historical pride in areas and landscapes that deserve special protection. Relatively good data sets exist, including CRONEN, Red Book, national system of habitats classification, Emerald/Natura 2000, and list of indigenous breeds.

Quite a few institutions exist who could take HNV farmland identification forward, but all with limited capacity. Relevant ministries are the Ministry of Agriculture – Rural

Development Department, Ministry of Culture – Department for nature protection, and also the State Institute for Nature Protection, extension services, universities and NGOs.

The EU accession process is a main driving force at the moment, e.g. regarding Natura 2000 and agri-environmental programmes. The capacities of the institutions are however limited, and so is the will for practical implementation. Nevertheless, there are some notable examples of progress. Co-ordination between ministries is another problematic issue. Extension services have limited capacities and are not addressing HNVF.

Areas in need of urgent support are the karstic fields in Eastern Slavonia. Significant budgets at national level are available for agricultural subsidies, but none of the schemes are focused on HNV farmlands. There are schemes for organic farming and rare breeds. At municipal level, some subsidy schemes exist as well.

Loss of HNV farmed areas is caused by abandonment and intensification. Also in Croatia, there is depopulation and ageing of rural populations. Tourism is related to the abandonment, but could be an opportunity for HNV farming. Hunting is perceived as a threat and an opportunity. There are some positive cases where hunters are involved in maintenance of HNV farmland.

The former Yugoslav Republic of Macedonia

Intensive agriculture (mainly cereals, vineyards, orchards) is limited to the main valleys, with some orchards also located around Prespa Lake. Most of the rest of the agricultural land is extensively cultivated and has some nature value. According to CORINE classes, 30% is probably Type 1. However, 83% of the country is counted as mountainous areas where intensive agriculture is practically impossible. The land is changing as more and more areas are invaded by scrub.

There is not much systematic data. A vegetation map is still in discussion. At least 20 people in academe would have relevant knowledge to identify HNV farmed area. Administrative capacity is very weak. Agriculture was ignored over the last few years due to other, more pressing problems. Technical capacity among relevant authorities, including the Ministry of Agriculture, is relatively limited. Even tourism is underdeveloped, with only one person in government working on this issue.

There is a Biodiversity Action Plan, but unfortunately no action. Protected areas must have management plans by 2008. This is certainly an opportunity for HNVF, as agricultural activity is permitted within the plans. But protected areas are mostly in the west of the country, and there are other locations without formal protection that are of similar interest, e.g. in the east and southeast.

Areas where the most urgent action is needed can be considered from two perspectives: where action would be most effective, and where it is most needed. Some areas have great need – attention must be given especially to the east of the country (Strumica,

Berovo, Delčovo...). However, in terms of overall impact, the most might be achieved from:

- Further action in protected and other areas where the possibility of building an integrated rural economy based on serving tourism (landscape, local food, accommodation, activities etc.) makes a self-sustaining future at least possible;
- Extending the influence of successful activity in these protected areas by linking them or having a zone around them where similar things are done – use them as seeds around which a bigger crystal can form;
- Addressing measures to retired people, including those who have moved recently moved back to the countryside, many of whom would do small-scale agriculture in (roughly) CORINE Type 2 areas.

Some areas may be hopeless, e.g. former summer pastures under transhumance systems, which most probably will never be used again.

The only practical action is currently being undertaken by NGOs, with very little governmental support and very limited in comparison with the need for systematic efforts to protect HNV farmlands.

Most farms are very small, with 2-5 cows for 'family' households, and 1-2 cows for 'aged' households. But old farmers also present an opportunity, probably especially for Type 2 maintenance. All livestock systems are under threat from a combination of lack of affordable labour and poor market for many products (e.g. milk). Many large sheep farmers with their own small shops are giving up shepherding when their fathers die. Economies of scale have little meaning at present when prices are so poor. Cheaper shepherds from Albania have been tried, but now even they are proving too expensive.

Serbia and Montenegro

Little is known in Serbia and Montenegro about HNV farming. Existing data sets are very general and there is a need for detailed mapping. There are defined Less Favoured Areas and this criteria is used for giving subsidies to farmers. In Serbia, support is given to autochthonous breeds and medical plants.

Potential capacity for identifying and protecting HNV farmland can be found in the Ministry of Agriculture - Department for Rural Development, with some activities relevant to HNV; the Institutes for Nature Conservation, involved in protected areas and threatened species; protected areas authorities, though with insufficient capacity and financial support; some NGOs involved in good agricultural practices, e.g. TERAZ involved in organic farming; scientific institutions and universities need to be re-focused on HNV farming; the Institute for Applied Science in Agriculture (in Serbia) and Biotechnical Institute (in Montenegro) are involved with rare plant and animal species; the Centre for Forage Crops, especially for grasslands; and also municipalities with some relevant services.

While there are no specific strategies focused on HNV farmland, there are some strategies for rural development and agricultural development that are relevant. A national agri-environmental programme is missing, but could be an umbrella for supporting HNV farming. Also certification of HNV farms/production could be useful. The eastern and southeastern parts of Serbia are particularly interesting for high nature value farmland.

An aging rural population, rural depopulation and abandonment of fields are major issues for the maintenance of HNV farmlands in Serbia and Montenegro. In mountain areas, plots are typically very small and ownership is often unclear. Good quality infrastructure is lacking to connect producers and markets and to bring products to market. In the lowlands of Serbia, more intensive agricultural practices receive significant support from government for further intensification and enlarging land units. This process is connected to the process of land restitution and privatisation, and presents a threat to HNV farmland.

**Textbox 4: A few snapshots, thoughts and quotes from the workshop
(without claiming there is general agreement on these among participants!)**

Western European experience with protecting and developing HNV farming does not translate easily to the Western Balkans. Experience from Poland and other countries may be more relevant. Western European countries have profited from EU and national subsidies, but now these subsidies are being cut back.

Gwyn Jones: "Lessons from the EU-10, EU-12 and EU-15 can be very relevant, e.g. Spain, Portugal and parts of United Kingdom, Austria, France, Italy, etc. However, good lessons are rare! Issues of targeting marginal areas and overcoming vested interests are the same in the Western Balkans."

Having one policy is not the answer. It is not possible to have the same policy to cover Spanish and German, UK and Polish, French and Serbian farmland systems.

How many HNV farmed areas exist in Europe? -- Possibly 25-40% of total area. But this is the wrong question. Developing a map is the most difficult to do, and may be of limited benefit. This should not stop you from undertaking actions for HNV farming systems. We should act on what we know, not wait until we have perfect information. We need to act on what knowledge we do have.

In discussing HNV farmland, we need to keep in mind people; in discussing instruments we need to have ways to keep people on the land, and continuing HNV farming practices. We need to keep in mind the broader picture of rural development, e.g. including opportunities for education, health service, infrastructure, etc.

HNV farmland policy may not be able to address specific problems in the countryside, e.g. social and economic issues.

Gwyn Jones: "There is no one answer to identification of HNV farmland, but I would favour a systems approach. Start from the bottom, from your knowledge of real farming systems, rather than theoretical approaches based on satellite imagery and maps."

Eva Viestova: "Suggestions for the Western Balkans: start to map the valuable grasslands in your countries, using existing databases (e.g. from PlantLife, Butterfly areas...). Influence your Ministries of Agriculture on existing systems of payments. Monitor protection of protected areas and management plans for protected areas covering valuable grasslands. These measures, plus a good control and monitoring system, can make HNV farming sustainable."

In Slovakia, many of the botanists were motivated by the possibility of really using their knowledge for a good cause.

HNV farming is often done mostly by older people. However, many agri-environmental schemes are least attractive to or even exclude older people (due to bureaucracy, complicated application procedures, etc.). We need to keep this in mind.

In Croatia, mainly due to the EU Accession process, much good data exists and agricultural subsidies budgets are relatively high. However, a „non-progressive political environment” and lack of strong political will is a major obstacle to further development.

The future of HNV farmland is not incompatible with rural development. On the contrary: HNVF depends on rural development for its survival. However, if maintaining high nature value farmland is not an explicit aim of policy, it can fall by the wayside as rural people turn to easier and more lucrative activities.

7. Conclusions and recommendations

The region of the Western Balkans is rich in high nature value farmlands. The richness of HNV farmland could be described in terms of the diversity of ecosystems, ranging from steppe and saline meadows, coastal areas and islands, karstic areas, high mountain pastures and slopes, as well as alluvial meadows. On the other hand, a diversity of traditional land uses is still present. Although rural areas with traditional land uses are in the process of abandonment, many farmlands are still under the influence of human and traditional forms of use. Despite all diversity, these areas are not fully recognized as (potential) HNV farmlands.

There are few strategies and policy responses in the Western Balkans that go along with the farming practices that support high biodiversity. Some policies are still in the process of implementation, such as Less Favoured Area payments (Serbia and Montenegro) and agri-environmental measures (Croatia). High Nature Value farmland in the Western Balkans faces many of the same problems experienced across much of Europe, including lack of sufficient state support, depopulation, non-attractive livelihoods in rural areas, undeveloped infrastructure, etc. Also, there are no clear objectives, funds and implementation mechanisms foreseen within the national strategies and policies that support High Nature Value farmlands in the Western Balkans.

It should be kept in mind, though, that datasets on HNV farmland are largely missing, preventing a detailed analysis of recent trends in HNV farmland and effectiveness of policy measures. There is a great need for:

- establishing data sets on distribution of HNV farmland (preferably on the basis of detailed national data sets);
- spatially explicit data on expenditure and corresponding environmental objectives of (agricultural) subsidies;
- pan-European monitoring of habitat and species abundance;
- sound comparative and analytical research into the effectiveness of emerging policy responses measures such as agri-environment schemes;
- innovative plans for the protection of HNV farmland.

In summary, the main message from the Belgrade HNVF Workshop is a plea for recognition of the importance of the Western Balkans and the South-Eastern Europe in general for achieving the objectives related to high nature value farmland that were agreed by European Ministers of Environment at Kyiv. There is an urgency to take this forward, both on paper and on the ground. Political will is needed to move forward.

Participants of the Belgrade workshop pushed for next steps to be undertaken before the end of 2006, giving priority to intensive efforts at a limited, regional scale capable of

initiating broader, longer-term initiatives. Another meeting should be organised by the end of 2006, by which time participants should:

- know what they think the concept means in their countries and regions;
- have some concrete examples of HNV farming systems and HNV farmland areas in each country;
- have enough information to plot the way ahead.

Financial support will have to be raised in order to support these actions and organisation of a second workshop.

Textbox 5: Actions recommended by workshop participants

- Translate HNV farming into the West-Balkan languages, finding words to express the concept adequately
- Compile more precise information on the character and distribution of HNV farmland in the Western Balkans, and assess the way in which these systems are changing and what the related implications for nature conservation are.
- At the same time, build awareness and clarify misunderstandings before talking about policy measures. Actions may include:
 - Preparing simple literature and/or a website to explain/share concepts
 - Use specific examples so people can relate to them
 - Consider 'demonstration' farms to illustrate the concept, especially outside of designated areas
 - 'Train the trainers' workshops
 - Link HNVF explicitly to international agreements and EU law
 - Cultivate pressure and support from high-profile international organisations (WWF, IUCN..) to reinforce local messages
 - Get international institutions, including the EU, FAO and World Bank to support overall message
 - Do not forget Ministries of Finance!
 - For ministries not present, the Fourth Intergovernmental Conference 'Biodiversity in Europe' in Plitvice later in February 2006 is a good opportunity for awareness-raising
- Discuss HNVF informally with other stakeholders and use their reaction to develop coalitions of stakeholders which together can make critical mass to which ministries often respond better. Stress urgency of task; build link in farmers' minds between HNV and economic viability; make link to the EU and EU accession process; have a communications strategy aimed at the general public to build support and understanding; and use consumer power.

- Ministries of Agriculture and Institutes of Nature Conservation are crucial players. We need to get them on board! We also need to raise awareness of the importance of agri-environmental programmes within Ministries of Agriculture where such programmes do not yet exist, especially in the context of EU accession.
- Involve actors from Croatia and Bulgaria, since they are at different stages of EU accession and have valuable experience
- Make the most of the Beograd Environment for Europe conference as an awareness-raising opportunity in itself and as a reason for governments to do something now
- For all this work, get know-how, support and help from foreign, experienced organizations, last but not least for fundraising
- Let's meet again before the end of 2006

Recommended literature

European Environment Agency (2004). *High nature value farmland: Characteristics, trends and policy challenges*. Luxembourg: Office for Official Publications of the European Communities. Online available at <http://www.ieep.org.uk/publications/pdfs/2004/highnaturefarming.pdf>

References

Baldock D. and Bennett H. (2002). *An Introduction to biodiversity and agriculture in Europe*. An interim report for EEA and UNEP. IEEP London.

Baldock D., Beaufoy G., Bennett G. and Clark, J. (1993). *Nature conservation and new directions in the common agricultural policy*. IEEP London.

Baldock D., Beaufoy G. and Clark J. (1995). *The nature of farming. Low intensity farming systems in nine European countries*. Report IEEP/ WWF/JNRC, London/Gland/Peterborough. For a PDF-version: koen.derijck@wwfdcp.bg.

Donald P.F., Green R.E. and Heath M.F. (2001). Agricultural intensification and the collapse of Europe's farmland bird populations. Proc. R. Soc. Lond., 268, pp. 25–29.

Janssen D. (2005). Far Away from Brussels. An investigation to the implementation of the Bulgarian SAPARD programme. Report Za Zemiata, Sofia. Online available at http://zazemiata.org/sapard_report_en.php.

Potter, C. (2002). Agri-environmental Policy Development in the European Union. In: Brouwer, F., J. van der Straaten (eds), 2002. *Nature and Agriculture in the European Union: New Perspectives on Policies that Shape the European countryside*. Current Issues in Ecological Economics, Cheltenham, pp. 67-87.

Tucker G.M. and Heath M.F. (1994). *Birds in Europe. Their conservation status*. Birdlife Conservation Series No 3. Birdlife International, Cambridge.

List of acronyms

BiH	Bosnia and Herzegovina
CAP	Common Agricultural Policy
CARDS	Community Assistance for Reconstruction, Development and Stabilisation
CBD	Convention on Biological Diversity
CEECs	Central and Eastern European Countries
CRO-NEN	Croatian National Ecological Network
EEA	European Environment Agency
EFNCP	European Forum for Nature Conservation and Pastoralism
EU	European Union
EU-10	The ten countries that acceded to the European Union in 2004, including Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia
EU-15	The fifteen countries belonging to the EU before 2004
EU-25	The 25 countries belonging to the European Union after the accession of ten new member states in 2004
EUNIS	European Nature Information System
FADN	Farm Accounting Data Network
FAO	United Nations Food and Agriculture Organisation
GEF	Global Environmental Facility
HNV	High Nature Value
HNVF	High Nature Value Farming
IUCN	International Union for the Conservation of Nature and Natural Resources - World Conservation Union
NARDP	National Agricultural and Rural Development Plans
NGO	Non-governmental organisation
PEBLS	Pan-European Biological and Landscape Diversity Strategy
SAPARD	Special Accession Program for Agriculture and Rural Development
UNDP	United Nations Development Programme
UN/ECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
WWF	World Wide Fund for Nature

List of participants and organisers

Name	Country	Institution, Function	Tel, Fax, Email
Tatjana Dishnica	Albania	Ministry of Agriculture, Food and Consumer Protection - Department of Science and Extension Service and Agricultural Information - Director	Tel +355 4 223 269 Fax +355 4 229 309 tana@icc-al.org tatjanad@abcom-al.com
Mihajlo Markovic	Bosnia and Herzegovina	University of Banja Luka – Faculty of Agriculture – Institute of Agroecology and Soil Sciences – Head of Institute	Tel +387 51 463 024 Fax +387 51 460 832 markovic@urc.bl.ac.yu mmarkovic@blic.net
Boris Markovic	Bosnia and Herzegovina	Institute for Urbanism of Republika Srpska - Spatial planner & landscape designer	Tel +387 51 242 262 Fax +387 51 216 557 bmarkovic@iu-rs.com kamelija@teol.net
Matija Franković	Republic of Croatia	Žumberak-Samobosko gorje Nature Park - NP Authority - Chief Ranger	Tel +385 1 3327 660 Fax +385 1 3327 661 matija@ppzsg.org
Valerija Hima	Republic of Croatia	Lonjsko polje Nature Park Public Service - Natural Resources Manager	Tel +385.44.672.080 Fax +385.44.606.449 pp.lonjsko.polje@sk.htnet.hr
Sonja Karoglan Todorovic	Republic of Croatia	Ecologica – President of Board	Tel +385 1 46 36 959 Fax +385 1 46 36 956 ecologica@ecologica.hr
Jasenka Topic	Republic of Croatia	Professor (retired), Faculty of Sciences, University Zagreb	Tel +385 91 547 3371 Fax +385 1 657 0678 jtopic@yahoo.com
Andreja Ribarić	Republic of Croatia	State Institute For Nature Protection - Adviser	Tel +385 1 4866 198 Fax +385 1 4866 171 andreja.ribaric@dzzp.hr
Lili Zivkovic	Republic of Croatia	NGO 'Eko Zadar'	Tel/Fax +385 23 300 120 ekozadar@inet.hr
Dragi Pop-Stojanov	The former Yugoslav Republic of Macedonia	Balkan Foundation for Sustainable Development - Executive Director; Makmontana - Association for the Sustainable Development of Mountain Regions in the Republic of Macedonia - Board Member	Fax +389 2 3079748 Mob +389 70 276333 balkanfoundation@mt.net.mk product@mt.net.mk
Oliver Avramoski	The former Yugoslav Republic of Macedonia	Alliance for Lake Cooperation in Ohrid and Prespa (ALLCOOP) - Programme Manager	Tel.: + 389 75 563 417 oliver@allcoop.org.mk
Srdjan Stojanovic	Serbia and Montenegro	Ministry of Agriculture, Forestry and Water Management - Department for Genetic Resources - Head	Tel +381 11 609 352 Fax + 381 113112289 agrvet@hotmail.com srdjan.stojanovic@minpoli.sr.gov.yu
Klara Szabados	Serbia	Institute for Nature Conservation of Serbia - Senior associate	Tel: +381 21 489 6309 Fax: +381 21 616 252 szabados@natureprotection.org.yu
Miloš Vukelić	Serbia	Institute for Nature Conservation of Serbia - Associate	Tel +381.11.209.38.42 Fax +381.11.209.38.67 vukelic@natureprotection.org.yu
Dusko Medic	Serbia	Green Network of Vojvodina - Project manager	Tel/Fax +381 216611484 zelenamrezans@yahoo.com
Maria Ilic	Serbia	NGO Endemit	Tel +381 63 692 789 office@endemit.org.yu mrmilic@yahoo.com
Sergej Ivanov	Serbia	Ministry of Agriculture, Forestry and Water Management - Local Project Co-ordinator	Tel +381.10.256.68 Fax +381.10.256.68 nike@ptt.yu
Nataša Mirecki	Montenegro	Biotechnical Institute - Department of Field Crops and Vegetable Growing - Research Associate	Tel: +381 81 266 136 Fax: +381 81 266 315 mirecki@cq.yu

Valentina Šćekić	Montenegro	NGO "The Educo Centre" - Executive Director	Tel +381.81.625.734 educo@cg.yu
Pascal Bernardoni	Int	FAO / SEEDEV - Serbia and Montenegro Office	Tel +381 63 8172 664 pascal.bernardoni@fao.mediaworks.co.yu
Joerg Lohmann	Int	IUCN Programme Office for South-Eastern Europe - Director	T/F +381 11 2272411 joerg.lohmann@iucn.org
Olivera Jordanovic	Int	FAO Coordination Office - National Consultant Refugee Integration Project	tel: +381 11 2661 713; 2661 892; 2661 796 fax: +381 2660 886 olivera.jordanovic@fao.mediaworks.co.yu
Dragana Tar	Int	FAO Coordination Office - National Consultant Refugee Integration Project	Tel +381.11.266.17.13 Fax + 381.11.266.08.86 dragana.tar@fao.mediaworks.co.yu

Gwyn Jones	Int	EFNCP	Tel +44 1478 612 953 Fax +44 1478 613395 aoportree@sac.co.uk
Koen De Rijck	Int	WWF-DCP - HNV farming Assistant	Tel +359 2 964 05 46 Fax +359 2 964 05 45 koen.derijck@wwfdcp.bg
David Reeder	Int	WWF-DCP - Senior Technical Adviser	Mob +36 20 514 8786 daimawr1@yahoo.co.uk
Andreas Beckman	Int	WWF-DCP - Deputy Director	Tel +43 1 524 54 70 21 Fax +43 1 524 54 70 70 abeckmann@wwfdcp.org
Dan Kuhnau	Int	UNEP-ROE	Tel +41 22 917 8278 dan.kuhnau@unep.ch
Boris Erg	Serbia	NGO 'Oikos'	Mob +381 63 381 519 berg@EUnet.yu
Duska	Serbia	Institute for Nature Conservation of Serbia	Tel +381 11 2093 852 duska@natureprotection.org.yu
Desislava Veleva	Bulgaria	Bulgarian Ministry of Agriculture and Forestry - Rural Development Directorate - Agri-environment and organic farming Department - Junior Expert	T +359 02 985 11 403 F +359 02 980 38 54 d.veleva@mzgar.government.bg
Veselka Ignatova	Bulgaria	Bulgarian Ministry of Agriculture and Forestry - Rural Development Directorate - Agri-environment and organic farming Department - Senior Expert	T +359 02 985 11 403 F +359 02 980 38 54 v.ignatova@mzgar.government.bg
Eva Viestova	Slovakia	DAPHNE, Slovakia - Policy Co-ordinator	T +421 2 455 24019 F +421 2 455 24019 viestova@changenet.sk