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Working Paper

Challenges for agri-environmental policies in CEE Countries

CEESA Discussion Paper, No. 3

Provided in Cooperation with:

Department of Agricultural Economics and Social Sciences, Humboldt University Berlin

Suggested Citation: Zellei, Anett (2001) : Challenges for agri-environmental policies in CEE Countries, CEESA Discussion Paper, No. 3, Humboldt University of Berlin, Department of Agricultural Economics, Central and Eastern European Sustainable Agriculture International Research Project (CEESA), Berlin

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CHALLENGES FOR AGRI-ENVIRONMENTAL POLICIES IN CEE COUNTRIES

ANETT ZELLEI

CEESA Discussion Paper No. 3/6/2001

ISSN 1616-9166

ABSTRACT

All Central and Eastern European Countries (CEECs) have been going through a severe agricultural depression since their centrally planned economies collapsed in the early 1990s. It has now become clear that the transition process is far more complex and is likely to be much more protracted than was first expected. The agricultural policies of the Communist era resulted in considerable environmental problems, which are still present to varying degrees even after a considerable decrease in agricultural inputs during the past ten years. On the other hand, CEECs still retain a significant proportion of Europe's biodiversity. The existing low input and low intensity agriculture practised in these countries can be perceived in certain respects as an opportunity for environmental sustainability in the agricultural sector. However, in view of future EU membership and accompanying policies, the question is to what extent the requirements of environmental protection and nature conservation will be taken into account in the CEECs' policy formation. The paper presents a preliminary survey of agri-environmental problems and relevant regulations in the Central and Eastern European Countries and identifies future challenges for their agri-environmental policy formation.

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ISSN 1616-9166 (Print)

ISSN 1616-9174 (Online)

CONTENTS

1 INTRODUCTION	4
2 AGRICULTURAL CHARACTERISTICS OF CEECS DURING COMMUNISM AND POST-COMMUNISM	6
3 ENVIRONMENTAL CHARACTERISTICS OF AGRICULTURE BEFORE 1990 AND AFTER THE POLITICAL CHANGE	8
3.1 INTENSIFICATION DURING THE SOCIALIST REGIME.....	8
3.2 WATER POLLUTION.....	9
3.3 SOIL DEGRADATION.....	10
3.4 BIODIVERSITY LOSS	10
3.5 ENVIRONMENTAL ASSETS IN CENTRAL AND EASTERN EUROPE	11
4 ACCESSION TO THE EU	12
5 CEECS CURRENT AGRI-ENVIRONMENTAL POLICY	16
5.1 POLICY INSTRUMENTS.....	16
5.2 IMPLEMENTATION AND ENFORCEMENT.....	17
5.3 ORGANISATIONAL ASPECTS	18
5.4 FINANCIAL SUPPORT FOR AGRI-ENVIRONMENTAL POLICY IN CEECS	20
6 THE EUROPEAN UNION'S AGRI-ENVIRONMENTAL POLICY.....	20
7 THE CEECS' INITIATIVES IN RELATION TO THE EU AGRI- ENVIRONMENTAL MEASURES	23
7.1 CHALLENGES FOR AGRI-ENVIRONMENTAL POLICY IN CEECS	25
8 PRE-ACCESSION FUND SAPARD.....	26
8.1 IMPLEMENTATION OF EU LEGISLATION	27
9 CONCLUSION	28

1 INTRODUCTION

The process of economic transformation in the Central and Eastern European Countries (CEECs) has been one of the most discussed economic issues of the 1990s. After early optimism that it could be achieved quickly, in only a few years, it soon became clear that the necessary changes in institutions and attitudes would take considerably longer (Tangermann 1999). This is particularly the case in the typically large agricultural sectors of the CEECs. Even after a decade of political, economic and structural changes, there still is an urgent need for comprehensive agricultural development strategies, related policy instruments and effective institutional arrangements for sustainable development. Agriculture has long been identified as a potential source of transformation difficulties, and a substantial amount of information and analysis has been produced on specific issues concerning agriculture, food and the rural economy (e.g. Swinnen, Buckwell and Mathijs 1997; Turnock, 1998; Koester, 1998).

Agri-environmental issues in the CEECs pertain to one of the following three categories: (i) the legacy of Communist policies (e.g. soil erosion and decrease in soil fertility, chemical usage and semi-natural habitat destruction); (ii) the consequences of ad-hoc agricultural policies pursued during transition and agricultural crisis (e.g. land abandonment and fragmentation, bankruptcy of a large number of holdings); and (iii) the environmental perspective of future policy reform as a consequence of EU integration, trade liberalisation under the WTO multilateral negotiations in agriculture and compliance with international conventions.

There are several factors which will shape agri-environmental policy in the CEECs. They include:

- 1) future EU membership and the implementation of Rural Development Regulation (EC 1257/99) with its compulsory agri-environmental component, and a range of environmental directives including monitoring and reporting requirements;
- 2) the general trend in policies towards liberalising commodity prices and production-decoupled payments, and a more integrated and decentralised rural devel-

opment. This has stimulated interest in potential synergies between better agri-environmental management and rural development (e.g. scope for the development of niche, organic products and the promotion of green tourism);

- 3) a growing consideration of consumer protection and compliance with European and international food quality standards and norms.

Applicant countries are aware that with regard to their future accession to the European Union, change is necessary and their agriculture has to become more competitive. However, it is also important for them to conserve their vital natural resources and maintain landscapes that have been created over centuries. Government policies in transition economies should aim at facilitating structural adjustment in agriculture, not only to enhance competitiveness and economic efficiency but also to protect the environment and maintain social welfare in rural areas.

This paper is based partly on information and data collected in the initial phase of the three-year research project on Sustainable Agriculture in Central and Eastern Europe (CEESA)¹. The project investigates to what extent the requirements of environmental protection and nature conservation will be taken into account in the transformation process in twelve CEECs². Information was also gathered from related national and international material, documents and reports. The aim of this report is to review the agri-environmental problems and relevant regulations in the CEECs and to identify future challenges for their agri-environmental policy formation.

The paper is structured as follows. Section two presents an overview of the agricultural characteristics of the CEECs during Communist and post-Communist eras. The following section illustrates the main environmental and ecological features of agricultural production of former socialist countries. This develops into a short description of the EU accession process, paying special attention to the approximation of the *environ-*

¹ The CEESA project is funded under the EU Fifth Framework Programme. The research studies changes in agricultural institutions, policies and farm management of twelve CEECs with particular attention to the applicant countries' preparation for EU Membership. The research group comprises researchers from Humboldt University of Berlin, University of Helsinki, Wageningen Agricultural University, University of Newcastle upon Tyne, and FAO Sub-Regional Office for Central and Eastern Europe Budapest, and individual researchers of twelve CEECs. Further information: <http://www.ceesa.de>.

mental acquis of the EU. The following section gives an overview of current agri-environmental policies in the CEECs, and in relation to that, describes the emerging problem of implementation and enforcement. Then a brief presentation of the European Union's Agri-environmental policy follows, focusing on the implementation and evaluation of the Agri-environmental Regulation (2078/92) in the EU Member States. The following section describes initiatives which have been taken by the applicant countries in relation to the Agri-environmental Regulation. Then the pre-accession aid for agriculture and rural development is presented (SAPARD) to be used in part for implementing agri-environmental measures in the applicant countries. Finally, the paper concludes by identifying the main challenges facing environmental policy formation in the agricultural sector of the CEECs.

2 AGRICULTURAL CHARACTERISTICS OF CEECs DURING COMMUNISM AND POST-COMMUNISM

All CEECs have been going through a severe agricultural depression since their centrally planned economies collapsed in the early 1990s. Under Communism, the majority of CEECs pursued an agricultural policy which involved four main strands: intensification and capital absorption; the release of surplus labour; collectivisation and agro-industrial integration; and rural industrialisation (Bildeleux, 1985; Gorton, 1997). The state was the dominant actor in pursuing these policies so that, with the exception of a part of the output from private farms, each stage of the food chain was centrally controlled from producer to final consumer (Cole, 1981). The agricultural and food processing sectors received huge subsidies relative to the level of economic development in the CEECs, the provision of cheap food to the masses being perceived as a requirement for the maintenance of regime control.

During the socialist regimes, agricultural production was dominated by large, centralised cooperatives or state farms (except in Slovenia and Poland)³. However, most

² Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, and Ukraine.

³ The vast majority of agricultural producers in Poland and Slovenia are small scale family farms which existed under the communist period. Unlike most CEECs, collectivisation largely failed in Poland and Slovenia and family farms continued to occupy around 70% of the total agricultural land. Because of this, post-1989 farm restructuring problems are very different in Poland and Slovenia than in other CEECs (Tangermann and Swinnen, 2000).

land in the CEECs that are associated to the EU, has now been privatised. The land restitution process led to a very deep but not yet completed restructuring of agricultural holdings. The resulting lack of clarity in land ownership contributes to the overall uncertainty about the future of the agricultural sector. The present farm structure is characterised by a mix of small and large units. Furthermore, the land register and the emergence of a market for land are still in the initial stage in these countries.

In late 1980s, traditional markets with the Soviet Union collapsed and domestic agricultural production had to compete with imported food products from the west, sometimes at prices below world market levels (Petersen, 1998). Agricultural production in the post-Communist era in the CEECs has been characterised by shrinkage in both supply and demand. Supply has fallen due to a cost-price squeeze, poor weather and restructuring which has led to higher average costs and a decrease in real government support (Hartell et al., 1999). The magnitude and duration of the contraction in agricultural production have varied considerably between countries and commodities (OECD, 1998).

The cost-price squeeze contributed to real falls in agricultural output in the region of 25-30%. Because of the sharp decline in farm incomes and lower real protection for agricultural production, the financial resources available for investment in machinery or for the purchase of mineral fertilisers or pesticides have been extremely limited. Consequently, agriculture in the CEECs has undergone involuntary extensification (European Parliament, 1999). In the CEECs, agricultural production at an average of 6% of GDP has a higher importance in total output than in the EU Member States where it accounts for just 2.5% of GDP. Likewise, the percentage of the population employed in agriculture is generally much higher than within the EU-15: ranging from 37.3% in Romania to around 5% in the Czech Republic. In terms of both agricultural area and farm population, the leading countries are Poland and Romania. Each has more than 14 million ha. of agricultural land and more than 3.5 million farmers. The two countries together have almost as many farmers (7.2 million) as the EU15 (8.2 million) (Tangermann and Swinnen, 2000).

A large part of the rural population depends on farming as their main source of income. Poland and Romania are characterised by a fragmented structure of land ownership. For example, 71% of all agricultural land in Romania belongs to farms of 3 ha or less per family (Dumitru, 1999). These holdings are largely used for subsistence production and are an integral part of rural life in Romania.

Most CEECs have progressively harmonised their agricultural policies towards the Common Agricultural Policy (CAP) by adopting support mechanisms such as guaranteed floor prices, production quotas, a range of direct payments, credit subsidies, loan guarantees, capital grants, and input subsidies (OECD, 1997). Direct payments usually in the form of area or headage payments are targeted at the Less Favoured Areas (LFA) in Slovenia, the Slovak Republic, Hungary and Estonia.

3 ENVIRONMENTAL CHARACTERISTICS OF AGRICULTURE BEFORE 1990 AND AFTER THE POLITICAL CHANGE

The driving forces for environmental problems in CEECs can be divided into two main categories. First, problems resulting from intensive agricultural production in the socialist regime, which might pose a threat again following the recovery of CEEC economies. Second, marginalisation and abandonment of agricultural land use due to the recent agricultural crisis. These differing challenges posed by intensification and abandonment of farming highlight the complexity of the relationship between agriculture and environment (COM, 1999: 22).

3.1 INTENSIFICATION DURING THE SOCIALIST REGIME

In most of the CEECs, agricultural intensification has been a primary objective for several decades, especially in areas where collectivisation occurred. On good quality land it has been common practice to apply high levels of artificial fertilisers, pesticides and mechanisation. This has had a damaging effect on a wide range of habitats and species. The losses associated with land drainage, ploughing of grassland, removal of traditional field boundaries, adoption of large-scale intensive arable cropping and extensive or inappropriate use of pesticides have been significant (Baldock and Pienkowski, 1996).

Prior to the 1990s, state-funded agricultural investment was rarely subject to environmental assessment or to public consultation. As a result of this, and the agricultural policy of the Communist era, considerable environmental problems arose, and are present to varying degrees even now, despite the involuntary extensification of recent years.

It is clear from the data collection in the CEECs as part of the CEESA project, that the most pressing ecological problems which are raising concern in almost all candidate countries are those of water pollution, soil degradation and biodiversity loss.

3.2 WATER POLLUTION

Agriculture has significant impacts on the quality of both ground and surface waters through the run off of nutrients (from organic and inorganic fertilisers) and plant protection products (herbicides, pesticides, and fungicides). Most agricultural operations, such as manuring, grazing and irrigation, can pose a serious threat to water quality. Agriculture is often the single biggest sector responsible for the pollution of European waters. For example around 50% of nitrate and phosphate pollution in the Danube River Basin are attributed to agriculture (Haskoning, 1994). Many watercourses and water bodies have been subjected to eutrophication, enrichment from phosphorus or nitrate fertilisers. Phosphate inputs to the aquatic environment come partly from point sources (especially untreated or inadequately treated urban wastewater) but also through diffuse run off of nutrients from agricultural land. Nitrate is very mobile in soil, and this can result in major consequences for groundwater in areas where high levels of nitrogen fertilisers and manure are used. The Drinking Water Directive (80/778/EEC, revised as 98/83EEC) sets a maximum permissible threshold of 50 mg NO₃/litre. However, in Slovenia, 50% of sampling sites exceeds 50 mg NO₃/litre and, in Romania 35% of sites tested above 25 mg NO₃/litre (Jones, 2000; Nixon, 2000). Concerns have also been raised in Slovakia about the high nitrate content of the underground water reservoir in the Danube basin, despite decreases in the use of nitrate fertilisers during last 10 years. According to Kováč et al., (2000), 33 drinking water sources contain more than 50 mg NO₃/litre in Slovakia.

3.3 SOIL DEGRADATION

In most of the CEECs, extensive government support was provided to state farms and co-operatives for the production of arable crops. Other land uses such as grassland management and nature conservation were marginalised. The land use planning system was built around the desire to maximise food production and support the socialist cooperative system. As a result, collectivised land ownership led to distinctive land use patterns and consequent environmental problems such as soil degradation and wind and water erosion. These problems also resulted from the emergence of more intensive, specialised and mechanised forms of agriculture, improper farm management and the recent threat of land abandonment.

3.4 BIODIVERSITY LOSS

Increasingly industrialised agricultural production also resulted in species and habitat loss. However, the wildlife value might be threatened not only by increased production pressure but also by a reduction in traditional management practices. The threat of biodiversity loss is a growing concern in all CEECs for two reasons. First, land abandonment (due to economic forces) can lead to the deterioration and eventual disappearance of semi-natural habitats created by low input agriculture, and labour intensive farming practices. Traditional management of dry and wet grasslands has ceased in a number of marginal areas of the CEECs. Consequently, the proportion of Internationally Important Bird Areas affected by abandonment varies between the countries, but is especially high in the Czech Republic, Estonia, Hungary, Slovakia and Slovenia (all above 50%) (BirdLife International, 2000). Second, the growing trend towards CAP-like agricultural policies in the East creates formidable challenges for biodiversity protection (Anon, 1993). In the CEECs, large areas of extensive, biodiversity rich farming still survive and it is important that these areas are not damaged by policies that accelerate the intensification of food production. The pattern of development of western European agriculture, where agricultural policies encouraged rapid intensification of production with detrimental effects for the environment and biodiversity, must be avoided in the CEECs.

It is also important to emphasise that, though many experts from the region claim the bulk of CEE agricultural production is ecological since little or no pesticide and fertiliser is being used, the reduction of agro-chemical inputs unless complemented by better

management may still degrade the environment. Low-input farming as practised by a vast majority of farmers in the CEECs is not necessarily environmentally friendly from several points of view (Znaor, 1997; 1999):

- it does not pay sufficient attention to anti-erosion measures and often promotes continuous soil erosion;
- it can cause overgrazing, but more often undergrazing (which is frequently detrimental to biodiversity);
- it usually does not pay sufficient attention to the replacement of soil organic matter, leading to poor soil structure and a decrease in overall soil fertility and soil retention capacity (more irrigation needed);
- it often leaves soil bare after harvest, resulting in soil erosion and nutrient leaching;
- inappropriate manure management (storage and application) is widespread resulting in runoff, leaching and volatilisation;
- it often involves narrow crop rotation or monoculture (e.g. maize, grain cereals, potatoes) that not only reduces soil fertility and allows the build up of pests and diseases, but also has a negative effect on biodiversity.

In short agriculture in the CEECs, although using much reduced levels of tradable inputs is not sustainable from an environmental point of view unless it is accompanied by better management practices (Kieft and Znaor, 2000).

3.5 ENVIRONMENTAL ASSETS IN CENTRAL AND EASTERN EUROPE

It is clear on the one hand that in the past, the institutionalisation of agriculture and inappropriate policies has caused many environmental problems. On the other hand, state ownership of areas of high natural value in some countries has at least guaranteed management regimes favourable to conservation. The CEECs contain a significant proportion of Europe's biodiversity, as a result of mostly low-input and low-intensity agricultural practices still used in these countries. Good protected areas systems exist in most CEECs and these should be maintained and important areas not yet protected be identified. As the European Commission requires by the time of accession, the presentation of lists of proposed Natura 2000 sites, and the adoption of national legislation capable of

implementing the Birds⁴ and Habitats⁵ Directives, the accession countries should identify all candidate sites under these Directives. In the CEECs this work should be carried out as soon as possible because the transport and agricultural development (through the EU and other sources) are proceeding in advance of the necessary steps being taken to safeguard biodiversity.

As a result of restitution and land privatisation, major parts of designated protected areas in the CEECs now consist of privately owned farmed areas. The realisation of conservation objectives in areas of high nature value, including small private holdings, is a challenge for the applicant countries. Private ownership may necessitate extensive consultation with stakeholder interest groups and the establishment of compensation or incentive systems to secure the cooperation of farmers (Karpowicz, 1996). In the CEECs, there is a little if any experience of either activity.

One new possibility for the CEECs to secure the long-term conservation of their biodiversity, maintain agricultural land management and help support rural employment, is to devise agri-environmental schemes. With the prospect of accession to the EU, the elaboration and implementation of agri-environmental measures become highly important as the only compulsory element of the Rural Development Regulation (1257/99). However, before detailing the current agri-environmental policies in the EU and the CEECs, a short overview will be given of the accession process, its requirements and difficulties in the CEECs especially in relation to the environmental policy field.

4 ACCESSION TO THE EU

Since the beginning of 1993, the EU has taken several major political steps to open the way towards greater integration and accession (Mayhew, 1998). The European Council at its Copenhagen meeting (1993) agreed that the CEECs associated to the EU should become members subject to satisfying a set of key economic and political conditions, such as having a functioning market economy, a democratic political system, and accep-

⁴ Council Directive 92/43 of 1992 on the conservation of natural habitats and of wild fauna and flora.

⁵ Council Directive 79/409 of 1979 on the conservation of wild birds. The Natura 2000 network will be made up of sites designated under the Birds and Habitats Directives.

tance of the *Acquis Communautaire*⁶. Eighteen months later, at the Essen summit, a strategy to prepare these countries for membership (the Pre-Accession Strategy) was outlined (European Commission, 1996). The key element in this strategy was the preparation of the associated states for integration into the internal market of the Union. The White Paper on this subject was produced by the European Commission as a reference document to guide the prospective member countries through the labyrinth of EU legislation. A major part of the White Paper covers the fields of veterinary, food, plant health, agri-environmental and animal nutrition controls, as well as marketing requirements for individual commodities (European Commission, 1995). In May 1996, the European Commission produced a Working Document 96 (319) entitled "Preparation of associated CEECs for the approximation of the European Union's environmental legislation". This document determines ways that associated countries could begin to define those directives – in addition to those identified in the White Paper – which are critical to the "approximation" process (BirdLife, 1997). In July 1997, the EU invited Cyprus, the Czech Republic, Estonia, Hungary, Poland and Slovenia to start entry negotiations by 1998.

The associated countries desire for membership of the EU has thus led them to begin a process of review and "approximation" of all their national legislation and policies to the *Acquis Communautaire*. EU environmental legislation has developed over the last 30 years and currently comprises more than 300 legal acts. However, the body of EU environmental legislation, with which the associated countries eventually will have to align their national legislation and administrative practices – the so called *environmental acquis* – is considerably smaller. It consists of mainly about 70 directives – some of which, however, have been amended several times and supplemented with "daughter" directives - and 21 regulations (European Commission, 1997).

The approximation process includes three key elements:

- to adopt or change national laws, rules, and procedures so that the requirements of the relevant EU law are fully incorporated into the national legal order (known as "Transposition");

⁶ The body of legislation and policy instruments prevailing in the European Union, consisting of around 80,000 pages of EU legislation (Jovanovic, 1999).

- to provide the institutions and budgets necessary to carry out the laws and regulations (known as the "Implementation or Practical Application") of the directive;
- to provide the necessary controls and penalties to ensure that the law is being complied with fully (Enforcement).

EU legislation comprises directives, framework directives, regulations and decisions, which are described below and in Table 1. Most EU laws are "directives". They are binding as to the results to be achieved, but leave to the Member States the choice of form and methods (Haigh, 1984). They are designed to impose obligations on Member States and to be sufficiently flexible to take into account differing legal and administrative traditions. "Framework directives" set out general principles, procedures and requirements for legislation in different sectors. So far they have been adopted for the air, waste and water sectors. Other daughter directives in each sector must conform to the general requirements of the framework directive.

About ten percent of EU environmental laws take the form of "regulations". They are directly binding in Member States and supersede any conflicting national laws. Member States may not transpose the provision of regulations into national law, even if the national law is identical to the regulation. Regulations therefore fall outside the approximation process and will come into force in the acceding countries on the date of accession. They have usually a precise purpose such as financial matters, or day - to - day management of the Common Agricultural Policy (CAP).

"Decisions" are individual legislative acts which are binding in their entirety upon the parties to whom they are addressed. They differ from regulations or directives in that they are usually very specific in nature. They are less common in the environmental field.

Table 1: Components of EU Legislation

	Directives	Regulations	Decisions
Enactment	Enter into force upon the date specified in the directive or on the 20 th day after publication in the Official Journal: this obliges Member States to approximate.	Enter into force upon the date specified in the directive or on the 20 th day after publication in the Official Journal.	Enter into force upon notification to the party to whom they are addressed.
Use	Are the most frequently used of EU environmental law.	Are used when a unified system is needed: funds, institutions, EU voluntary schemes such as eco-label, product or trade regulation (endangered species, transport of wastes).	Are used to specify detailed administrative requirements or update technical aspects of Regulations or Directives.
Obligation on Member States	Members States must adopt laws, regulations and procedures to give effect to the directive by the date of transposition; this is typically two years after the date of entry into force.	Member States must establish institutions and procedures; they should repeal conflicting national provisions.	Focused in scope and application.
Enforcement	Come into effect on the date of practical application, the same as the date of transposition unless other date(s) is (are) indicated in the directive itself for specific actions. Some directives can have direct effect if the Member State fail to transpose into national legislation.	Are directly binding on the date they come into force.	Are binding on the parties to whom they are addressed on the date they come into force.

In the forthcoming enlargement of the EU the environmental dimension will present greater challenges than in any previous accession. This relates both to the sheer scale of past environmental liabilities and the gap in the level of environmental protection and legal administrative capacity in the CEECs compared with the situation in the EU. In the Commission's Agenda 2000, it is recognised that full compliance with the environmental *acquis* will probably be only achievable in the long term for all candidate countries.

5 CEECs CURRENT AGRICULTURE-ENVIRONMENTAL POLICY

The data collection carried out under the CEESA project reviewed the following agri-environmental policy fields in the CEECs: agro-chemical usage, nutrient balances, water use and quality, land use and quality, biodiversity and wildlife habitat protection, landscape quality, air quality and environmental friendly farming practices. Analysis reveals water, biodiversity and land-use policies are the major areas of concern in the agri-environmental policies of the CEECs. Since agriculture is not considered to be a primary source of air pollution, policies related to improving air quality have a less developed role in the CEECs' agri-environmental policy frameworks.

5.1 POLICY INSTRUMENTS

Faced with adjusting to political and economic transformation, and the continuing environmental legacy, the CEECs have attempted deliberately to build up institutional, informational and financial capacity for environmental protection, using a wide range of instruments. Concerning available policy instruments, regulation is the most widely applied tool in all policy fields with the exception of environmentally friendly farming, which lacks a specific legal framework in the majority of countries. Most of the studied countries also apply financial instruments, among which penalties and taxes are the most commonly used. However, the application of financial incentives are limited to only a few cases. Existing environmental legislation is regarded as outdated and inefficient by many countries. In general, environmental policy in state socialist societies displayed a paradoxical combination of extensive and detailed environmental legislation, which in some cases set more exacting standards above those in the West (Carter and Turnock, 1993).

In all these countries, new environmental legislation has been, or is being passed in order partly to signify a break from the past pattern of overly detailed legislation combined with ineffective implementation, and partly to bring legislation into line with EU norms, in anticipation of future EU membership (Caddy, 1997). The speed of legislative harmonisation with the EU environmental *acquis* and the level of formal compliance differs from country to country and varies greatly from sector to sector. According to the Commission's Opinion and Regular Reports (1997c;d;e;f;1999a;b;c), applicant countries have achieved legislative progress and adopted a number of legal acts, but less

progress has been made with regard to legislation on waste management and water protection. With the current decline in agricultural production and lower fertiliser use, candidate countries tend to see this as a low priority.

As regards nature protection, many accession countries have recently enacted legislation on protected areas which complies to various degrees with existing EU legislation. Many also have legislation on the protection of wild animal and plant species. But the administration and management of protected areas suffers from a lack of funds and human resources. Law enforcement and public awareness of nature conservation are also weak. For example, accession countries will need to compile a preliminary list of sites for the designation under Natura 2000 (important sites for threatened wildlife and habitats designated under the Birds and Habitats Directives). High quality data on the distribution and status of species and habitats exist in only a few countries. Countries will need extra funding to document, administer, manage and monitor these sites.

5.2 IMPLEMENTATION AND ENFORCEMENT

The use of standards and fines in Central and Eastern Europe as the primary enforcement policies has been largely discredited due to lax enforcement under central planning. Enforcement of standards was not taken seriously and the fines imposed were very low. The implementation and enforcement of existing law continue to be a major concern in the CEECs. The strengthening of implementation and monitoring structures was also identified as a priority task for the CEECs in the Accession Partnership⁷. In most countries however significant work remains to establish a structure that can fully apply and enforce the *acquis*.

Adopting EU standards immediately and expecting compliance is unrealistic. First, clear benchmarks and sanctions should be established. These sanctions should be strictly enforced if benchmarks are not met. The challenge is to create a credible enforcement regime. Strengthening enforcement also requires consistent and fair application of the laws.

⁷ At its meeting in Luxembourg in December 1997, the European Council decided that the Accession Partnership would be the key feature of the enhanced pre-accession strategy, mobilising all forms of assistance to the candidate countries within a single framework. (European Commission, 1999a).

In order to implement effectively and enforce the environmental *acquis*, existing structures need to be strengthened and new institutions created, for which competent and responsible human resources and financial assistance need to be made available. In the candidate countries the legal-administrative capacity of Environmental Ministries, sub-national and local implementation structures, systems of monitoring and enforcement remains inadequate in many cases. In most of the countries, the Ministry of Environment and other governmental as well as non-governmental organisations dealing with environmental and nature conservation require more qualified and trained staff (European Commission, 2000).

Enforcement, however, is not just a problem for the CEECs, but also a growing focus of attention within the European Union. This is because of the problems of uneven implementation by the existing Member States and the recognition that compliance problems can arise even in countries which otherwise have relatively strict laws and procedures. An example is the EU Nitrate Directive which has had little effect in combating water pollution due to inadequate implementation in Member States. It is clear that the development of Community monitoring and enforcement mechanisms has not kept pace with the expansion of its legislative role. The fundamental difficulty remains the reluctance of Member States to acknowledge the requirement for the Community to possess a more significant role in monitoring and enforcement policy (Collins and Earnshaw, 2000).

5.3 ORGANISATIONAL ASPECTS

Ministers in the new democratic governments, which took over power in the associated countries, frequently had no experience in administration. They were also consumed by the political necessity of reforming their economies and societies as rapidly as possible. This meant that there was generally little time spent on giving clear direction to the civil service or improving efficiency. The civil services, which had served the previous communist regimes with totally different priorities and working methods, have had to cope with new regimes. Management techniques employed in the civil services of many of the associated countries are relatively under-developed considering the challenges which they face (Mayhew, 2000). Apart from this, the whole environmental administrative structure in most countries has been in constant change during the past decade, which can undermine the effectiveness of enforcement. According to the Commission's

opinion there is a requirement to strengthen the administrative structures necessary for environmental management in CEECs.

The long post-war communist period left CEECs with a very weak system of municipal government, with power strongly centralised in national government. In general, central governments play a significant role in determining the local administration of environmental policy. They allocate responsibilities to local government, directly implement legislation through their own structures (e.g regional environmental inspectorates) and continue to provide a large part of local government income (Bennett, 1998). This raises two key issues. The first concerns the priority given by central government to environmental issues and the second is the reliance of effective environmental policy on local implementation.

In the CEECs, implementation and enforcement of environmental legislation is often delegated to regional or local authorities or other organisations responsible for monitoring, issuing of permits and inspection. In many cases, the work of these bodies will be seriously affected by the new legislation, with additional obligations requiring more efficient management and additional staff training. More effective implementation of environmental legislation requires effective and responsible administrative capacity at the local level.

Agri-environmental policy involves a range of organisational actors. In all CEECs there is a well established Ministry of Agriculture but for most of these ministries agri-environment represents a new policy departure requiring them to relate to other parts of the state as well as to organised interests outside the traditional agricultural lobby. The Environmental Ministries are relatively younger institutions in the CEECs, and it is evident, that in a number of countries, they are politically weak in relation to agricultural ministries. The dynamics of the agri-environmental policy very much reflects the inter-relationships between these two ministries and their associated policy communities. The old pattern of conflict between economic and environmental ministries seems likely to continue in the future because of the priority given to economic growth and economic restructuring, and because of the perception that environmental policies are a source of additional cost for business. (Pickvance, 2000).

The organisational capacity for implementing strategy remains weak in the CEECs, with top-down policy styles and no experience of partnership among different players. It is clear that inter-ministerial consultation is poor in many accession countries. Insufficient coordination and weak or non-existent joint decision-making and planning continues to hinder attempts at integration of agriculture and nature conservation policy.

5.4 FINANCIAL SUPPORT FOR AGRICULTURE-ENVIRONMENTAL POLICY IN CEECS

Regarding financial support, the main part of this is provided by national governments. However, international organisations and the EU contribute significantly to activities that focus on the protection or improvement of water quality, biodiversity, and the promotion of environmental friendly farming practices. Despite financial assistance from governmental, international, commercial and NGO sources, the need for additional fiscal support is high, particularly with regard to meeting the challenges of accession to the EU.

6 THE EUROPEAN UNION'S AGRICULTURE-ENVIRONMENTAL POLICY

Since 1992, the Community has supported agricultural production methods, which respect the environment and biodiversity. The Agri-Environmental Regulation (EEC 2078/92) was one of the accompanying measures of the CAP Reform in 1992 which fundamentally changed EU policy, placing more emphasis on the integration of agricultural and environmental policies. One of the most important aims of the Regulation was to promote and encourage agricultural production methods compatible with the protection of the environment and the maintenance of the countryside while, at the same time, contributing to the provision of an appropriate income for farmers (Buller, 2000).

Member States were required to submit, by the 30th July 1993, draft regulatory frameworks for the implementation of five-year (1993-1997) agri-environmental aid schemes. The level of payment made to farmers engaging voluntarily in agri-environmental aid schemes are established according to three criteria: costs incurred, income foregone, and incentive elements (which must not normally exceed 20% of the former). As the Commission states: "premia should be regarded as compensation for the costs of delivering

environmental public goods and cannot be regarded as subsidies in an economic sense". (EC, 1997d, 5).

The full range of agri-environmental measures currently in operation in Member States can be divided into four groups:

- nature and landscape protection;
- economic support of marginal agricultural activities and compensation for natural handicaps;
- regulation of farm based pollution;
- agricultural modernisation and structural reform.

Two types of schemes operating in the EU Member States can be differentiated, corresponding to geographical variations; first, the horizontal schemes aimed at maintaining extensive practices on large holdings; and second, highly targeted schemes often designed to protect natural resources by active changes to farm practice on small farm holdings. The former schemes are mainly operating in upland regions of Austria, Sweden, and Finland. The latter schemes aimed at reducing farm pollution are typical of intensive lowland states, such as the Netherlands, Denmark, and Belgium.

Agri-environmental schemes have been running in the majority of Member States for seven years. By October 1998, 158 Agri-environment programmes had been approved, representing 17% of total EU farmland. The participation target (15% of EU farmland covered by agri-environment measures by 2000) set by the 5th Environmental Action Programme has therefore been achieved. However, looking at the environmental benefits of the programmes, it is clear that there is room for improvement. According to the report of the Community's Court of Auditors (2000), the Regulation 2078/92 and agri-environmental policy in terms of its implementation, has proved most effective in maintaining extensive and environmentally friendly farming systems and practices. It has proved notably less effective in bringing about any major de-intensification of agriculture in the most sensitive areas in terms of environmental pollution, either because of poor take-up rates or because schemes have not been targeted in such zones (in anticipation of poor uptake rates or because the payments necessary to attract farmers into

schemes would be too costly). Poor promotion of agri-environmental programmes was identified as a factor restricting uptake in several Member States.

Agri-environmental measures have had very little effect in converting intensive practices to extensive farming. One of the main reasons for this unsatisfactory performance is the Commission's and Member States' weaknesses in resource targeting, programme design, approval and evaluation. It can be concluded that too little monitoring is built into some of the schemes. This is partly because little attention has been paid by EC on the evaluation of the programme and the adequate baseline surveys of important habitats and species against which progress could have been measured is missing. Poor design and implementation of agri-environmental programmes across many Member States have resulted in few benefits to species and habitats of high conservation importance. Few programmes approved under the regulation have been used to help fulfil the requirements of important European legislation such as the Birds and Habitats Directives (Lowe, Baldock 2000). This has resulted from the fact that few Member States have clearly stated conservation strategies for their programmes setting out priority species and target habitats and areas. In addition, the implementation of programmes turned out to be very costly in terms of their administration and control.

The allocation of funds was determined mainly by the priorities of governments and regional authorities. This resulted in high financing in some countries and regions with less urgent environmental problems, while pressing environmental needs remained unaddressed in countries which did not implement comprehensive programmes. Besides the above mentioned criticisms, there are some further negative characteristics of the schemes:

- much of the EU agri-environmental policy can be seen as seeking to undo what the more traditional aspects of CAP have done;
- the proportion of the EAGGF budget going to agri-environmental schemes is less than 5% of that going to other forms of direct aids;
- regions benefiting the most from agri-environmental aid are not necessarily the poorest or the most threatened by environmental or farm income decline (Buller, 2000);

- the failure to develop environmental indicators on the basis of which the impact of the programmes could be quantified;
- with respect to control, the Commission does not routinely visit Member States to verify the data or analyses submitted by them nor do the EU Agri-environment Unit personnel routinely conduct missions to verify that programmes are in practice providing good environmental value for money;
- with respect of staff requirement, the Commission underestimated the workload and failed to deploy enough human resources for the Agri-environment Unit (EC, 2000).

Following agreement on the Agenda 2000 reforms, agri-environmental measures became a component of the new rural policy strand of the CAP. The new Rural Development Regulation 1257/99, covering the period 2000-2006 states that "a prominent role should be given to agri-environmental instruments to support the sustainable development of rural areas and to respond to society's increasing demand for environmental services" (European Commission 1999g). As CEECs prepare for EU membership, they are in the process of adjusting their policies to EU legislation which is requiring the adaptation of current agri-environmental schemes, and the introduction of new legislation in this area. The EU provides assistance for the CEECs to carry out these tasks through its pre-accession instrument for agriculture and rural development (SAPARD), which will be discussed below. It is necessary for the accession countries to have an experience and feedback on the beneficial environmental and social effect of the programmes prior to nation-wide implementation of the schemes. The following section describes initiatives which have been taken by the applicant countries in relation to the EU Agri-environmental measures.

7 THE CEECS' INITIATIVES IN RELATION TO THE EU AGRICULTURAL MEASURES

Agri-environmental measures are not a new phenomena in the applicant countries. Many CEECs already implement schemes which are similar either to the EU Less Favoured Areas (LFA) measure or to those under the EU Agri-environmental Regulation. Certain countries have developed a legal framework to permit payments for environmental purposes, through management agreements or other mechanisms. In the Czech Republic, Slovakia, Slovenia, Lithuania and Hungary considerable support is provided to farmers to continue agricultural management and preservation of the landscape in

marginal areas, especially for grassland based systems (Petersen, 1999). Estonia provides supports for a small agri-environmental scheme in a wetland area.

In contrast, there is little experience in the CEECs of the use of incentive payments for farmers accepting additional environmental obligations. For example, in the Czech Republic, this kind of incentive only became available in 1998 for farmers who face restrictions in water protection areas. However, as it is based on legislation, it cannot be considered as an environmental payment under the agri-environmental programme but rather compensation for a legislative burden. In spite of the possibility of being compensated, the long bureaucratic procedure for applicants has resulted in a low level of uptake.

Most of the CEECs run organic farming schemes although most are in their infancy. However, they plan to encourage and increase this type of environmental friendly production. Some countries have already introduced a legislative base (and others are preparing one) to encourage the appropriate environmental friendly farming practices. For instance, in the Czech Republic the introduction of state subsidies has resulted in a major increase in the number of holdings and total land area farmed organically. Slovakia and Slovenia aim at achieving around 5% of the agricultural land being farmed organically by 2010 which would mean 100-150,000 ha. in the case of Slovakia. For Estonia and Romania, the main constraint of the scheme is the absence of financial support and a lack of local markets for ecological products. Support for organic farming could have environmental as well as socio-economic benefits because it provides a great opportunity for many small farmers who are not able to compete on the conventional market.

Regarding the domestic readiness to apply the EU Agri-environmental Regulation, in Hungary the government approved the National Agri-Environmental Programme (NAEP) in 1999. Schemes developed under the NAEP are intended to provide support for environmentally friendly production methods (reduced use of fertilisers and pesticides, environmentally oriented farm plans) and nature sensitive land use that will also support quality food production. It is envisaged that the horizontal schemes (comprising wetland, grassland, organic production, integrated production, and agri-environment basic schemes) should apply to all agricultural land. The zonal schemes target areas of high natural value, to be designated as Environmentally Sensitive Areas (Ángyán et.al,

2000). Until now the implementation of the Hungarian NAEP could not be started because of missing financial resources.

In all accession countries, national agri-environmental working groups have formed to develop pilot agri-environmental programmes at national and regional level (Lankester, 1999). Their progress shows that governments are interested in exploring new agri-environmental ideas especially if external support is forthcoming. The proposed pilot projects would represent a useful first step for testing the value and viability of this approach with reference to specific conditions in the CEECs, including administrative feasibility, levels of response by farmers, and effectiveness in attaining environmental objectives (Baldock and Pienkowski, 1996).

7.1 CHALLENGES FOR AGRI-ENVIRONMENTAL POLICY IN CEECS

The future challenges for CEEC's agri-environmental policies summarised as:

- Progress in adoption of the agri-environmental policies is slow in the face of entrenched interests and opposition by agricultural lobbies and domestic economic priorities. The main objective of current agricultural budgets is to improve agricultural efficiency and production and to aid investment, which prepare the agro-food sector for EU accession. Under these circumstances, it is extremely difficult to achieve policy developments that would put more attention for the protection of natural and environmental values.
- Regulation 2078/92, now superseded by Regulation 1257/1999 on Rural Development, is a useful policy instrument but it has to be adapted to the CEECs local circumstances. These countries are inexperienced in establishing contractual engagement for non-production related farm activities. Limited national resources are available to compensate landholders for environmental obligations.
- The lack of financial resources and competition for government funds make it unlikely that proposed agri-environmental schemes can preserve the traditional diversity of the CEEC countryside wholesale. External funding would be essential if management agreements or other incentive payments were to become a significant policy tool.

8 PRE-ACCESSION FUND SAPARD

One possible external financial source for implementing agri-environmental measures in the CEECs is provided under the EU pre-accession instrument for agriculture and rural development (SAPARD). One of the aims of the fund is to support environmentally friendly measures in the applicant countries.

- The fund is managed by the Agriculture DG (VI) during the time period 2000-2006.
- 0.52 billion Euro is available per year to cover all ten applicant countries.
- Target measures include rural development, farm diversification, modernisation of the food industry, adaptation of food hygiene, veterinary and plant health controls and marketing, agricultural production methods designed to protect the environment and maintain the countryside, as well as other measures. Concerning the agri-environment, the Regulation spells out:

"Support may be granted for action foreseen in Title II, Chapter VI of Regulation (EC) No 1257/1999, and taking account of the conditions included therein, provided that they concern actions at the pilot level. Such support shall promote:

- ways of using agricultural land which are compatible with the protection and improvement of the environment, the landscape and its features, natural resources, the soil and genetic diversity;
 - an environmentally favourable extensification of farming and management of low-intensity pasture systems;
 - the conservation of high nature-value farmed environments which are under threat;
 - the upkeep of the landscape and historical features on agricultural land;
 - the use of environmental planning in farming practice."
- The Community contribution may amount to up to 75% of the total eligible public expenditure (Council Regulation No 1268/1999, European Community 1999b).

The CEECs were required to submit their Rural Development Plans to the European Union by the 31st of December 1999. Every country submitted these plans which were endorsed by the EU's STAR Committee (Committee on agricultural structures and rural

development). Although the possibility was offered to the CEECs to include agri-environmental measures in these programmes, in reality this issue did not get a high priority in the plans. In general countries intend to devote less than 5% of SAPARD funds to such schemes (e.g. Hungary intends to spend 4.2%, Slovakia 3.5%, the Czech Republic 3%, Poland 2%, Estonia 1.4%, and Latvia 4% of the SAPARD budget).

Almost all countries will spend the majority of their budget under SAPARD (around 60-70% of the budget) on the restructuring of the "classical" agricultural sector; that is, providing investment to agricultural holdings and processing/marketing. Diversification of the rural economy and improvement of rural infrastructure will receive significantly smaller amounts in most countries, although it is still around 20-30% of SAPARD fund allocation. This probably reflects the importance the Accession Countries attach to the speedy re-structuring of their agricultural sectors to achieve increased competitiveness on EU markets, while rural development and the preservation of the natural resources in the countryside feature much lower on their list of priorities. If this situation persists, it will be a chance missed to provide alternative incomes to rural populations or to help them maintain current low-input farming practices that can benefit the economy and the countryside (BirdLife International, 2000).

8.1 IMPLEMENTATION OF EU LEGISLATION

All of the Plans make reference to the need to comply with EU legislation and standards and see this as one of the key objectives for SAPARD. Frequent reference is made to the Nitrate Directive and its associated Codes of Good Agricultural Practice (many of the accession countries have already prepared these). The network of protected areas to be designated under the Birds and Habitats Directives, called Natura 2000, should benefit from sustainable agricultural practices, such as Environmentally Sensitive Areas or similar schemes. The fact that most, if not all, of the Accession countries are still developing their lists of Natura 2000 sites suggests that potential problems may arise. Implementation of SAPARD when Natura 2000 networks are incomplete poses a threat, as the agricultural development might proceed faster than the necessary steps being taken to protect the biodiversity.

9 CONCLUSION

The environmental problems that exist in the CEECs partly result from decades of inappropriate management and intensified agricultural production on collectivised farm units. Due to agricultural activities water became the most polluted natural resource while soil degradation is a significant threat to large areas of agricultural land. As a result of the reduced government support for agricultural production in the 1990s, there has been a decrease in use of agricultural input and, inevitably therefore, a reduction in some of the pressures on the environment. Conversely, concern for biodiversity loss as a consequence of land abandonment is increasing among the CEECs.

The CEECs possess vast areas of high nature value which contribute considerably to the biological diversity of Europe. To keep these natural assets and at the same time to develop and manage economically and environmentally sustainable framework, forms a major challenge. As agricultural sector productivity improves, especially where agricultural policies stimulate intensive use, there is a real possibility that environmental risks will increase. The reality of existing low input level can be perceived as an environmental opportunity for the region. However, this situation is only an opportunity if agricultural production can be increased without again increasing pollution. Since official agricultural policies in most CEEC countries aim to reverse the decline in yields and provide relatively little support to environmentally friendly types of farming, there must be concern that this opportunity might be missed.

One way of encouraging sustainability in the agricultural sector is the development and implementation of well targeted agri-environmental policies. Agri-environmental programmes could play an important role for the CEECs for a number of reasons:

- they would support biodiversity conservation and nature friendly farming methods in the CEECs, which are becoming more relevant as the requirement for greater environmental regulation and monitoring of agriculture to satisfy consumer concerns increases;
- they provide not only environmental but also social benefits to rural communities. By supporting labour intensive farming methods and funding additional conservation work in the countryside, they can help to retain rural employment;

- in view of an enlarged Europe, they have a crucial importance because they are a production-decoupled farm income support which is, therefore, more likely to be compatible with WTO commitments than other subsidies.

Certain schemes similar to the EU agri-environmental schemes are already used as agricultural policy instruments by most candidate countries. The importance of the development and implementation of additional measures as required by the agri-environmental section of the Rural Development Regulation (EC) 1257/1999 is becoming highly important in the applicant countries given that these measures will become obligatory for them upon joining the EU. In the CEECs, the testing of proposed measures in pilot areas is supported by the EU through its pre-accession aid for agriculture and rural development (SAPARD). However, in the recently submitted Rural Development Plans, not all the candidate countries intend to use the financial aid provided for these kinds of measures. Strikingly, agri-environmental measures represent a rather small proportion of the SAPARD budget in all countries. With such low funding allocation, it is difficult to see how agri-environmental schemes can be really tried and tested in the Accession Countries. It is evident that CEECs give priority to production-oriented agricultural policy focusing on the improvement of their agricultural sectors' efficiency and productivity with environmental and rural development issues accorded a much lower priority.

Integrating the environment across all important sectors will be a major challenge, especially compliance with the *environmental acquis*, including the legal and organisational aspects. As this paper has described, all candidate countries have started to transpose the environmental *acquis* into their national legislation as one of the requirements of the EU membership. While the problems of adopting the EU legislation are considerable, the problems of implementing them are even more daunting. The alignment of the candidate countries' national legislation to that of the EU is a challenging and tremendous task because:

- the shortage of legal expertise, in particular in relation to the environmental *acquis*, and language barriers are still a problem in the candidate countries, although to varying degrees;

- lack of experience and trained personnel in the new institutions which have been created since the reform began and, as a result legislation sometimes is poorly drafted;
- the legal harmonisation process is a divided responsibility between several ministries in some fields of environmental protection and there is too little consultation with affected parties;
- the participation of public and civil organisations in environmental decision making is very weak;
- policies tend to have vague and/or contradictory objectives;
- large parts of existing environmental legislation is outdated or ineffective;
- the body responsible for proposing legislation is not substantially responsible for its application and implementation.
- Monitoring and the establishment of structures and institutions that can fully comply and enforce the *acquis* are weak.

However, as Jordan (1999), stated to force the new entrants to achieve existing standards at a stroke would result in massive levels of noncompliance that could fatally undermine political confidence in the *Acquis Communautaire*. Preparation for accession should not be limited to the transposition and "mechanical" implementation of environmental and related legislation, but should instead encompass the thorough integration of environmental considerations into sectoral policies and programmes to achieve a long term and sustainable development planning in accession countries. On the political front, the lack of an integrated agriculture and nature conservation policy is clear in the CEECs as is the need for administrative capacity building in organisations responsible for the enforcement, implementation and monitoring of environmental legislation at national and local level.

Further research is required to analyse in detail the effects of EU accession, and pre-accession policies on agri-environmental policy formation in the CEECs. It would be beneficial to investigate what the prospects are for tackling specific agri-environmental problems (e.g. nitrate contamination of water resources, semi-natural habitat destruction) through the changes that the EU accession policies and programmes are likely to induce.

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