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Preparing for EU environmental policy in Poland: the case of the nitrates directive

Zbigniew Karaczun*

Department of Environmental Protection, Warsaw Agricultural University, Ul. Nowourynowska 166, Warsaw 02-787, Poland

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Abstract

The requirement of accession nations to adopt European Union (EU) legislation, in particular the Nitrates Directive (91/676/EEC), has elevated the issue of nitrate pollution of water by agriculture to one of considerable political significance in Poland and other Central and Eastern European countries. This paper reports on the legislative and institutional changes made with the object of achieving compliance. Although harmonisation of Polish law with EU law has been achieved, this paper questions whether there has been sufficient institutional development to ensure the Nitrates Directive's aims are attained in practice.

Keywords: Integration; Europeanization; Environmental policy; Implementation; Nitrates Directive; Institutions

Introduction

A pre-condition of accession to the European Union (EU) is the adoption of the whole body of European law and practice, known as the '*acquis communautaire*'. The present research's aim is to investigate the adoption in Poland of one element of the environmental *acquis*, the Nitrates Directive 91/676/EEC. Specifically the paper examines the implementation of the Directive's requirements in relation to equipping farms for the storage and utilisation of livestock manure. 91/676/EEC was chosen as it combines problems in the fields of both agriculture and environmental protection, issues that have been amongst the most difficult in negotiations between the Central and Eastern European (CEE) countries and the EU. Moreover the requirements of the Nitrates Directive are very demanding such that by 10 years after its adoption, only two existing Member States (Denmark and Sweden) had implemented it satisfactorily, with the others facing legal proceedings (De Clerq et al., 2001).

Following the Second World War economic development in Poland, in common with many other CEE countries, took little account of environmental protection (Jancar-Webster, 1991; Jasinski, 1999). As a result, the natural capacity of ecosystems was exceeded and regional ecological disasters occurred. Although agriculture was acknowledged as a source of pollution, it was the general opinion that the main cause of environmental degradation was industrial activity (Nowicki, 1993). Since the end of the socialist regime in 1989, greater efforts have been taken to improve the state of the environment. Initially action was focused on limiting emissions from industrial sources, but since the mid-1990s increased attention has been dedicated to reducing pollution from other sources, including agriculture.

Wide-ranging research on the impact of Europeanization on domestic legislation and governance has been conducted in the CEE countries applying for membership to the EU (Baker and Jehlicka, 1998; Stawarska, 1999; Grabbe, 2001; Lippert et al., 2001). However the issue of whether the accession countries are effectively adjusting their environmental protection systems to EU requirements remains under-researched. This paper examines whether the Europeanization of Polish law and administration, and specifically the adoption of the Nitrates Directive has affected the degree of protection afforded to waters against agricultural nitrate pollution.

Evaluations of the implementation of EU environmental legislation have identified widespread

*Corresponding author. Tel.: +48-22-8530944; fax: +48-22-8530944.

E-mail address: karaczun@alpha.sggw.waw.pl (Z. Karaczun).

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'implementation deficits' between policy objectives (desired outcomes) and actual outcomes. Deficits may occur in formal compliance, through a failure to transpose EU law into national legislation, and in practical compliance through failing to enforce the law (Jordan, 2000; Haigh, 2000). Great changes in institutional structures have occurred in Poland as a result of transition from the Socialist regime and during its move towards European integration. With respect to the Nitrates Directive, this paper examines the capacity of the relevant institutions to bring about the necessary legislative changes and to implement the Directive in practice. Specifically it investigates two issues: whether transposition of EU law to Polish law has occurred, and whether institutional capacity is sufficient to implement and enforce the Directive.

To address these questions this paper draws on the literature concerned with European policy development in CEE countries, analyses national legislation concerning water protection and livestock manure use control and relevant EU pre-accession instruments. Additionally several interviews were conducted with public administration representatives from the Agriculture and Environment Ministries, farmers, agricultural advisers, experts and non-governmental organisations representatives by the author.

The paper is structured as follows. Section 2 discusses the requirements of the Nitrates Directive. Section 3 describes the pollution of water sources by agriculture in Poland. Section 4 examines Poland's preparation for EU accession with particular attention to the transposition of the Nitrates Directive (91/676/EEC). Specifically it examines legal harmonisation, institutional development at national and sub-national levels, and the pre-accession negotiations. Section 5 concludes with some reflections on how effective the process has been in readying Poland's institutions to implement EU environmental policy.

The EU's Nitrates Directive

Water pollution by nitrogen is one of the leading water quality issues associated with agricultural development (Shortle et al., 2001). Since the early 1970s the European Commission has implemented several policies with the goal of protecting water resources. These include the Bathing Water Directive (76/160/EEC), the Drinking Water Directive (80/778/EEC) and the Nitrates Directive (91/676/EEC). Several EU Member States (and other nations) have international agreements to protect shared rivers, the Baltic Sea and the North Sea.

Growing public concern over steadily increasing nitrate concentrations in drinking water sources, and disturbance of aquatic ecosystems by eutrophication (in which nutrient enrichment results in algal growth and reduced oxygenation) were the trigger for action to improve water quality (EC, 2002). Nitrate in drinking waters above certain concentrations is considered to be a public health problem because it can give rise to blue-baby syndrome (EC, 1997). Elevated nitrate levels are largely due to agriculture, although local pollution from municipal or industrial sources can also be important. Nitrate is very mobile in soil, with important consequences for groundwater especially for alluvial and shallow aquifers which are particularly vulnerable to nitrate pollution.

Adopted in 1991, the Nitrates Directive aims to reduce water pollution caused or induced by nitrates from agricultural sources. Member States are obliged to identify waters in which the concentration of nitrate in water is above, or at risk of reaching, 50 mg/dm^3 together with waters where there is actual or threatened eutrophication. Agricultural areas that drain into these waters and which contribute to pollution should be designated nitrate vulnerable zones (NVZs). Designations may be applied to either discrete zones or whole nations. In NVZs member states must draw up action programmes containing mandatory measures concerning the storage and application of liquid manure, natural and chemical fertilisers. It is also mandatory to prepare a code of good agricultural practice (CGAP) which aims to provide all waters with a general level of protection against pollution. Its implementation is voluntary outside NVZs and compulsory within them. The CGAP regulates the time and circumstances in which manure may be spread, the storage and spreading technology to be used, and the application norms for different crops (Goodchild, 1998). These will vary between countries, partly reflecting their climatic and soil conditions. The Directive also stipulates that member states shall draw up and implement suitable monitoring programmes to assess the effectiveness of action programmes and will generally be required to review NVZs every 4 years.

This paper is concerned with the implementation of one measure from the Directive—the storage of livestock manure. It is stated that storage containers must be of sufficient capacity to cover the entire period during which spreading on the land in the vulnerable zone is forbidden. In Poland this is for a period of 6 months. Additionally they must be of leakproof construction.

Nitrate pollution in Poland

Agriculture in Poland occupies 59% of the total area and contributes 4% of total GDP. A distinctive feature is its prominent role in employment, supporting to varying degrees a quarter of the workforce, or almost 4 million people, although it is the main income source for