

THE OECD ENVIRONMENT PROGRAMME

MANURE POLICY AND MINAS: REGULATING NITROGEN AND  
PHOSPHORUS SURPLUSES IN AGRICULTURE OF THE NETHERLANDS

**Executive Summary**

***Environmental policies in agriculture have economic consequences.***

Agriculture in Europe and especially in the Netherlands is increasingly affected by environmental policies and measures. The effectiveness of these environmental policies and measures in agriculture is still limited, while the economic cost associated with the implementation of environmental policy can be high. More than 10 years after approval of the EU Nitrates Directive (91/676/EEC), there is a delay in the implementation and enforcement in many member states, which reflects in part the large complications that arise from this Directive for intensive livestock farming. It also reflects that environmental policies in agriculture have economic consequences.

***The nitrogen and phosphorous accounting system MINAS marks a shift towards use of economic incentives.***

This report deals with the manure policy in The Netherlands, with a special focus on the effectiveness and efficiency of the economic instrument MINAS. The manure policy of the Netherlands is a complex policy that addresses a stubborn and complicated problem. The manure policy has a history of almost 20 years of changes, successes and failures. The nitrogen (N) and phosphorous (P) accounting system MINAS implemented at farm level in 1998 has been the core instrument of the third phase of the manure policy, and marks a shift in the manure policy from regulations and measure-oriented policies in the first and second phases between 1984 and 1998 towards target-oriented policies with stimulations via economic incentives. MINAS was intended to be also the main instruments to implement the EU Nitrates Directive.

***The effectiveness of MINAS has varied between farm types.***

Monitoring results indicate that the N and P accounting system MINAS is an effective policy for decreasing total nutrient losses from especially dairy farms. Potentially, it could be also an effective instrument for arable farms, but there is no clear evidence yet. MINAS has turned out to be not effective and efficient for pig and poultry farmers.

***Additional instruments have been implemented to support MINAS.***

Though MINAS is an integrated and flexible instrument and in principle applicable to all farms, the differences between sectors are so large and the complexity of the manure problem is so big that the results so far indicate that a single instrument like MINAS cannot solve the manure problem at once. As a consequence, additional instruments have been implemented to support MINAS, but not all these additional instruments appeared to be effective and supportive. There have been also quite some changes in MINAS and the additional manure policy instruments between 1998 and 2004, which often led to confusion and disbelief among farmers (and policy makers), which further complicated effectiveness and efficiency of these instruments.

***Administrative costs have been high.***

The economic costs for enforcement and monitoring of MINAS and other instruments have been increasing greatly over the last few years. The high cost for administration is in part caused by exploitation of loopholes, fraud, juridical procedures, and by the many changes that have been made in the MINAS system and in the additional policy instruments. Due to these many changes, there has been insufficient time for proper implementation and fine-tuning of MINAS in practice. As such, MINAS has not received the credits that it would deserve as an instrument to decrease nutrient losses from agriculture

***MINAS will be replaced by application limits for animal manure and fertilizers.***

A judgement of the European Court, the increasing administrative burden, increasing fraud, and the near absence of environmental benefits in the pig and poultry sectors (where manure surpluses are largest) have led to a very rapid erosion of MINAS. By the end of 2005, MINAS will be replaced by a (complex) system of application limits for animal manure and fertilizers, in compliance with the Nitrates Directive. It remains to be seen whether such a system is equally effective and efficient for dairy farms, arable farms and pig and poultry farms.

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