Implementability of agro-environmental targets in Estonia

BALTIC COMPASS promotes sustainable agriculture in the Baltic Sea Region. The 90 million people living in the region deserve locally produced, high-quality food, but it is also important to protect the very vulnerable Baltic Sea. Baltic Compass fosters win-win solutions for the agricultural and environmental sectors to promote a more sustainable rural economy and healthier ecosystems. This policy brief focuses on agro-environmental targets as a basis for combating eutrophication in the Baltic Sea caused by agricultural run-off.

Key agro-environmental targets

The agro-environmental targets are set in Estonia's Rural Development Plan for 2007-2013, in the Water Act, and in the Nitrate Vulnerable Area programme. The targets address water and soil quality, use of fertilisers and plant protection products, air pollution, and climate change. The use and protection of water and the use of fertilisers are regulated by the Water Act and the Integrated Pollution Prevention and Control Act. Special and stricter environmental regulations are applied to the Pandivere and Adavere-Põltsamaa nitrate-vulnerable area, which covers 7.7% of the Estonian territory. This is an area of conflicting objectives: On one hand, the most fertile soils of Estonia are here, attracting intensive agriculture. On the other hand, it is a karst area, where surface and ground water is poorly protected from pollution.

Some of these measures have yielded results: the chemical load on the environment has been decreasing since 1990, after the restructuring of the agricultural sector, and agricultural support payment requirements provided a boost from 2004 to 2010. As for phosphorus, the chemical load has been decreasing, but organically farmed soils are becoming less fertile, since the applied manure lacks sufficient phosphorus. Erosion is not a significant problem, with only 3.1% of total arable land exposed, mainly to water erosion.

Agriculture and environment in Estonia

Estonia's land area is 4,522,700 ha, of which 13% is arable land and 49% is forest. The livestock density index was 0.35 in 2007, considerably lower than the EU average (0.78). The main crops grown are cereals, rape, vegetables and potatoes. The area under organic farming has increased, from 8.8% in 2007 to 17.5% in 2009.

Agriculture is the sector of the economy that underwent the most significant changes during Estonia's transition from a planned economy to a market economy in the early 1990s. Agriculture’s share in the Estonian economy has decreased, from 3.5% of total value added in 1995, to 1.5% in 2009, but it continues to play asignificant role in food supply, in the rural economy, and in shaping cultural landscapes. Estonia's rich biological diversity also affects agriculture: since the country joined the EU Natura 2000 network, the share of protected territory has increased from 12% in 2004 to 18% in 2010. Six per cent of Estonia's total arable land is in Natura sites.

In the 1970s and 1980s, lakes in Estonia were heavily polluted by fertiliser run-off and farm sewage, which caused rapid eutrophication of surface and ground waters. In the beginning of 1990s,
after the collapse of the collective farming system and an accompanying decline in agricultural production, the condition of the lakes improved. The eutrophication process was slowed, and the nitrogen content in the water decreased. As Estonia’s economic situation improves, it is expected that the use of fertilisers and plant protection products will rise, but will still remain considerably below the EU average.

**Actors implementing the AE measures**

The environmental regulations of agricultural production and facilities are set by the Ministry of Environment; the agro-environmental measures are designed, implemented and monitored by the Ministry of Agriculture.

**Methodology**

The information in this policy brief is drawn from a review of relevant laws – especially the Rural Development Plan 2007–2013 – and the midterm review of RDP implementation, specifically the permanent monitoring report of Pillar II issued in May 2010. The policy recommendations were discussed and agreed at a stakeholder meeting in Tallinn in November 2010 with representatives from the Ministry of the Environment, Ministry of Agriculture, Agricultural Research Centre, Estonian Agricultural Registers and Information Board, and regional associations of agricultural producers.

**Key challenges**

Our review and stakeholder meetings identified several issues of concern in the implementation of agro-environmental targets:

- There is a need for more cooperation among the different implementing institutions.
- The advisory service for small and medium agricultural producers needs improvement.
- Fertiliser use and storage and management of manure remain inefficient.
- There is insufficient capacity for processing and marketing of organic farm production.

**Policy recommendations**

There are several areas for improvement in the implementation of Estonia’s agro-environmental targets. There is a need for more coordination and collaboration among the institutions involved, and these specific areas require attention:

- Increasing the efficiency of fertiliser use and improving manure management at the farm level.
• Building capacity among agricultural producers and agencies to help them implement agro-environmental measures, with a common goal of improving water quality by 2015.
• Integrating policies, especially those on the marine environment, water courses, and nature conservation of water and riparian habitats. Protecting the Baltic Sea from eutrophication has been identified as important issue in several policy documents, but the lack of an integrated approach has kept it from being treated as a priority.
• Joint planning and implementation of water policy. Communication between the two ministries has largely involved an ad hoc working group. To foster more effective collaboration, a permanent commission or expert panel should be established.
• Engagement of stakeholders, such as agricultural producers and local governments, needs to become common practice in planning and implementation of water protection goals.

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