

Reducing nutrient emissions from agriculture

Agriculture accounts for about half of the human-induced nutrient load in Finland's waters. Nutrient emissions from agriculture have not changed in recent decades. Nitrogen and phosphorus loads are on the same level as in the 1980s. Runoff from agricultural land has resulted in the deterioration of water quality particularly in the shallow lakes in regions where agriculture takes place and in coastal waters. According to a Government resolution, the objective is to reduce nutrient emissions from agriculture by 30% between now and 2015.

Finland has paid considerable attention to reducing nutrient emissions from agriculture since it joined the EU. About 15% of agricultural support or around 300 million euros has been spent annually on the environmental support system for agriculture. One of the most important aims has been to reduce nutrient emissions.

The present audit sought to determine whether clearly lower nutrient emissions can be achieved by taking advantage of the possibilities available in national agriculture policy and whether the means exist to reach the target set in the Government resolution.

The audit found that in spite of objectives and measures, nutrient emissions from agriculture have not been reduced. Moreover, structural trends in agriculture have been such that the risk of increasing nutrient emissions has grown. Livestock farming is concentrated in a few regions such as Southwest Finland, Ostrobothnia and North Savo, increasing the amount of manure in relation to arable land in those regions. Meanwhile the area covered by grasses is falling as a result of increased grain farming in southern Finland. This reduces winter cover on fields and results in more nutrient runoff.

On the basis of the audit, the objective of reducing nutrient emissions is at odds with other objectives that have been set in agricultural policy. In practice, production and income objectives have been given greater weight than environmental objectives.

The audit found that the environmental support system is in effect part of income support for agriculture. According to EU regulations, environmental support can only be used to compensate for additional costs and lost income caused by environmental protection measures. Owing to income policy factors, the cost effects of the conditions placed on environmental support have been negligible and in practice every farmer has been able to participate in the system. Because of the loose support conditions, no change has taken place in the nutrient load in Finland's waters, even though the system has been in place for 13 years and spending has totalled several billion euros so far.

Although environmental support conditions have been loose for farmers and make little difference for the environment, monitoring compliance with conditions is laborious. It causes over half of monitoring costs for agricultural support even though environmental support makes up only 15% of total agricultural support.

On the basis of the audit, current means are inadequate to achieve the target set in the Government resolution, which is to reduce nutrient emissions from agriculture by 30% between now and 2015. Nevertheless, the audit found that by refocusing support it would be possible to reduce nutrient emissions from agriculture significantly. Measures and support should give priority to fields that are worst in terms of runoff because they lie on steep slopes near waters. Active farming should cease on such fields. In addition the use of fertilisers should be further reduced. Lost income resulting from measures can be compensated with the resources that are currently available for environmental support. Support should not be on an equal basis for all fields as in the present system, however.

Significantly reducing nutrient emissions would not hamper the achievement of objectives regarding agricultural self-sufficiency, according to audit findings. At present Finland produces large quantities of feed grain for export using environmental support. Exports of feed grain have taken place mainly with the help of export subsidies paid by the EU, so the economic benefit for the nation is questionable to say the least. Overproducing feed grain is very costly, taking into account its negative environmental impacts, i.e. nutrient emissions to waters. Retiring fields and cutting down on fertilisers should focus on cutting the overproduction of feed grain.