Is farming becoming more environmentally sustainable?

The environmental track-record of agriculture has come under scrutiny in a new report which details the environmental performance of farming in OECD (Organisation for Economic Co-operation and Development) member countries since 1990. Its findings demonstrate that progress has been made, but there are still areas for improvement which policy measures could help overcome.

One of the most striking findings in the report¹, published by the OECD, is that in nearly half of OECD member countries agricultural pollution of rivers, lakes and aquifers exceeds recommended limits for national drinking water. The levels of nitrates, phosphorus or pesticides were found to be excessive in more than one out of 10 monitoring sites in 13 out of the 30 OECD countries.

Algal blooms caused by excessive nutrient pollution have damaged marine life in the coastal waters of, for example, Australia, Japan, Korea, the US and Europe. This also has an economic impact: as nutrients cause marine waters to cloud with the boosted algal growth, commercial fisheries in some of those countries have suffered. Treating this polluted water is very expensive. In the UK, for example, the cost of treating water pollution from agriculture is estimated at around 345 million Euros per year.

At a time when water availability is an increasingly urgent issue, this report shows that in a third of OECD countries more than 30 per cent of water taken from underground aquifers is used by farmers. In some regions of Australia, Greece, Italy, Mexico and the US, groundwater is being depleted at rates higher than it is being recharged.

Overall, the use of pesticides has declined in OECD countries since 1990, and modern pesticides have become less environmentally harmful as regulatory measures have tightened and the development of new products has followed. However, some older pesticides – some of which are now banned in some countries – still persist in the environment.

The report also looks at energy consumption. It shows that energy use on farms has increased overall, but by only 3 per cent, compared to an average of 19 per cent in all other sectors. Also, increasingly efficient farming methods are leading to a steady increase in agricultural productivity. However, the widespread fuel subsidies for farmers in OECD countries are acting as a disincentive to energy efficiency. Similarly, government support for irrigation is widespread but can act as a disincentive to efficient water use.

For air quality, levels of air pollution have reduced overall, including a 70 per cent reduction target that has been met for methyl bromide – an ozone-depleting chemical, largely derived from agricultural activity.

Political lessons can be learned from the report, according to the OECD. By moving away from production-linked farming subsidies, and towards environmental objectives, the environmental performance of farming can be improved. These measures could include direct payments for environmental benefits, such as wildlife conservation and taxes to prevent pollution.

¹. The report provides comparative analysis and a database for OECD countries up to 2004 across a range of environmental issues, including: nutrients, pesticides, energy, soil, water, air, biodiversity and farm management. An assessment is also provided for each of the 30 OECD countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States and the European Union.

Source: OECD report (2008). ‘Environmental Performance of Agriculture in OECD Countries since 1990’. See the following page for details of how to order, download related material and access the database: www.oecd.org/tad/env/indicators

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