



EU Evaluation: Protecting waters from pollution caused by nitrates from agricultural sources

The Vegan Society believes the Nitrates Directive 1991 has not worked, is not consistent with current EU policy, & is not fit for purpose.

The Directive explicitly aimed for “the control & reduction of water pollution resulting from the spreading or discharge of livestock effluents & the excessive use of fertilizers”.

Yet, two of the biggest human-caused sources of nitrate water pollution are still (1) industrial farming of animals, & failures in their manure processing; & (2) inappropriate use of agrochemical nitrate fertilizers. The Rivers Trust 2024 State of Our Rivers report found 62% of rivers in England fail to reach ecologically good status due pollution from fertilisers or farming of animals, just as in 2019.

This call for feedback explicitly admits: “Water quality has improved in the EU, but pollution by nitrates can still be a serious problem.”

The failures are because EU policy needs to change to coherently & consistently support the urgent transition to intrinsically low nitrate pollution agricultural methods. The EU rapidly needs to move over to plant-based protein farming, & away from industrial artificial breeding of animals for farming, & inappropriate use of industrial nitrate fertilizers.

Canada has successfully scaled-up legume farming, including for plant-protein food, during this failed EU agricultural nitrate directive. From 1991, Canada has increased their legume harvest by a factor of five, now sustaining over 5 Mha of land harvested for grain pulses.

Legume farming has huge potential to improve water quality, soil nitrogen retention, crop yields & plant-based protein supply. Microorganisms & legumes symbiotically fix atmospheric nitrogen for crops. When legumes are appropriately grown e.g inter-cropped with a second crop that can use surplus soil nitrogen, this biological nitrogen fixation (BNF) can significantly reduce nitrate pollution of water compared to chemical fertilizer or bulk manure application.

The EU must exceed Canada’s investment in legume farming. These legumes are of greatest benefit to farmers when grown to be made directly into plant-based protein food products. Farmers are more likely to decide to grow legumes when they get the higher financial returns from pulse-based foods, than from feed for farmed animals.



The first priority must be, reducing the numbers of animals in farming. The EU must now rapidly support a plant-based transition in EU protein foods. A steady, strong reduction in the numbers of animals bred for farming within the EU will significantly reduce water nitrate pollution. Legumes will supply the protein we need, along with grains & other plants & fungi. EAT-Lancet shows the central role grain legumes (e.g. soya & other beans, & peas) play in food security. There is significant scope for the EU to increase grain legume production. Suitable land is available, & the scale of increase would be less than Canada has already achieved: c. 2.8 times more grain legume harvested hectares

This will also support other environmental & public health policy targets such as climate change & healthy, sustainable diets. The Vegan Society outlined a policy framework for this transition in the report, 'Planting Value in Our Food System' (2021): <https://www.plantingvalueinfood.org/> with steps needed to achieve 2030 policy goals & treaty obligations.

The Vegan Society works with many plant-protein food companies our pioneering project, The Vegan Trademark: <https://www.vegansociety.com/the-vegan-trademark> & is part of Donau Soja, a lead partner in the EU Legume Hub research network: <https://www.legumehub.eu/our-projects/>

Farmers for Stockfree Farming are demonstrating legume growing in colder climates: <https://stockfreefarming.org/one-hundred-ways/growing-crops-for-human-consumption2/>

The EU must work with farmers, researchers & food business to rapidly expand EU legume growing, & transition away from industrial farming of animals.

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