NATURE RESTORATION – WHAT IT MEANS FOR FARMERS AND OTHER LAND MANAGERS

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WHAT THIS BRIEFING IS ABOUT:

- To inform the debate in advance of the Parliament's vote, this briefing provides an evidencebased overview of the possible impacts of the law on the farming sector, on climate adaptation and on food security, taking into account the proposed changes by the Council.
- The European Commission's proposal for a Nature Restoration Regulation, known as the Nature Restoration Law (NRL), aims to accelerate the restoration of ecosystems and habitats in Europe by setting out a national restoration planning process including monitoring and filling of data gaps, and legally binding targets for restoration of specific habitats, species groups, and ecological functions. The targets and goals address the biodiversity-rich habitats protected by the EU Habitats Directive, known as Annex I habitats, and goals for the marine and forest ecosystems, agro-ecosystems, rivers, and urban areas. These targets will be binding on national governments.
- The Council agreed its general approach on 20 June, introducing some flexibilities into the law and making provisions for some areas of overriding public interest which will take priority in restoration planning.
- The European Parliament will vote on its position next week on 12 July, after the environment committee responsible for the file failed to reach an agreed position.
- Much of the debate in the Parliament has focused on the expected impacts of the law on land managers (in particular farmers and foresters), along with what it means for food production. However, in many cases the claims have been very general and not based on solid evidence.

WHAT ARE THE KEY MESSAGES?

- The Nature Restoration Law's impact assessment confirms its benefits to society as a whole, with an estimated 1 EUR investment in nature restoration bringing 8 EUR worth of benefit in return¹. There is no reason to believe, based on the scientific evidence, that the nature restoration law poses a threat to Europe's or global food security. Not least because food insecurity is driven mostly by poverty and conflict, not lack of supply.
- Of course, land managers will be affected, as farmers and foresters have a central role in nature restoration, but having a national framework and plan also provides opportunities.

¹ European Commission (2022)

Most of the benefits go to the whole of society, some will benefit land managers in the long run – but nature restoration will also require up front investment and costs in the short term. Today's inaction would only lead to higher expected costs in the future.

- It is unavoidable that if we want to change the declining trends in biodiversity across Europe, and at the same time make our forests and farmland climate resilient, some land managers will have to change their practices and in some areas land use changes or rewilding will be needed (e.g. floodplains that are currently being cultivated will need to change to periodically flooded grassland or grazing marsh). Some of the NRL's broader provisions provide opportunities for farms across the board to invest in their ecosystem services and climate adaptation, others will affect a much smaller subset. The evidence shows that these impacts can be positive, especially long-term.
- At the same time, given the short term costs of changing practices or opportunity costs for some land managers of ceasing or scaling back production, there is a clear case for supporting such changes to ongoing management with public funding, such as that available in the CAP and other EU funds, and providing farmers and foresters with better advice, tools, research, and long term perspectives.
- The Council's amendments to the Commission proposal introduce a number of flexibilities that allow Member States to focus nature restoration efforts on non-farmed areas, e.g. reducing the need to rewet peatlands and restore protected habitats that are in agricultural use.

WHICH FARMING SECTORS WILL BE IMPACTED BY THE NRL AND HOW?

- Some of the NRL's broader provisions would affect farms across the board, others would affect a much smaller number.
- For most farms, the provisions of the law mainly relate to improving soil health (through the indicator of soil carbon) and restoring landscape features and farmland bird and pollinator populations. For soil and landscape features, these are non-quantified targets in the Council General Approach, requiring only an increasing trend at the national level. The evidence shows that the majority (60%-70%) of soils in the EU are negatively affected by erosion and degradation, reducing productivity². Farmers are already required to meet minimum soil protection standards through the CAP, and have increasing opportunities to get CAP support for testing their soils and getting advice, and taking actions to repair soil health, such as moving towards regenerative agriculture, using more cover crops, and so on. A key enabler here will be soil testing and advice, which some Member States are already making available to farmers for free. Reintroducing landscape features can take some land out of production, but this is often the less productive field edges, and landscape features are

² Panagos et al (2018) Cost of agricultural productivity loss due to soil erosion in the European Union: From direct cost evaluation approaches to the use of macroeconomic models. Land Degradation & Development No 29 (3), 471-484.

linked to improved ecosystem services (crop pollination, natural pest control, erosion control, climate adaptation) that can boost the long-term resilience of farm production. Impacts vary according to where and how it is done along with the type of farm, but a recent meta-analysis showed that on average flower strips and hedgerows have neutral-to-positive effect on yields³. Further, funding is available for such interventions via the EU's Common Agricultural Policy (CAP). The Council has added the option to count productive areas to the area counted as high diversity landscape features.

- More significant changes may be required for a smaller subset of farms: those that have protected ('Annex I') habitats, and those on peatlands. The NRL proposal requires Member States to restore and re-establish Annex I habitats and avoid the deterioration of these habitats both inside and outside of protected areas (Natura 2000 sites). Annex I habitats that have some agricultural activity cover nearly 200 000 km² in the EU, but most of this is not productive farmland it is rough grassland, scrub, marsh, fen and tundra that is grazed by a small number of farmers and livestock owners⁴. Farmers in the EU's productive farm areas may have some fields of Annex I habitat that are not economically important to the farm, but for which the NRL can unlock support. Farmers in regions with larger areas of high nature value (HNV) farmland with Annex I grasslands and grazing areas, who are struggling to keep afloat economically, the NRL will oblige governments to better target support for both restoration investments and to keep this nature friendly management going. The Council's Approach introduces flexibilities to the provisions, which would allow governments to focus on restoring habitats in one ecosystem more than another, meaning that national stakeholders can have a say in whether the focus should be more on one or the other.
- On peatlands, the Commission's proposal set targets for restoring (re-wetting) 50% by 2040 and 70% by 2050, which the Council has reduced to 40% by 2040 and 50% by 2050. Rewetting peatlands is essential to meeting the EU's net zero carbon and LULUCF targets on carbon because of the large emissions from drained peat⁵. The reduced targets risk Member States not meeting their LULUCF target.
- Peatlands mainly occur in northern Member States, a portion of which are currently drained for intensive cultivation (arable, vegetable crops or dairying) in lowland areas, or used for

³ Albrecht et al (2020) The effectiveness of flower strips and hedgerows on pest control, pollination services and crop yield: a quantitative synthesis. Ecology Letters No 23 (10), 1488-1498.

⁴ As specified in the NRL impact assessment, natural and semi-natural agro-ecosystems include 35 Habitats Directive (HD) Annex I habitat types. These cover close to 177 442 km2 (4.5 % of the EU terrestrial area); this excludes areas reported by Romania, which are known to be largely overestimated. The average total area of agri-habitats and grasslands habitats reported by Romania is 54 124 km2.

⁵ For more evidence on this, see Wetlands International (2022) <u>Higher ambition for Peatlands in the EU Nature Restoration Law Proposal</u>.

extensive livestock grazing or afforested in upland areas⁶. Over time, peat soils are used up by draining and cultivation, meaning that cultivating them has a limited life-time in and of itself. Rewetting is the only way to keep the peat. On the other hand, the current market opportunities for alternative crops or livestock systems on rewetted peat are small (though growing), and there is therefore a clear reason to support such actions with public funds, or potentially carbon credits in the future. EU and national funding is already available for this, including ongoing payments for land managers to compensate their loss of income from scaling back or ceasing cultivation. The Council has also introduced flexibility that allows some national governments to rewet peatland without affecting agriculture at all⁷, or only to a small extent.

• Finally, the NRL will enable systematically planned and funded nature restoration for climate adaptation on floodplains and along rivers and coasts. This is a nature-based solution for long term protection against floods and sea level rise, but would take some farmland out of production. However, the costs of maintaining this land in a productive state in many cases is becoming extremely costly due to increasing risks that will continue to worsen with climate change. In these cases, there is also therefore an opportunity for managers of such lands to benefit from the public resources that the EU and Member States have available to fund changes in land management.

HOW WILL NATURE RESTORATION IMPACT FOOD PRODUCTION?

• There is no reason to believe, based on the scientific evidence, that the Nature Restoration Law poses a threat to Europe's or global food security⁸. Not least because food insecurity is driven mostly by poverty and conflict, not lack of supply. The land that will be taken out of production as a result of the NRL is a small percentage and therefore not significant in terms of food production overall. Where changes will be required across the board to broad-acre crops these can, as discussed, be beneficial by for example reducing damage from soil erosion and boosting ecosystem services, especially in the long-run. The short-term costs to farmers of changing practices can be supported by the CAP.

⁶ Peatlands cover an area of approximately 350,000 km² in the EU, of which more than 50% are degraded by drainage for forestry, agriculture, or peat extraction. Drained peatlands on agricultural soil in the EU amount to 52,000 km²; about twice as much drained peatland is under land uses other than agriculture, mainly covered by forest. Wetlands International briefing 2022 Higher ambition for wetlands in the EU nature restoration law.

⁷ For example, in Ireland, the prime minister has stated that the peatland target will be met almost completely by rewetting publicly owned peatland that has come out of the peat cutting business. The Irish Climate Action Plan sets national targets for peatland rewetting that go beyond the proposed EU targets.

⁸ For more evidence on this question, see IEEP's briefing on Nature restoration as a driver for resilient food systems

 The NRL is one in a suite of laws that is aiming to restore healthy ecosystems and avert climate tipping points, key to keeping up a stable food production potential in the long run.
Restoration itself is also essential for building resilience to the impacts of climate change, not least on farms: healthy soils and ecosystems will help farms to withstand droughts and floods (see below).

WHAT IS THE RELATIONSHIP BETWEEN RESTORATION AND CLIMATE ADAPTATION?9

- Farming: climate adaptation measures are essential in both the agriculture and forest sectors in the EU to ensure the future security of production potential and hence food security of the EU to 2050.
- Forests: A shift from single species forestry to mixed tree species (and genotypes) in forests, and continuous cover silvicultural systems will benefit forest biodiversity, increase resilience to storm damage, drought, and other climate hazards, and may reduce the risk of loss from pests and diseases; the introduction of open spaces, ponds and wetlands in forests can reduce fire risk.
- The climate resilience benefits for the farming system arising from nature restoration are associated mainly with diversified vegetation types and vegetation structures and more permanent land cover. For example, permanent land cover protects soils, and managed permanent green cover under permanent crops reduces fire risk, especially in the Mediterranean; agroforestry provides shade and shelter to both livestock and crops, and if strategically located in catchments, it can reduce peak flow during flood events; diversified crops and farm landscapes improve biosecurity (reduced transmission of livestock diseases and vector-borne plant diseases), and provide more habitats for beneficial invertebrates and predators of crop pests.
- Financial compensation and economic rewards for nature restoration, and more diverse cropping systems and farm produce help to make farm and forest businesses less exposed to fluctuations in input costs and global market prices. Some nature restoration options will provide opportunities to develop alternative streams of income (e.g. fruit and quality timber from agroforestry, biomass from wetlands). Specialised nature restoration management and monitoring may provide new, skilled job opportunities and there may be opportunities to generate other income from some restored semi-natural habitats for example from educational access, eco-tourism, and recreation ¹⁰.

⁹ For more evidence on this, see IEEP briefing on Why is nature restoration critical for climate adaptation in the EU?

¹⁰ For more evidence on this, see IEEP briefing on <u>Why is nature restoration critical to sustain jobs and economic benefits from healthy ecosystem services?</u>

CONCLUSIONS

The Nature Restoration Law's impact assessment confirms its benefits to society as a whole, with an estimated 1 EUR investment in nature restoration bringing 8 EUR worth of benefit in return. Of course, land managers will be affected, as farmers and foresters have a central role in nature restoration, but having a national framework and plan also provides opportunities. It is unavoidable that if we want to change the declining trends in biodiversity across Europe, and at the same time make our forests and farmland climate resilient, some land managers will have to change their practices and in some areas land use changes or rewilding will be needed (e.g. floodplains that are currently being cultivated will need to change to periodically flooded grassland or grazing marsh). Some of the NRL's broader provisions provide opportunities for farms across the board to invest in their ecosystem services and climate adaptation, others will affect a much smaller subset. The evidence shows that these impacts can be positive, especially long-term. At the same time, given short term costs for changing practices or opportunity costs for some land managers of ceasing or scaling back production, there is a clear case for supporting such changes to ongoing management with public funding, such as that available in the CAP and other EU funds, and providing farmers and foresters with better advice, tools, research, and long-term perspectives.



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