

Scientists support the EU's Green Deal and reject the unjustified argumentation against the Sustainable Use Regulation and the Nature Restoration Law

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The scientific community is deeply concerned about the ongoing discussions on the EU's Green Deal. Of particular concern are the current criticisms targeting the Sustainable Use Regulation (SUR) and Nature Restoration Law (NRL). Opponents of these new regulations argue that they will have adverse effects on farmers, fisheries and society at large, suggesting that they will threaten food security and kill jobs. Those claims not only lack scientific evidence, but even contradict it, as we highlight below. Against this background, **we urge policy makers to continue the legislative procedure for the SUR and the NRL**, as cornerstones of food security and human health; and we invite opponents of the Green Deal for an open-minded consultation with scientists.

Claim 1 by opponents of the SUR and NRL: The new regulations will reduce yields and overall production, posing a threat to food security.

Scientific evidence: Protecting and restoring nature, and reducing the use of agrochemicals and pollutants, are essential for maintaining long-term production and enhancing food security.

- The biggest risks to food security stem from climate change ([Pörtner et al., 2021](#)) and the loss of biodiversity and ecosystem services ([IPBES, 2019](#)) such as pollination ([FAO, 2022](#)) and pest control ([IPPC Secretariat, 2021](#)).
- From a biodiversity perspective, 50% of land cultivated with pollinator-dependent crops face a deficit in pollinators ([European Commission, 2022](#)), which are under numerous pressures from pesticides, habitat destruction and climate change ([CBD, 2018](#)).
- SUR and NRL have the potential to greatly contribute to sustainable agrifood systems by increasing functional diversity in agricultural landscapes ([Tschamtko et al., 2012](#)) and supporting landscape features and a vegetation cover that can stabilise microclimate, support pest control and pollination, and reduce soil erosion (e.g. [Petit & Landis, 2023](#)).

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Claim 2 by opponents of the NRL: Marine protected areas will harm fisheries.

Scientific evidence: Marine protected areas boost fisheries.

- The fraction of marine fish stocks harvested at an unsustainable level globally has increased from 10% in the 1970s to almost 35% in 2017 ([Stankus, 2021](#)). Especially large (>1.5m) commercially relevant species are under exceptionally high risk of extinction ([Fernandes et al., 2017](#)).
- Setting marine protected areas, especially large and fully protected, has been shown to be the most effective means to retain and even boost yields for fisheries, thanks to the spillover effect of fish and invertebrates by providing nursing grounds ([Edgar et al. 2014](#); [Gorud-Colvert et al. 2021](#)).
- The scientific evidence is thus crystal clear: marine protected areas boost fisheries, and are likely to persist under climate change ([Frid et al. 2023](#)), hence they are essential to preserve fish stocks now and in the future.

Claim 3 by opponents of the SUR and NRL: these new regulations will kill jobs.

Scientific Evidence: SUR and NRL can create new employment opportunities and stimulate innovation.

- In 2020, there were 5.3 million fewer farms in the EU than in 2005 (37% loss). Structural changes and reduced demand for labour due to technological progress are the primary drivers of these losses. Current policies, especially the CAP, fail to reverse these trends ([Scown et al. 2020](#); [Pe'er et al. 2021](#)).
- By supporting a business model based on extensification and innovation for developing agroecological practices, which tends to be more labour intensive (Vona 2019), both SUR and NRL can stimulate employment in the agricultural and food system sectors ([Plieninger et al. 2012](#)). In the longer term, such investments can prevent the collapse of agricultural productions, and with them the collapse of jobs, due to climate changes and environmental degradation ([Pörtner et al. 2021](#); [IPBES 2018](#)).

Claim 4 by opponents of the SUR and NRL: The new regulations will place a burden on society.

Scientific Evidence: The current production model is expensive for society and cannot be sustained in the long-run. It also exacerbates future costs of environmental degradation.

- The EU agricultural sector is already a considerable burden on society: taxpayers in the EU pay once, through the subsidies under Common Agricultural Policy (55 bn. EUR p.a. in 2022), and a second time, by paying the externalised environmental costs (e.g. 100 bn. EUR/year in Germany alone; [Kurth et al. 2019](#)).
- Dramatic yield losses due to droughts caused by climate change ([Schmitt et al. 2022](#)) are estimated to about 7-8 bn. EUR in Germany in 2018 ([Trenczek et al. 2022](#)), and compensation costs to farmers estimated to 572 Mio. EUR in Germany, Sweden and Poland alone ([D'Agostino 2018](#), [Bastos et al. 2020](#)).
- Economic losses of up to several hundred billion Euros have been predicted for European forestry until the end of the century due to climate change ([Hanewinkel et al., 2013](#)).
- Overall, estimations show that restoring areas protected under the Habitats Directive to a good condition over 10% of the EU territory would cost in total circa €154 billion. The projected benefits of restoring the EU's biodiversity-rich habitats are expected to reach €1,860 billion. This is a cost benefit ratio of 1:12 in favour of benefits ([European Commission, 2022](#)).
- Globally, the gap for financing biodiversity recovery until 2030 is estimated at ca. 720-960 bn. USD p.a. (Deutz et al 2020), while ecosystem services of biodiversity are estimated at 125-140 trillion USD/year ([OECD 2019](#)).
- When accounting for all costs to all stakeholders, including the cost of policy inaction, the benefits exceed the costs by at least an order of magnitude on economic terms, and far more in

social values. Thus, the SUR and NRL should be considered as an exceptionally cost-efficient investment.

Claim 5 by opponents of the SUR and NRL: The new regulations will prevent Europe from feeding the world.

Scientific evidence: Europe can contribute to food security by reducing the drivers of global food scarcity, such as high meat consumption and the use of biofuels.

- Global food security is not directly linked to European food production but rather determined by many other factors such as food accessibility or food waste ([Tschardt et al. 2012](#)) or by high consumption of meat in industrial countries ([Parlasca & Qaim 2022](#)).
- The EU can best contribute to global food security by reducing its own meat production and overconsumption ([Sun et al. 2022](#)); reducing food waste ([Shepon et al. 2018](#)); and phasing out the use of first generation biofuels ([Iacobuță et al. 2022](#); [Lakner 2023](#)).
- Conserving 20% of (semi-)natural habitat in farmed landscapes is both possible and desirable to mitigate climate change and increase biodiversity and associated ecosystem services. This can enhance food security in the long term ([von Jeetze et al. 2023](#)), by making food production and consumption better adapted to climate change.

Claim 6 by opponents of the SUR and NRL: These new regulations will be too risky in times of the war in Ukraine.

Evidence: Short-term changes in supply and prices do not indicate any risk to food sovereignty or a need to enhance production.

- The military aggression of Russia in Ukraine highlighted the dependence of the current production model on imported energy or agrochemicals ([Creutzig 2022](#)).
- Despite short-term disruptions of supply chains and prices, too low prices in the Eastern EU and a claimed regional oversupply of Ukrainian grain led the EU Commission to restrict deliveries of Ukrainian agricultural commodities from March 2023 onwards. These circumstances contradict the claim that Europe is facing a sharp scarcity of commodities due to the war.
- The war has been, however, (mis-)used as an argument for a derogation from the obligation to provide 4% of arable land as fallow land (Ecological Focus Areas and GAEC 8), that is a key habitat for biodiversity (e.g. [Traba & Morales 2019](#), [Hertzog et al. 2023](#)) and delivers key ecosystem services to retain production. Grain production on these low-productivity lands are negligible and do not significantly contribute to global food security ([Lakner 2023](#)). The derogation thus delivered marginal benefits, at a high risk of accelerating biodiversity losses ([Jeanneret et al., 2021](#)) and, with them, risks to long-term food security.

To conclude:

To tackle the challenges ahead of us, effective nature restoration and shifting towards sustainable use of resources are essential to address the needs of consumers, and producers during global change both within and beyond the EU.

A societal debate and appropriate, effective and efficient policy instruments and reforms are welcomed and necessary to foster much faster transitions:

Societal and political debates are essential in democratic societies, and particularly valuable for driving well informed transitions in society. Such transitions are urgently needed in an era of multiple environmental and socio-economic crises. To this end, signatories to this document are welcoming, and keen to support, an evidence-based dialogue.

Signatories

To become a signatory see [link here](#)

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