

The increasing threat of desertification to Europe

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Key message

The rising threat of desertification, likely to be exacerbated by increasing climatic and anthropogenic drivers in the future, requires immediate and comprehensive action. In the EU, efforts to address desertification have traditionally been plagued by the absence of a centralised EU-level strategy. Policies which do tackle desertification in some form, and to a certain extent, are often sectoral and fragmented in nature.

Nonetheless, the EU council's recent adoption of conclusion to address the challenges brought upon by land degradation and desertification signals an increasing recognition of the need to take action. Revised and new policies, for instance the Common Agricultural Policy and Nature Restoration Law respectively, provide opportunities to combat the drivers and impacts of desertification. However, a lack of binding targets and continued absence of cohesion between policies reflects the distance policies still need to travel in order to combat desertification comprehensively in Europe.

Background

Land degradation affects around 1.3 billion people and 1.56 billion hectares of land globally^{1,2}- with 12 million hectares being degraded every year³. While often associated with other continents, desertification – a form of land degradation occurring in arid, semi-arid and sub-humid regions – is an escalating issue within the European Union (EU) as well. In Europe, particularly the Southern, Central and Eastern regions, close to 23% of land are deemed to be vulnerable to degradation⁴. The growing pressures from climate change and human activities are likely to increase the vulnerability of land in Europe⁵. The European Environment Agency's (EEA) recent Climate Risk Assessment⁶ found Europe to be the world's fastest warming continent, with extreme heat, drought and threat to water security – some of the key drivers of land degradation – increasing in frequency. Adding to this is the fact that 60-70% of soils in the EU are assessed to be in unhealthy condition⁷. Soil erosion rates are also estimated to increase by up to 22.5% by 2050⁸; exacerbating the risk of desertification and underscoring the critical need for action. Recognising the

¹ <https://data.unccd.int/>

² Reported figures may vary across sources due to differences in definitions and indicators. Our figures are derived from UNCCD Data Dashboard (referenced above).

³ https://www.diplomatie.gouv.fr/IMG/pdf/dos-desertification-ang_cle81131a.pdf

⁴ <https://eu.boell.org/en/SoilAtlas>

⁵ Hessel, R., Reed, M.S., Geeson, N., Ritsema, C.J., Van Lynden, G., Karavitis, C.A., Schwilch, G., Jetten, V., Burger, P., Van Der Werff Ten Bosch, M.J. and Verzaandvoort, S., 2014. From framework to action: the DESIRE approach to combat desertification. *Environmental management*, 54, pp.935-950.

⁶ <https://www.eea.europa.eu/publications/european-climate-risk-assessment>

⁷ Panagos, P. and Montanarella, L., 2018. Soil Thematic Strategy: An important contribution to policy support, research, data development and raising the awareness. *Current Opinion in Environmental Science & Health*, 5, pp.38-41.

⁸ <https://publications.jrc.ec.europa.eu/repository/handle/JRC137600>

severity of this issue, the EU Council has adopted conclusions⁹ emphasising the need to combat land degradation and desertification. This response not only signals the growing severity of the threat that land degradation poses but also points towards a growing recognition that more needs to be done at the European level to halt land degradation and desertification.

The burgeoning threat of land degradation to Europe necessitates a better understanding of the measures currently in place and opportunities for strengthening policies which address land degradation in Europe. Over the coming months, IEEP will examine the existing policy framework addressing land degradation, evaluate its effectiveness in mitigating impacts, and identify gaps and opportunities for enhanced action at the EU level, along with selected countries as part of the [TERRASAFE project](#) (further information found in Box 1), with a particular interest on current efforts and changes since the publication of European Court of Auditors (ECA) key report on combatting desertification in 2018¹⁰. This brief presents the findings of the initial scoping exercise, identifying the most relevant EU-level policies and a first assessment of key policies, including the Common Agricultural Policy (CAP), the Water Framework Directive (WFD), the Nature Restoration Law (NRL) and the proposed Soil Monitoring Law (SML).

Box 1. The Horizon Europe TERRASAFE project

In unison with policy action, research and innovation will play a vital role in combatting desertification. The 'Soil Deal for Europe' Mission provides an avenue to fund and build research geared towards tackling the soil related challenges that Europe face today - many of which drive or are driven by land degradation. **TERRASAFE** is one such project funded under this Mission and seeks to combat desertification in the Mediterranean region. Recognising the importance of context specific solutions, the project seeks to collaborate with local communities in five pilot sites (Spain, Italy, Romania, Cyprus and Tunisia) to co-develop and co-implement nature-based technological and social innovations which are tailored to specific challenges faced by these communities (<https://terrasafe.eu/>).

⁹ <https://data.consilium.europa.eu/doc/document/ST-14146-2024-INIT/en/pdf>

¹⁰ <https://www.eca.europa.eu/en/publications?did=48393>

How does desertification affect nature and people?

Impacts of land degradation are multifaceted, often transcending biophysical or ecological dimensions (e.g., detrimental effects to biodiversity and ecosystem functions, together with the way we adapt and response to climate change), yielding social and economic repercussions as well. This includes impact on food security, increase in poverty, conflict and migration¹¹ – most of which are linked and exacerbate one another. For instance, Halbac-Cotoara-Zamfir, et al. (2020)¹², in their review of the drivers of land degradation in Mediterranean Europe, identified close links between



soil erosion, land abandonment and depopulation in regions such as the Spanish Pyrenees and Southern Italy - with depopulation being the main driver towards the land abandonment and degradation. In such cases, populations become more isolated geographically, have decreased accessibility to public services and face greater risk of natural disasters. Subsequently, it has been found that this could lead to economic disadvantages which drives migration and worsen conditions of poverty – continuing a vicious cycle that worsens both the drivers of, and impacts from, land degradation. Other studies have also demonstrated similar effects of land degradation, often highlighting how the “*interlinked social, economic and environmental change*”¹³ driven by land degradation and desertification have adverse impacts on livelihoods. Vulnerability to these impacts are further amplified in developing countries, as there is often inadequate infrastructure and capital required to address the threats

Box 2. Are land degradation and desertification the same?

Land degradation is broadly understood as the decline or loss in biodiversity, ecosystem functions or ecosystem services in any terrestrial and associated aquatic ecosystems arising from human activities and human caused processes. Desertification is defined as land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities (IPBES, 2018). Consequently, it affects the land’s capacity to support, amongst other things, food production and ecosystem services.

¹¹ <https://www.genevaenvironmentnetwork.org/resources/updates/desertification-land-degradation-and-drought-and-the-role-of-geneva/>

¹² Halbac-Cotoara-Zamfir, R., Smiraglia, D., Quaranta, G., Salvia, R., Salvati, L. and Giménez-Morera, A., 2020. Land degradation and mitigation policies in the Mediterranean region: A brief commentary. *Sustainability*, 12(20), p.8313.

¹³ Kelly, C., Ferrara, A., Wilson, G.A., Ripullone, F., Nolè, A., Harmer, N. and Salvati, L., 2015. Community resilience and land degradation in forest and shrubland socio-ecological systems: Evidence from Gorgoglione, Basilicata, Italy. *Land use policy*, 46, pp.11-20.

brought about by land degradation¹⁴. Such is the extensiveness of land degradation’s impact on nature and humans.

How do we prevent and reduce desertification?

Along with climate change, intensive agriculture remains one of the key drivers of desertification in Europe¹⁵. Farming practices such as tillage, irrigation and the use of herbicides and pesticides¹⁴ have resulted in extra pressures on the land and soil fertility, which in turn have led to soil erosion¹⁶. Conversely, as one of the largest carbon sinks globally, soil has the potential to play a key role in capturing CO₂ emissions³. This makes the protection of soil resources and combatting desertification even more pertinent. Table 1 below presents a range of solutions to combatting desertification.

Table 1: The various solutions to address desertification. Adapted from: <https://soilhealthbenchmarks.eu/soil-at-risk-desertification-impacts-and-solutions/>

Type of solution	Examples
<p>Sustainable land management</p> <p><i>Given that agriculture is a major contributor to desertification, the adoption of sustainable practices offers avenues to address and reverse this issue.</i></p>	<ul style="list-style-type: none"> • Agroforestry – trees and shrubs are integrated into the farm to enhance soil health • Crop rotation – various crops are planted for nutrient preservation and pest prevention • Composting – organic materials are used for soil enrichment • Efficient irrigation – water saving measures are adopted • Holistic grazing – livestock are put on rotation to provide time for soil to recover
<p>Restoration of ecosystems</p> <p><i>Ecosystems play a role in reducing erosion and improving the fertility of the soil – as such, efforts to restore or enhance these ecosystems will go a long way in tackling desertification.</i></p>	<ul style="list-style-type: none"> • Reforestation – restoration of forest and/or woodland. This stabilises land and enhances biodiversity. • Wetland restoration – returning wetlands to its natural condition, which can enhance biodiversity and water quality, together with sequester carbon.

¹⁴ AbdelRahman, M.A., 2023. An overview of land degradation, desertification and sustainable land management using GIS and remote sensing applications. Rendiconti Lincei. Scienze Fisiche e Naturali, 34(3), pp.767-808.

¹⁵ <https://eu.boell.org/en/SoilAtlas-PDF>

¹⁶ Rodrigo Comino, J., 2022. Desertification and degradation risks vs poverty: A Key Topic in Mediterranean Europe.

International efforts

- Co-ordinated action on a global scale will be needed to tackle desertification comprehensively. On an international level, the UN Convention to Combat Desertification (UNCCD) is the only policy currently addressing desertification, with a strong focus on promoting the role of healthy lands. The latest UNCCD COP16 also emphasised the role of private sector and financial institutions, alongside countries, to combat desertification.

How does the EU policy framework address desertification?

Despite the wide-ranging detrimental impacts that desertification has, the UN Convention to Combat Desertification (UNCCD) currently remains the only policy, and only legally binding one, that directly deals with desertification. Each country, which declares itself to be affected by desertification, is obliged to enact a National Action Plan (NAP) -- with the participation of stakeholders affected by desertification. The NAP is prepared, coordinated and implemented by a National Coordination Body but are often found to be constrained by the minimal and varying legal status, financial resources and effectiveness¹⁰. This has added to criticisms that the implementation record of UNCCD has been wanting - particularly within the Mediterranean region of Europe¹⁰. Nonetheless, addressing desertification and its drivers remain a crucial key objective, with the UNCCD setting a target of zero net land degradation (or land degradation neutrality - LDN) by 2030.

The UNCCD COP16, which was held in December of 2023, further underlined this ambition. A priority during Saudi Arabia's COP 16 presidency was to mobilise not only nations but also the private sector, financial institutions, as well as other key stakeholders, to boost current efforts to address desertification and land degradation. This comes in light of UNCCD findings, released during the COP event, which found drylands around the world to be expanding, and that there exists a £278 billion annual funding gap for land restoration and to become more drought resilient¹⁷. Currently, thirteen EU Member States have declared themselves to be at risk of desertification^{10,18}.

Focusing on Europe, while various strategies, action plans, and programmes—such as the Common Agricultural Policy and the EU Climate Adaptation Strategy—have

¹⁷ <https://www.unccdcop16.org/news-room/news-details?lang=en&id=184>

¹⁸ The thirteen Member States are: *Bulgaria, Croatia, Cyprus, Greece, Hungary, Italy, Spain, Latvia, Malta, Portugal, Romania, Slovakia and Slovenia.*

relevance, there is currently no EU-level strategy in place that directly combats desertification¹⁹. Only a handful of Member States possess specific legislation related to soil²⁰. In its 2018 Special Report, the ECA highlighted significant gaps in the EU's approach to addressing desertification. It found that EU actions lack coherence, and reiterated the lack of a dedicated legislation or integrated framework specifically targeting land degradation. Unlike other environmental resources such as air and water, which are governed by comprehensive EU directives, soil remains unprotected by similar legislation. This is reflected by the fact that EU has not developed an Action Programme for desertification on an EU level under UNCCD, since it has not declared itself to be impacted by desertification¹². This has left Member States to declare desertification based on their own self-assessment. Insufficient progress has therefore been made in terms of combatting desertification, as only a few Member States are taking action depending on the level of threat they are facing. Moreover, the complex interplay of drivers and causes of desertification adds further complications as to how desertification can be addressed⁵. This is one reason that scholars have attributed as to why policy action, not just in EU but around the world, has thus far been sectoral and uncoordinated; running the risk of overlaps, duplication of efforts or even contradictory objectives^{19,21}.

The first efforts to address desertification to some extent on an EU level was the Communication “[Towards a Thematic Strategy for Soil Protection](#)” in 2002, which aimed to address concerns around soil protection²². This was borne from the Commission’s recognition of the importance of a holistic approach and addressing soil-related issues and the need for legislation that had a sole focus on soil²³. As such, a Soil Framework Directive was proposed as part of the “[Thematic Strategy for Soil Protection](#)”. However, the proposed directive did not gain the support of the Council and was withdrawn in 2014 having been pending for eight years. The inability to reach an agreement for the Directive was due to concerns that this would interfere with soil policies of individual nations and that soil should be addressed locally rather than at an EU-level – with opponents often claiming that soils, and its issues, are unique to local context and thus should be dealt

¹⁹ https://www.eca.europa.eu/Lists/ECADocuments/SR18_33/SR_DESERTIFICATION_EN.pdf

²⁰ Stankovics, P., Tóth, G. and Tóth, Z., 2018. Identifying gaps between the legislative tools of soil protection in the EU member states for a common European soil protection legislation. *Sustainability*, 10(8), p.2886.

²¹ Lefèvre, C., Balks, M., Nziguheba, G. and Poch, R.M., 2021. Guest editorial—Policies and practices in action to address soil erosion: A special issue from the Global Symposium on Soil Erosion 2019. *Land Degradation & Development*, 32(12), pp.3389-3392.

²² Panagos, P. and Montanarella, L., 2018. Soil Thematic Strategy: An important contribution to policy support, research, data development and raising the awareness. *Current Opinion in Environmental Science & Health*, 5, pp.38-41.

²³ Glæsner, N., Helming, K. and De Vries, W., 2014. Do current European policies prevent soil threats and support soil functions?. *Sustainability*, 6(12), pp.9538-9563.

nationally²⁴. This was compounded by fears of the additional cost of soil protection (by adopting this Directive) and extra policy obligations that come with it¹⁴.

On the other hand, despite the failure to agree on the proposed Directive, the “Thematic Strategy for Soil Protection” was subsequently adopted by the EU Commission and sought to have greater integration of soil into various policy areas. For instance, the monitoring of soil erosion and soil organic carbon was a part of the 2014-2020 cycle of the Common Agricultural Policy. However, while the Strategy has emphasised stronger integration of soil into policies, and more research on this issue, the non-binding nature of these measures present limits as to how effective this Strategy could be – especially when it comes to implementing this on a broad range of legislations (i.e., agriculture, climate change, biodiversity, etc.)¹⁴.



Nonetheless, while there are no EU policies that specifically focus on desertification, there are new and revised policies, such as the Nature Restoration Law (NRL) and Common Agriculture Policy (CAP)²⁵ respectively, which provide opportunities for further action to be taken. The Thematic Strategy for Soil Protection 2006 is now replaced by the EU Soil strategy for 2030, which has set a goal of having all EU soils in healthy condition by 2050. Moreover, it proposes setting some legally binding targets in the NRL. Encouragingly as well, desertification now represents a high priority within the EU policy agenda, reflected by the Council’s adoption of the conclusions in October of 2024²⁶ to tackle desertification and land degradation. A goal has also been set for EU and Member states to achieve LDN by 2030¹².

The Nature Restoration Law

The recent adoption of the Nature Restoration Law provides a clear expression of the EU’s priority to increase the restoration of ecosystem and habitats across Europe. The law now requires Member States to establish a National Restoration Plan by 2026, which includes a target of restoring 30% of terrestrial, coastal, freshwater, and marine ecosystems to

²⁴ Ruppel, O.C., 2022. Overview of international soil law. *Soil Security*, 6, p.100056.

²⁵ For the Programming Period of 2023-2027

²⁶ <https://data.consilium.europa.eu/doc/document/ST-14146-2024-INIT/en/pdf>

good condition by 2030. In relation to actions addressing desertification, Article 9²⁷ requires Member States to put in place measures to enhance biodiversity in agricultural ecosystems. It has set indicators, including organic carbon stock in soils and the share of agricultural land with high-diversity landscape features, for which Member States need to achieve an increasing trend. It also requires Member States to establish restoration measures for drained peatlands, such as restoring 30% of peatland by 2030 and 50% by 2050 – with increasing portions of these peatland to be rewetted. Peatland restoration results in enhanced soil health²⁸ and improved water regulation²⁹. However, the measures under the National Restoration Plans will be voluntary for farmers – highlighting the recurring theme of the lack of binding targets and measures in place to address land degradation. Moreover, further assessment of the NRL shows that there are limited provisions within the Law that address desertification, with the planting of an additional three billion trees by 2030 (Article 13) – which will prevent further soil erosion – being the only other of relevance. Article 14 briefly mentions the need for nations to account for synergies with land degradation neutrality when putting in place their respective National Restoration Plans but remains vague in what that entails in practical terms and how it will be accomplished.

The proposed Soil Monitoring Law

Efforts to continue to enact an EU level soil protection legislation have come in the form of a proposed Soil Monitoring Law. This reflects the main commitments of the Soil Strategy of 2030 and includes an established definition of what healthy soils look like along with requiring Member States to establish a coherent monitoring framework for soils across EU. The proposed Soil Monitoring Law in essence highlights the need for monitoring soil health, assessing soil resilience and establishing actions which will enhance soil health³⁰. This will include a harmonised EU methodology and rules for soil health monitoring for all Member States across the EU – although Member States are given some flexibility in how they implement the directive. The law is closely linked with a wide range of existing policies around the environment, agriculture and biodiversity – such as the CAP and Water Framework Directive – perhaps highlighting the growing recognition of the need for a more holistic and comprehensive approach towards protecting soil health and combatting desertification; a key gap identified earlier in the

²⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1991&qid=1722240349976>

²⁸ <https://bioclearearth.com/projects/peatland-restoration-impacts-on-soil-health-and-microbial-communities#:~:text=Improving%20soil%20health%20through%20rewetting,health%20and%20therefore%20plant%20growth.>

²⁹ https://globalpeatlands.org/sites/default/files/2023-07/QA-peatland-rewetting_fin.pdf

³⁰ Arias-Navarro, C.(editor), Baritz, R.(editor) and Jones, A.(editor), 2024

brief. Nonetheless, criticisms abound with regards to the proposed Soil Monitoring Law. Once again, there remains a lack of legally binding elements to the objectives set out in the Law. In addition, Member States are under no requirement to rectify their course of action if monitoring identifies the state of soils to be unhealthy – with a lack of penalties in place when Member States have failed to comply. This is compounded by what is perceived as inadequate frequency of measurement and reporting cycles³¹, together with requirements focusing on aspects which are easiest to monitor (i.e., soil sealing and degradation).

The general approach of the Soil Monitoring Law was adopted by the Council on 17 June 2024. Following this, on 14 October 2024, Member States supported the EU Council’s conclusions, which had expressed the need to put forward an “*integrated EU wide Action Plan*” which will address desertification, land and soil degradation. This is in light of the Council’s recognition of the distance needed to travel in order to realise the EU’s target of Land Degradation Neutrality by 2030. However, more recently, negotiations in the latest trilogue for the proposed Soil Monitoring law had broken down after the parties - the European Parliament, Council of the European Union, and European People’s party - failed to reach an agreement due to several points of contention. This included disagreements on the stipulations for EU countries to define and promote sustainable soil management practices, divergences in views on the land take mitigation principles, together with how the soil health monitoring and assessment framework should work. The impasse in this trilogue negotiations could spell further danger for the proposed law, as this could mean that the Parliament and Council would need to find a compromise in the second reading; weakening what critics have deemed to be an already watered down Law.

The Common Agricultural Policy

Agriculture remains one of the most significant drivers of desertification in Europe. The sector, and the management practices it adopts, is heavily influenced by the Common Agricultural Policy (CAP). As such, measures have been implemented within the CAP to mitigate the impacts of agriculture practices and intensification – especially on soil health. The CAP’s fifth Specific Objective in particular aims to promote sustainable natural resource management, including soil protection and reduced chemical dependency. In addition, payments under the CAP are tied to statutory management requirements (SMRs) and good agricultural and environmental conditions (GAECs), some

³¹ <https://tracker.carbongap.org/policy/soil-monitoring-law/>

of which focus on soil preservation (e.g., GAEC 5 – Tillage management to reduce the risk of soil degradation and erosion). Eco-schemes and agri-environment and climate



measures (AECMs) also offer funding for practices enhancing soil health and carbon sequestration. Nonetheless, findings from Birdlife Europe and European Environmental Bureau brief³² found that the CAP Strategic Plans inadequately addresses

soil protection from further degradation. For instance, GAEC 5 was found to be “applied in limited circumstances and must be more ambitious”³². Moreover, while there are a range of interventions which Member States utilise – for example the Basic Income Support for Sustainability (BISS)³³ and Eco-schemes for no-till and promotion of organic fertilisation³² – to address soil health and protection, none of the CAP Strategic Plans specifically set out actions to address land degradation or desertification directly.

The continued allocation of spending to harmful subsidies is also a cause for concern. Studies have noted that such harmful subsidies are the very economic drivers which worsen land degradation processes, and while pressures from these subsidies have gradually decreased over the years, they still apply a significant amount of pressure on agriculture³⁴. A WWF report³⁵ indicated that around €34-48 billion EU subsidies are being used as harmful subsidies – mostly through the CAP³⁶. This has included funding from the European Agricultural Guarantee Fund (EAGF) to increase livestock and crop production, subsidies for water-demanding crops, and farm modernisation investments which perpetuate harmful and unsustainable agriculture practices. Therefore, and as mentioned in the [Strategic Dialogue on the Future of EU agriculture report](#), subsidies would need to be better targeted and oriented at specific desired outcomes, yielding greater benefits to both farmers and ecosystems services.

³² <https://eeb.org/wp-content/uploads/2022/06/Briefing-Soil-Health-No-Branding-V2.pdf>

³³ [https://www.europarl.europa.eu/RegData/etudes/STUD/2023/747255/IPOL_STU\(2023\)747255_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2023/747255/IPOL_STU(2023)747255_EN.pdf)

³⁴ Kelly, C., Ferrara, A., Wilson, G.A., Ripullone, F., Nolè, A., Harmer, N. and Salvati, L., 2015. Community resilience and land degradation in forest and shrubland socio-ecological systems: Evidence from Gorgoglione, Basilicata, Italy. *Land use policy*, 46, pp.11-20.

³⁵ https://wwfeu.awsassets.panda.org/downloads/wwf---harmful-subsidies-report_executive-summary.pdf

³⁶ The report uses the *EU 2021-2027 Multiannual Financial Framework* for its evaluation.

Another development that has sparked concern is the adoption of a range of measures which sought to simplify the CAP in early 2024³⁷. The decision, criticised for the lack of assessment or debate, was meant to provide farmers more flexibility in meeting conditionality and lessen the administrative burden. However, it also means that the mandatory requirements in GAECs - which were in place to safeguard biodiversity and soil health - have been weakened. For instance, GAECs 5, 6 and 7 were weakened or made voluntary, and Member States are now allowed to exempt certain soil types, certain crops and farming system, from meeting requirements in GAEC 5 and 6 (tillage and soil cover respectively). This could signal a step backwards to soil protection, improving soil health and further endanger efforts to comprehensively combat desertification in Europe³⁸.

The Water Framework Directive

Water resources – or the mismanagement of it – which stems from a range of drivers such as irrigation practices, presents another key pressure of desertification. Measures such as the Water Framework Directive (WFD) which was adopted in 2000, will play an equally crucial role in the tackling of the drivers of desertification. The main tenet of the WFD is for integrated water resource management. Member States are required to preserve, enhance, and restore water bodies – achieving a minimum of “*Good Status*” water quality by 2027 – in particular through the development and implementation of a River Basin Management Plan, which itself must include Programmes of Measures which establish specific actions, regular monitoring to assess the status of water bodies, and incorporate water management into sectors such as agriculture³⁹. Pollution from agricultural activities will thus have to be reduced and groundwater quality will have to be maintained. Therefore, ensuring the sustainable use of water, which entails the protection of soil, lowers the risk of desertification. Further to that is the Commission’s adoption of its conclusion for a water resilience strategy in its Strategic Agenda for 2024-2029 – an initiative to enhance water security in Europe. However, the last-minute inclusion of water resilience in the Strategic Agenda and certain proposed exemptions to the WFD⁴⁰ further reflects the low priority placed on this issue. Moreover, these policies and initiatives remain constrained to the extent to which they can contribute to tackling

³⁷ [https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/760414/EPRS_BRI\(2024\)760414_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/760414/EPRS_BRI(2024)760414_EN.pdf)

³⁸ <https://www.euractiv.com/section/agriculture-food/news/cap-simplification-will-get-more-and-more-complicated/>

³⁹ <https://www.wareg.org/articles/the-essence-of-the-water-framework-directive/>

⁴⁰ <https://www.aquatechtrade.com/news/circular-economy/water-resilience-added-to-eu-strategic-agenda>

desertification, given their lack of specific requirements related to soil protection and restoration.

Final reflections and conclusion

Several developments over recent months have also emphasised the dire state of soils in Europe once again, and the urgent need for action. In November of 2024, the New Soil Atlas report was published. Authored by Heinrich-Böll-Stiftung and TMG Think Tank for Sustainability, the report once again highlights the importance of soil to nature and humans, reiterating for instance the impacts of desertification on agricultural productivity and conversely the exacerbating effect of agricultural intensification on desertification. The report also finds 23% of Europe is moderately sensitive to desertification, with Hungary, Bulgaria, Spain and Italy being some of the most affected countries by desertification⁴¹ - a trend which is in congruent with findings from JRC's recently released State of Soils in Europe report, which estimated that overall soil erosion in EU totalled close to 1 billion tonnes annually⁴². This is likely to be worsen through the climate crisis, and will in turn contribute to the climate crisis as CO₂ emissions from soil degradation increase. There is particular concern for peatlands, which act as important carbon sinks but can conversely contribute to carbon emissions when deteriorated; a state in which 50% of peatlands are estimated to be in currently, and many of which are considered beyond restoration⁴³. This has led the Soil Atlas report to advocate for a coordinated effort to protect soils at an EU level – laying forth the political framework conditions needed for long-term soil protection to be successful – including the need for an increased understanding of areas in Europe that are increasingly prone to desertification.

These developments echo the growing recognition of the increasing threat of desertification to Europe. The impacts of this problem are far-reaching – not only in biophysical and ecological terms but through social and economic repercussions as well. The variety of policy areas, and thus Commission services, that are involved in addressing desertification on an EU level (mainly through soil erosion and health) reflects the complexity and wide-ranging causes and impacts of desertification, but also crucially highlights that the EU's longstanding failure to address this problem directly. While this issue has escalated up the political agenda in the EU in recent times, there remains an

⁴¹<https://eu.boell.org/en/SoilAtlas-PDF>

⁴²<https://publications.jrc.ec.europa.eu/repository/handle/JRC137600>

⁴³<https://publications.jrc.ec.europa.eu/repository/handle/JRC137600>

absence of policy that directly combats desertification on an EU level. This is also complicated by the variable extent to which EU national policies have adopted soil protection – with only a few having binding measures – and soil related measures have hardly been integrated into other national policies related to the environment. The fragmented sectoral nature of the response and general lack of co-ordination between policies and programmes further emphasises the necessity for one centralised vehicle to deliver a coherent response to land degradation and desertification. Further to this, the current lack of a full assessment of the land degradation in Europe hinders our understanding of the full scale of this problem. While a suite of current policies provides an opportunity to address the various drivers and impacts of desertification, absence of any legally binding targets and obligations, such as in the proposed Soil Monitoring Law and revised CAP, weakens any effort to tackle desertification and land degradation more comprehensively.

