Planning Reform Working Paper: Development and Nature Recovery

Written Submission of the Institution of Environmental Sciences

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The <u>Institution of Environmental Sciences</u> (the IES) is at the forefront of uniting the environmental sciences around a shared goal: to work with speed, vision and expertise to solve the world's most pressing environmental challenges, together. As the global professional membership body for environmental scientists, we support a diverse network of professionals all over the world – and at every stage of their education and careers – to connect, develop, progress and inspire.

As a professional body, the IES represents the voices of environmental professionals, sharing insights from the front lines of work with the environment. The interdisciplinary background of the IES family makes it particularly well-placed to address interconnected environmental challenges such as planning and economics, drawing members working in climate change, air quality, land condition, water, impact assessment, agriculture, nature, and anywhere else where environmental work is underpinned by science.

The Institution can elaborate on any of the details in this response with further evidence in whatever form is most appropriate. Our membership includes over 6000 environmental professionals who are well-positioned to share insights directly from the point of policy implementation.

Executive Summary

- The IES supports the Government's ambition for a transformative approach to land use to deliver sustainable wellbeing and a country with thriving people, a healthy economy, and a flourishing environment. The Land Use Framework will be a fundamental feature of such an approach, as long as it is set up to deliver and provides the right incentives to do so.
- Achieving a multifunctional approach in practice is crucial, because so many social, economic, and environmental outcomes can be achieved – or forfeited – through our approach to land use. Equally, it must be recognised that there are likely to be trade-offs, so a holistic, systemic, and strategic approach is necessary to determine what can realistically be achieved and to encourage effective action.
- Currently, there are several areas where further information is required to know whether the Land Use Framework will deliver multifunctional social, economic, and environmental benefits. Details of how the Land Use Framework will work with other policies will be particularly important.
- In particular, the assumptions and evidence underpinning the Analytical Annex are not sufficient to assess the scale and type of land use change needed. A longer timeframe should be embedded; deeper economic analysis of the land market and food production is required; a broader perspective of the environment would be beneficial; greater regional variance should be accommodated; and the qualitative evidence base should be more representative.

- The Land Use Framework provides a substantial opportunity to address historic market failures in the land market, as well as the economic systems underpinning food production. This opportunity must be taken, so the Framework should address how farmers can be fairly incentivised to provide environmental benefits and how land use and the planning system can deliver appropriate multifunctional solutions.
- Strategic planning should underpin any approach to land use to avoid future risks. This should be informed by a wide range of desirable outcomes, modelling of land and water systems, and planning against a range of future scenarios.
- Even the best possible version of the Land Use Framework will rely on effective delivery on the ground, so resources and capacity must be available to delivery organisations, particularly local authorities.

We would be happy to follow up any specific requests for additional information, or to participate in future workshops or discussions. We have members working in land and water management, conservation, and other areas of environmental science.

This response was developed with support from the IES communities, which are expert groups of members brought together around a shared professional interest, goal, or challenge. In particular, the response was supported by members from the Foundation for Water Research (FWR) and the Land Condition Community (LCC).

Question 1: To what extent do you agree or disagree with our assessment of the scale and type of land use change needed, as set out in this consultation and the Analytical Annex?

Disagree

Please explain your response, including your views on the potential scale of change and the type of change needed, including any specific types of change.

The IES disagrees with the assessment because of the underlying assumptions used to produce it. Though it is difficult to assess the implications of those assumptions for the scale and type of land use change needed, it is likely that the scale of land use change identified is broadly correct, albeit that the type of land use change required may be different from those identified in some instances, with a need for increased emphasis on multifunctional land use.

There are five broad issues with the underlying assumptions in the Analytical Annex.

Firstly, it does not sufficiently account for the long-term timeframe that would need to underpin a Land Use Framework. There are a range of difficult-to-predict factors associated with land use change, so scenario planning and adaptability will be critical considerations in analysing the potential scale and type of land use change needed. These issues will continue to play out over multiple generations, so understanding the scale and type of land use change required will necessitate a multigenerational perspective that goes up to and beyond 2050. This could be resolved with greater future scenario planning, sensitivity analysis, participatory foresight, and wind-tunnelling against future pressures, including increased impacts of climate change, changing food markets, land market pressures, developments in international trade and supply chains, demographic change, and predictable responses to policy change. Greater recognition of these fundamental drivers would not only better inform the Analytical Annex, it would also allow for a more adaptive plan that reconciles different outcomes without compromising on the Government's goals for land use.

It will therefore also be important to have a careful system of monitoring to manage these changes, as well as any seasonal fluctuations caused by climate change. As further spatial analysis becomes available over the coming years, it would be prudent to have an embedded approach to reflexive assessment of how plans and predicted land use change requirements are affected.

Secondly, the Analytical Annex operates on a linked assumption that the food supply will remain secure under the proposed land use change due to reliable increases in technology and productivity. This assumption relies on historic trends continuing (as outlined in page 34 of the Annex).

Realistically, this trend is not justified across the breadth of agriculture: UK farm crop yields have plateaued over the last decade, in the context that UK arable cropping is one of the highest yielding globally, suggesting that limits to productivity gains in traditional agriculture are being reached from a biological, practical, or viability perspective. The assumption also does not sufficiently account for the immediate context of climate change or policy change. While the Annex recognises the impacts of climate change on productivity, it does not reconcile this with the assumption of increased productivity. Similarly, the Annex recognises the policy context within which productivity operates but does not sufficiently reflect on how measures such as field margin habitat measures or peatland rewetting may affect the projected trend.

Practical concerns arise from these unknown factors, such as trade deals and whether imported food could increase, offshoring impacts and making food security less certain, or the long-term viability of nature friendly farming in the context of wider land market considerations.

Ultimately, this reflects that there may be significant trade-offs and value judgements to be made around land use in order to maintain food security. The Annex does not yet fully reflect these trade-offs, the associated risks, or what they may mean for scenarios that emerge under the Land Use Framework, so these considerations should be significantly better reflected. It is not possible to assess whether the potential scale or type of land use change is accurate without these considerations.

These ambiguities could be better addressed through more explicit consideration of the wider context around productivity. The consequences emerging from them could be reconciled with the desired scale of change through greater reflection on the potentially most impactful changes at the farm scale, some of which are currently out of scope for the scale of land use change (Category 1 Land management changes). There is a strong

possibility to improve agricultural land quality by improving soils, which are the essential basis of sustainable production that achieves food security and environmental outcomes. Such regenerative measures should be considered alongside Category 3.2 for their potential to secure multifunctional land use benefits.

These issues are particularly problematic in Figure 4, where both the scoping and level of change projected raise questions. The consultation indicates that a significant driver for the projections is current policy, rather than evidence on the actual land use change needs required to meet social, economic, and environmental objectives.

This is backwards, as policy should be calculated to create the necessary change to realise these objectives, rather than calculating change based on which policies will be implemented, lest the objectives are not achieved. This appears to have led to underambitious calculations for the increase in pro-environmental changes, particularly in categories 1 and 2. Ultimately, it means that the underpinning assumptions of the Analytical Annex are not sufficient to produce the desired land use outcomes.

Thirdly, the Annex and the Land Use Consultation have a limited perspective on the environment and nature, which affects the type of land use change considered. In particular, the consultation currently insufficiently considers: (a) the potential to enhance nature, natural capital, and natural processes; (b) the potential for synergies and interdependencies; (c) beyond multiple functions, the potential for one function to support, enhance, or jeopardise another; and (d) the linked social, economic, and environmental challenges that could be addressed through nature-based solutions.

One particular area where considerations are underdeveloped relates to water. This could be resolved through emerging developments around whole water system modelling. The Water Systems Integration Modelling (WSIMOD) framework produced by Imperial College London is a tool that could support modelling under different land use and climate scenarios, allowing for greater assessment of land use scenarios and their impacts on high and low flows and river water quality; evaluation of the role that new developments could have for water neutrality; and strategic spatial planning at the regional spatial scale, supporting Spatial Development Strategies. This would directly support a more holistic approach to the environmental consequences of land use change, informing the scale and type required to secure economic and social benefits.

Fourthly, the Analytical Annex does not sufficiently reflect (or acknowledge) the potential for regional variations in land use. Where limited analysis exists on spatial variations, it does not fully reflect varying land use grades or economic pressures including the viability of farming compared to conversion for housing development.

Fifthly, the evidence used to examine the drivers and opportunities for land use is not sufficiently representative. The Annex acknowledges that the sample used during consultation was not necessarily representative, presenting challenges for the accuracy of the scale or type of land use change required and risking an oversimplified approach. Insights from implementation are essential to the effective delivery of environmental policy,

so the design of land use changes should be more reflective of the perspectives of those who will need to live with the consequences of land use.

This is particularly important for land use changes which relate to agriculture, as understanding the factors driving land use choices by farmers will be critical to intervening in a way that encourages nature-friendly farming and land management changes in line with those proposed in the Analytical Annex. While these perspectives should not be overweighted against other groups or considerations, they should certainly be acknowledged and addressed. Understanding them will be crucial to developing a Land Use Framework that reflects practical ways to drive positive land use changes in line with the Government's vision and objectives.

The Land Use Framework provides a unique opportunity to pursue transformative change. Operating from the perspective of the whole land use system, it has the potential to reconcile agriculture, development, biodiversity, energy production, green spaces, and other uses of land, as well as the multiple potential benefits of land, including food security, energy, infrastructure and housing development, nature recovery, and human health and wellbeing. The opportunity to achieve these mutual benefits cannot be squandered, so the land use system must be approached from a holistic and transformative perspective.

Practically, that means that the ambition for the Land Use Framework cannot be solely predictive or calculated against narrow targets: it must set a complete vision for the use of land that benefits people, the economy, and the environment, based on mutual and multifunctional outcomes. The scale and type of land use change should be calculated to reach that ideal, supporting progress towards a country with thriving people, a healthy economy, and a flourishing environment.

Question 2: Do you agree or disagree with the land use principles proposed? [Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / I don't know]

Agree

Please provide any reasons for your response including any changes you believe should be made.

The IES agrees with the proposed land use principles, though they could be further improved.

The first principle, on co-design, will be critical, including for the reason set out in the fifth response to question 1 above: effective delivery relies on meaningful collaboration and the integration of local knowledge into policy design. To that end, it would be helpful for the Land Use Framework to clarify how this principle will be enacted through specific platforms of engagement, including how co-design will be structured to ensure genuine representative participation at the local and national level.

Additionally, it may be beneficial to either expand on the element of fairness identified in principle 1, or to introduce this as a separate principle. Considerations of fairness go beyond

the need for co-design to broader questions of environmental justice and the potential for a just agricultural transition, which will be crucial to supporting the transition to nature-friendly farming, facilitating the adoption and maintenance of multifunctional land use, and sustaining a viable farming community currently under increasing stress.

Principle 2 on multifunctional land should reflect a wider breadth of potential benefits, such as water management and natural flood risk management. These examples would align with the requirement under the Water (Special Measures) Act for sewerage undertakers to address the use of nature-based solutions within Drainage and Sewerage Management Plans.

Principle 4 is especially important for the reasons set out in the first response to question 1 about the importance of a long-term perspective, so it would benefit from a more meaningful and robust definition of what 'long-term' means, ideally going beyond a single generation to achieve a perspective that more fully accounts for the multiple scenarios identified in response to question 1.

The principles as a whole could also be improved by better reflecting the economic and social implications of land use change. A principle could be added to manage the social, economic, and environmental costs of land use change at the time of land use change. For example, the principle would suggest that when developments occur, developers should cover the full costs of the change in land use, including impacts on community infrastructure, water supply, and the natural environment.

Such as principle could also account for failures in the land market, such as land pricing and perverse incentives that arise as a result; the overall pressure on the food market created by the asymmetrical influence of supermarkets on food prices; and the returns to land managers and farmers relative to other forms of land use, which may distort how land markets operate and promote types of land use change which contradict other principles (particularly principle 2).

Finally, it may be prudent to consider adding a principle of coherence, with a view to ensuring that individual land use choices add up to a collective whole that aligns with the Land Use Framework and the Government's wider objectives and commitments around land use. This is particularly important in the context that many of the principles are interlinked, mutually-reinforcing, and engage with similar aspects of decisions which may otherwise be traded-off against one another.

As the consultation identifies, it would be inappropriate to mandate individual decisions in a way that restricts flexibility or fails to account for regional variation and local circumstances, yet it will be important to ensure that the Framework delivers change and does not lead to incoherent decisions that restrict land use choices in the future.

Beyond the individual principles, the success of principles will also depend on how they are applied in practice. Further clarity will be needed in the Land Use Framework to ensure that the principles are applied consistently and are able to provide the clarity needed to support coordinated strategic spatial planning. Guidance should be available to those making

decisions to help them manage trade-offs and identify the potential for multifunctional benefits where these are not immediately apparent. These principles should then be embedded into decision making, both through guidance and by supporting decisions with data, tools, and resources.

It would also be useful to have a clearer understanding of how decision makers will be held to account in their application of the principles. In practice, the usefulness of the principles will depend on whether they influence decisions, so it may be necessary to have some degree of monitoring and evaluation in place over a sufficiently long period of time to measure their success.

Question 3: Beyond Government departments in England, which other decision makers do you think would benefit from applying these principles?

• [Combined and local authorities (including local planning authorities)]

Yes.

• [Landowners and land managers (including environmental and heritage groups)]

Yes.

• [Others (please specify)]

Local authorities should, in particular, consider land for nature-based solutions as part of their drainage and sewerage management plans.

In addition to the groups identified above, it would be beneficial to apply the principles to as wide a range of stakeholders as is practical, ensuring a more coherent approach to land use decisions and supporting the delivery of a cohesive plan for land use change.

This will be especially important for delivery agencies that make decisions relevant to land use, including the Environment Agency and Natural England. As these bodies make decisions or support the delivery of policies where land use is a relevant factor, of which may have implications for land use in the future, they would benefit from applying these principles, even if the result is that there are minimal implications for land use.

Similarly, there are many other stakeholders making decisions around land use who would benefit from considering these principles, even where there are other considerations which may ultimately outweigh them, including developers and construction firms, farmers and land managers, energy providers, and infrastructure planners. While some of the principles (such as co-design) may be less relevant to these groups, consideration of the principles would benefit their ability to operate as part of a wider land use system without compromising multiple benefits for others.

Question 4: What are the policies, incentives and other changes that are needed to support decision makers in the agricultural sector to deliver this scale of land use change, while considering the importance of food production?

To support decisions being made in the agricultural sector, it will be necessary to understand the wider economic system within which farmers and land managers operate. In particular, financial incentives are critical to optimising land use decisions. This understanding needs to underpin any policies or incentives, as well as the wider Land Use Framework, in line with the fifth response to question 1.

The land market is currently distorted by several factors which are significantly limiting the potential to balance food production with multifunctional land use, so further intervention will be needed to correct for the potential for market failure. The primary factors affecting the land market are: (a) the excessive influence that large supermarkets have in setting food prices, which has driven down prices towards marginal production costs, leading to decreasing and often non-viable returns for farmers and land managers; (b) similarly, contract conditions which disincentivise farmers from growing the types of food needed to support dietary changes in line with the transition to a sustainable and healthy society; (c) broad issues around the value of land for different purposes, which risks agricultural land being sold for development or facing intentional degradation for economic gains; (d) the need to balance financial incentives for renewable energy with the potential to undermine overall land use objectives; and (e) limited implementation of Community Infrastructure Levy to address the full costs of infrastructure required by developments, such as water supply and sewage treatment.

Farmers are increasingly facing pressure from falling farm gate prices, increased reliance on imports, and consolidation of supply chains, the latter of which has given more power to a small number of major retailers and suppliers, particularly around animal feed, fertiliser, and machinery. Research by the Food, Farming and Countryside Commission argues that an emphasis on low-cost food production has hidden long-term costs, as well as significant negative outcomes for sustainability, public health, and national food security. More should be done to clarify how the new Profitability Unit will address these factors in the wider context of land use and sustainable agriculture.

Several of the measures identified in the consultation will make progress towards improving the situation, including policies for enhanced carbon sequestration on farms and by delivering appropriate payments through the Sustainable Farming Incentive to produce public goods such as reduced soil erosion and natural flood risk management. Ongoing government policy developments around the Sustainable Farming Incentive must be brought in line with the strong potential of the policy to deliver multifunctional benefits for people, the economy, and the environment. Reliable and fair payments for ecosystem services delivered through non-food use of land will be needed to drive wider uptake by land managers.

Despite the positive measures identified in the consultation, further action is needed to correct the failures facing the lank market and ensure the effective implementation of wider measures. Beyond funding for nature-friendly farming, these should include strengthening

the capacity for the Environment Agency to enforce Flood Risk Management Plans and engage in integrated water and flood risk management at a catchment scale; as well as measures to ensure that the planning system delivers holistic benefits, rather than single benefit developments.

Question 5: How could Government support more land managers to implement multifunctional land uses that deliver a wider range of benefits, such as agroforestry systems with trees within pasture or arable fields?

The responses to question 4 are also relevant here, particularly with regard to the Sustainable Farming Incentive (SFI).

The overall coherence of the SFI and its restrictions should be reviewed in light of the principles underpinning the Land Use Framework. Currently, rules under the SFI often penalise multifunctional land use approaches in practice, contrary to the Government's intentions. For example, to provide farmers with the upfront certainty and security needed to take on the risk of short-term multifunctional land use, they need the assurance that, in the long-term, land used for tree planting could be returned to crop use, if needed and in line with overall nature-friendly farming approaches.

Land managers would also benefit from a broad range of support during the transition to implementing multifunctional land uses, such as upskilling and training on specific crops or processes.

In addition, there may be the potential to learn from the integration of land management into catchment management through Integrated Natural Resources Planning in Wales. More dynamic partnership between agencies like the Environment Agency, Natural England and Forestry England should be at the heart of multifunctional land use, allowing for a clearer strategic approach with which land managers can directly engage.

Question 6: What should the Government consider in identifying suitable locations for spatially targeted incentives?

Spatially targeted interventions need to be part of a coherent approach to land use across the England and across the Land Use Framework and all linked policy instruments. A strategic approach to spatial planning should have three aspects: (a) identifying the criteria used to make a decision about land use change; (b) recognising where interventions are needed, including where standards need to be adjusted; and (c) linking plans to the overall vision and strategic objectives.

Firstly, with regards to selecting the criteria for making decisions, these should naturally include the principles for land use identified in response to question 2. Beyond these, it is also important to recognise a wider set of criteria for decision making in line with wider social, economic, and environmental goals.

To that end, decision making criteria for a spatial approach should reflect the wider potential for impacts on flood risk, air quality, land condition, water quality, climate mitigation and

resilience, biodiversity, and other key objectives. These should be reflected as underpinning criteria for strategic planning decisions and spatial approaches. They must also be supported by sufficient incentives that they can be realised in practice.

Secondly, determining interventions for strategic planning should follow logically from these success criteria, focusing on how to achieve the widest range of benefits. Where planning decisions take place in areas which have a high degree of vulnerability to a particular risk, such as flood risk, spatial incentives or regulations should be targeted to prevent the need for significant investment in the future. Analysis should begin at the national scale in terms of desirable land use change, with individual developments following the overall strategic goals and criteria for how we can promote land use that leads to thriving people, a healthy economy, and a flourishing environment. This will be particularly relevant for the built environment and therefore for planning and infrastructure development.

Additionally, water planning across a catchment area should reflect both urban and rural considerations with a view to scenario planning for potential impacts and different environmental pressures, in line with the first response to question 1. For example, significant development in a floodplain should not be part of any spatial development strategy, so targeted regulations or incentives need to deliver that outcome. As such developments add to future flood risk, they create a need for further investment in flood defence over the long-term.

Thirdly, strategic planning and spatial interventions should have reference to the broader view of social, economic, and environmental objectives, as well as the context within which decisions are made. Given the role of land use in driving many decisions by government and society, a strategic and holistic approach is essential to securing government objectives. It is also necessary in order to reconcile individual decisions with the longer-term context of climate change and other trends which may impact on whether decisions contribute to the desired scale and type of land use change in the future.

Question 7: What approach(es) could most effectively support land managers and the agricultural sector to steer land use changes to where they can deliver greater potential benefits and lower trade-offs?

In addition to the points raised in response to questions 4 and 5, which remain relevant, it will be especially important that the approach is clear, practical and simple, avoiding unnecessary complexity or confusion. Given the agricultural sector's limited capacity, engagement with land managers should be a priority.

Naturally, the IES recognises that these are inherently complex decisions and that delivering an effective Land Use Framework will rely on a degree of nuance and complexity, particularly in light of the recommendations made throughout this response. A balanced approach is needed, which can be achieved through tailored support for key stakeholders, broad guidance, a coordinated approach to providing the appropriate incentives, and public engagement activities. While a complex Framework can be communicated in simple and strategic ways, an overly simplified Framework cannot be brought back to the necessary level of nuance without sacrificing consistency and coherence. In that context, simple and clear communication with land managers and the agricultural sector should be a priority, exemplifying the positive benefits of land use changes as well as outlining incentives or how risks can be managed. This should be accompanied by acknowledgement of the social, economic, and heritage motivations that often drive decision making and create an emotional investment to land, land management, and specific practices. Similarly, overall communication efforts should recognise past failures to provide clear and consistent engagement with the farming community, which may have increased distrust and scepticism in some instances.

Question 8: In addition to promoting multifunctional land uses and spatially targeting land use change incentives, what more could be done by Government or others to reduce the risk that we displace more food production and environmental impacts abroad? Please give details for your answer.

[Monitoring land use change or production on agricultural land]

Yes.

[Accounting for displaced food production impacts in project appraisals]

Yes.

[Protecting the best agricultural land from permanent land use changes]

[Other (please specify)]

Factors that may increase the risk of displacing food production and environmental impacts abroad are identified in response to question 1. The responses to question 4 are also relevant here, particularly with regard to the potential for land market failures. Ultimately, measures to address the risk of displacing food production abroad need to reflect wider food systems and economic pressures.

To that end, it would be useful to properly account for the carbon cost of imported goods through Carbon Border Adjustment Mechanisms, beyond just fertilisers. This should be included in all trade agreements, alongside a clear and enforceable obligation on retail buyers to adopt standards even where it raises food prices. Where food production is exported to lower food prices, it comes at the expense of social and environmental benefits, putting pressure on the land market and jeopardising the Government's land use objectives.

Question 9: What should Government consider in increasing private investment towards appropriate land use changes?

The Government's current proposals for a Nature Restoration Fund could be a powerful vehicle for mobilising private investment. To be successful, it needs to be actionable for relevant stakeholders, which will rely on enhanced capacity and capability for delivery bodies like Natural England and the Environment Agency. There will also need to be effective

monitoring, evaluation, and action to ensure that any investment through the Nature Restoration Fund is being directed to the most useful actions for land use change and nature restoration.

Beyond the Nature Restoration Fund, the Government should consider tax-based incentives such as breaks or exemptions for land buyers or sellers in line with the type of land use change outlined in the Land Use Framework. Incentives for private investment should also recognise the wider financial context, including effects on land ownership and tenancy farmers, as well as loans secured against land and their relationship to loss of agricultural status, which may discourage appropriate land use change.

The Government should also consider the role of the planning system in private investment towards land use change. Payments through the planning system should account for the costs of ecological expertise to local authorities, allowing for a more strategic and embedded approach to delivering appropriate land use change. While the latest changes to the National Planning Policy Framework have increased the flexibility available to local authorities around payments, more should be done to embed this approach at a strategic level, so that proper resourcing of planning decisions about land use are not contingent on overcoming contentious political processes.

Question 10: What changes are needed to accelerate 30by30 delivery, including by enabling Protected Landscapes to contribute more? Please provide any specific suggestions.

• [Strengthened Protected Landscapes legislation (around governance and regulations or duties on key actors) with a greater focus on nature]

No. Existing legislation is sufficient but needs to be better enforced and applied. In particular, there is a risk of siloed thinking emerging from targets, coming at the expense of multifunctional approaches to land, and these risks could be further embedded though new regulations or duties.

• [Tools: such as greater alignment of existing Defra schemes with the 30by30 criteria]

Yes, but these tools need to be flexible, rational, and coherent to support a strategic approach, as set out in response to question 6.

• [Resources: such as funding or guidance for those managing Protected Landscapes for nature]

Yes. Specific areas where further funding and guidance are required are also identified in response to questions 2, 4, and 7.

• [Other (please specify)]

There are two additional areas where delivery of 30 by 30 could be accelerated.

The first would be to facilitate greater investment in community-based environmental stewardship. There is a significant opportunity to capitalise on the long-term commitment to nature protection and restoration that can be encouraged by creating a sense of stewardship and responsibility within communities for environmental assets and ecosystems. The Countryside Stewardship Facilitation Fund evaluation provides a good example of how this kind of success can manifest.

To help drive community stewardship, the Government could develop a framework or toolkit for local authorities to provide clear guidance on how to encourage stewardship that aligns with spatially relevant objectives for land use change and the delivery of 30 by 30 more broadly. Direct investment could also support this goal by providing greater opportunities for volunteering, apprenticeships, and work experience in the context of managing protected landscapes.

The second would be to increase clarity on the overall vision for how 30 by 30 will be realised in practice, with a clear spatial vision for where land will be 'spared' for nature and where it should be shared, as well as scientifically robust and transparent definitions of what constitutes protecting or conserving land in both a 'land sparing' and a 'land sharing' context. This should also reflect how Local Nature Recovery Strategies can deliver at a local level.

Question 11: What approaches could cost-effectively support nature and food production in urban landscapes and on land managed for recreation?

Cost effective support for nature and food production in urban landscapes will rely on sufficient capacity for local authorities, so the Government should take the opportunity of the English Devolution Bill to ensure that any devolution settlement champions local authorities to deliver for the environment by clarifying their responsibilities and increasing their powers and resources. Specifically, the Bill should devolve powers to communities and local authorities for nature (as well as linked issues around sustainable and active transport, air quality management, and wood burning), with the capacity and resources to act on new powers.

The Government should provide long-term non-competitive funding for environmental schemes, allowing local authorities to operate under greater certainty. To support cost-effective nature recovery in urban landscapes, the Government should commit to funding Local Nature Recovery Strategies for at least the next 10 years, giving them greater influence and increasing confidence in their delivery.

Additionally, there are also many existing initiatives which are demonstrating good practice in this area, such as OrganicLea. These schemes would benefit from greater support and clearer mechanisms to share good practice so that it can be adopted elsewhere. Similarly, the Green Infrastructure Framework should be better utilised to reduce areas of impermeable paving and add supportive features to existing parks and green spaces, such as orchards and habitats.

Question 12: How can Government ensure that development and infrastructure spatial plans take advantage of potential co-benefits and manage trade-offs?

Effectively managing the potential for co-benefits and trade-offs will rely on a coherent, ambitious, and unambiguous approach across a range of government policies, with a view to driving land use that supports a country with thriving people, a healthy economy, and a flourishing environment. The Land Use Framework must provide that clarity and coherence, as outlined in response to questions 1, 2, and 4.

The Land Use Framework will need to explicitly link action across different scales, timeframes, and the objectives outlined in: Local Nature Recovery Strategies, Environmental Land Management Schemes, Spatial Development Strategies, the National Planning Policy Framework, the Nature Restoration Fund, the role of Biodiversity Net Gain across developments, Catchment Plans (and their role in integrated water management), the National Food Strategy, the Strategic Spatial Energy Strategy, the Green Infrastructure Framework (and HM Treasury's 10-Year Infrastructure Strategy), the 25 Year Farming Roadmap, the National Climate Adaptation Programme, and the Environmental Improvement Plan.

All of these policies have land use implications, so decisions around land use need to be made with an understanding of how all these plans contribute to a collective and coherent whole, or it is likely that decisions will miss out on the opportunity for co-benefits, or not fully realise benefits where trade-offs are made. The manner in which these policies facilitate an overall vision for land use is a relevant consideration for all involved stakeholders, who need to be able to transparently see how different spatial policies work together so that they can align their actions with that vision.

Reconciling the range of policies, timeframes, and geographical areas involved will be a challenging task, so the Government should adopt a shared logic throughout these policies, as part of a wider cross-governmental consensus on the approach to land use, with a clear and transparent understanding of objectives, priorities, and how multiple benefits can be achieved.

The goal of this shared logic should be to maximise the ways that land use can benefit society, with a holistic view to creating a country with thriving people, a healthy economy, and a flourishing environment. Despite the scale of challenge involved in reconciling these policies, it is very much worth it: objectives that could be mutually achieved through a holistic approach include: food security and diversification, nature protection and recovery, energy security, healthier diets, infrastructure and housing development, soil health, climate mitigation and resilience, sustainable agriculture, sustainable economic development, improved social equality, better transport connectivity, and improved air, water, and land quality. The recent IPBES Nexus Assessment demonstrates the extent to which these goals are not only mutually achievable but significantly linked to one another.

Beyond the Land Use Framework, the National Planning Policy Framework (NPPF) is another policy where it will be important to embed a strategic and coherent approach to securing cobenefits and managing trade-offs. The consultation does not sufficiently clarify the role of

paragraph 20 and paragraph 35 of the NPPF in securing positive land use outcomes and the contributions necessary to deliver them in practice.

One area where further action is required is the high-profile issue of water management, where greater coordination is required to ensure that any land use change is part of an integrated approach to land and water that reflects wider water systems and the role of catchments in managing water stress, water quality, and other risks. This could be best facilitated through spatial planning informed by long-term quantitative data and model-based evidence on the interactions between land and water systems, as set out in response to questions 1 and 6.

Where managing the complex and myriad potential benefits or trade-offs associated with the policy places a disproportionate burden on government, this can be significantly reduced through increased engagement and co-design of policies, engaging a diffuse and diverse range of stakeholders in the identification of potential co-benefits, risks, or trade-offs. It will be particularly important to engage with local authorities and land managers for the reasons already identified.

It will be important to ensure that decisions around the overall coherence of land use policy are made with reference to the outcomes of other policy discussions currently taking place, including ongoing consultations and conversations within government on compulsory purchase, Nationally-Significant Infrastructure Projects, and industrial strategy, as well as the outcomes of the Independent Water Commission. The Government should take a reflective approach to ensure that the outcomes of those discussions are also able to inform wider land use strategy.

Further clarity will be needed to understand how Spatial Development Strategies will operate in practice, as well as how they will account for the full variety of considerations, managing the trade-offs between them with a view to optimising outcomes. These Strategies cannot be led by siloed objectives or centrally-derived single-factor approaches to spatial development. To be successful, they must provide a means to reconcile different desirable outcomes and the trade-offs between them, as well as the nuances of specific areas and communities.

In the context of integrated water management and water considerations more broadly, the ongoing call for evidence from the Independent Commission on Water is likely to produce recommendations which will be relevant to the outcomes of this consultation. Clear links should be drawn between both, such that they can inform one another and produce a joined-up approach to land and water management.

Question 13: How can local authorities and Government better take account of land use opportunities in transport planning?

Much of the commentary about the overall coherence of policies in response to question 12 is also relevant to this question, as well as the commentary on resourcing local authorities in response to question 11.

Additionally, opportunities for appropriate land use change could be better identified in transport planning by encouraging a more holistic set of considerations at the design stage. The shift to 'vision-led' plans in the updated National Planning Policy Framework will be a key opportunity to ensure that land use opportunities are identified at the earliest possible stage to maximise the chance of adoption. This is also an opportunity to design spaces and areas with a view to minimising the need for transport, promoting active travel, and freeing up spaces for other land use objectives including housing and infrastructure development.

While there have been challenges for the implementation of the existing Community Infrastructure Levy (CIL), it is vital that measures are in place to ensure that developments and the planning process directly contribute to the costs or delivery of the infrastructure associated with developments. This is especially critical for transport planning, where the increased requirement of transport links is often a consequence of development that is not fully addressed at the point of construction. Similarly, there are significant land use considerations associated with providing sufficient water infrastructure from the design stage of a new development.

To that end, developments should be set up to deliver community infrastructure in the public benefit. For example, this could be achieved by requiring upfront payment for the costs of community infrastructure requirements associated with a given development, such as transport, public health, water, energy, and impacts from noise or air pollution, which would better deliver locally coherent benchmark land values and address public benefit from the perspective of the genuine needs of the public.

Finally, there is also a role for environmental expertise in ensuring that land use opportunities are seized during transport planning, so Environmental Impact Assessments (or their presumed successor, Environmental Outcomes Reports) must also have a role in delivering objectives under the Land Use Framework. This is particularly important in the context of transport planning where broad geographical areas are involved and a wide range of environmental considerations from water to noise are likely to be relevant.

Question 14: How can Government support closer coordination across plans and strategies for different sectors and outcomes at the local and regional level?

Much of the commentary about the overall coherence of policies in response to question 12 is also relevant to this question. Also, one of the most significant factors in supporting closer coordination will be to address the wider land market issues identified in response to question 4.

Local authorities are the key delivery bodies for many policies in practice, particularly in the context of land use. To coordinate effectively with other authorities and national strategies, they need clear guidance and appropriate resources and capacity.

Local authorities are currently significantly underfunded to deliver their objectives, so where further action will be required, they should receive non-competitive funding in line with new obligations. In that context, the commentary on local authority resources in response to question 11 is relevant. Additionally, local authorities need clarity on what they are expected

to deliver with regards to different strategies, and how the Land Use Framework expects different policies to relate at the scale of implementation.

It will be particularly important to set out clear guidance on how Local Nature Recovery Strategies, Biodiversity Net Gain, Spatial Development Strategies, the Nature Restoration Fund, and the Land Use Framework are expected to coordinate with one another.

Additionally, it may be worth considering the role that sectoral pathways could play in coordinating action across sectors, particularly in relation to land use and its links with other objectives that have cross-sectoral implications, such as carbon mitigation and water management.

Question 15: Would including additional major landowners and land managers in the Adaptation Reporting Power process (see above) support adaptation knowledge sharing? Please give any reasons or alternative suggestions [Yes / No / I don't know]

Don't know. Further clarity is needed to determine whether this would be appropriate or successful.

This could enhance knowledge sharing for adaptation by expanding the evidence base for climate-resilient land use planning. This is particularly important in the context of spatial data and evidence of good practice, where the reliability of interventions can be uncertain due to limited access to evidence.

However, this approach could also present risks. The process would need to be clear and accessible to provide these benefits, fitting with the ways that land managers work currently. It cannot become an additional burden (either for those sharing knowledge or those receiving it) and the benefits of outputs should be clearly communicated so that practices can be adopted or improved.

More broadly, there are still questions about the interactions between land management and adaptation that will need to be resolved to clarify the state of climate-resilient land use planning. Risks such as the potential for farmland loss to coastal flooding in areas like East Anglia need to be fully addressed with a view to maximising the capacity of land owners to facilitate more resilient land.

Question 16: Below is a list of activities the Government could implement to support landowners, land managers, and communities to understand and prepare for the impacts of climate change. Please select the activities you think should be prioritised and give any reasons for your answer, or specific approaches you would like to see.

• [Providing better information on local climate impacts to inform local decision making and strategies (for example, translating UK Climate Projections into what these mean in terms of on-the-ground impacts on farming, buildings, communities and nature)]

As identified in response to question 15, the accessibility of environmental data is incredibly important to spreading good practice. Data should be presented in such a way that local decision makers, including landowners, land managers, local authorities, and community organisations, can access clear, relevant, and actionable insights. Where possible, the option to tailor data to specific areas or contexts would be particularly helpful.

This may require additional efforts to support the wider consolidation of data and environmental evidence. It may be necessary to open up the accessibility of privately-owned data through incentives or regulatory requirements to engage in data sharing as part of planning and land management processes, though any interventions in this space need to be fair and just.

• [Providing improved tools and guidance for turning climate information into tangible actions (for example, how to produce an adaptation plan for different sectors)]

The answer above is also relevant here.

- [Developing and sharing clearer objectives and resilience standards (for example, a clear picture and standards of good practice for each sector under a 2°C climate scenario30)]
- [Supporting the right actions in the right places in a changing climate (for example, prioritising incentives for sustainable land uses where they will be most resilient to climate change)]
- [Other (please specify)]

Question 17: What changes to how Government's spatial data is presented or shared could increase its value in decision making and make it more accessible?

- [Updating existing Government tools, apps, portals or websites]
- [Changes to support use through private sector tools, apps or websites]
- [Bringing data from different sectors together into common portals or maps]
- [Increasing consistency across spatial and land datasets]
- [More explanation or support for using existing tools, apps or websites]
- [Greater use of geospatial indicators such as Unique Property Reference Numbers (UPRNs) and INSPIRE IDs to allow data to be more easily displayed on a map]
- [Other (please specify)]

The answer provided in response to question 16 is also relevant here. Data consolidation will be especially important to deliver a coherent response to land use challenges in a way that achieves the best value-for-money possible. Further details on this are provided in response to question 18.

Question 18: What improvements could be made to how spatial data is captured, managed, or used to support land use decisions in the following sectors? Please give any reasons for your answer or specific suggestions.

- [Development and planning: such as environmental survey data]
- [Farming: such as supply chain data and carbon or nature baseline measurements]

- [Environment and forestry: such as local and volunteer-collected environmental records]
- [Recreation and access: such as accessible land and route data]
- [Government-published land and agricultural statistics]

As identified in response to question 16, the landscape of environmental data, particularly spatial data, is currently fragmented. It would benefit significantly from further consolidation and centralisation. The Government should consider establishing a national centralised database that consolidates a range of sources of environmental data, including the outcomes of other processes like impact assessments and their underlying raw data.

In many cases, this will require the identification of ways to overcome commercial sensitivity, which should be done in a fair and equitable manner. There are often questions of commercial sensitivity around farm data, yet there are increasingly expectations of free access to this data. To the extent that this data is valuable for meeting wider land use objectives, a consistent and equitable approach will be needed to overcome the commercial sensitivities involved in a fair way. This endeavour could be supported through a plan for consolidating environmental evidence, including how project-specific evidence can contribute to the wider evidence landscape.

The Government should also take a cautious approach to artificial intelligence and usergenerated data, both of which can pose risks for validity and reliability. Where either is used, they require direct involvement from a skilled practitioner and high standards of validation should be applied. This could be further supported through the development of better citizen science tools and frameworks to ensure greater validity at the point of data collection.

Question 19: What improvements are needed to the quality, availability and accessibility of ALC data to support effective land use decisions?

Any changes to the Agricultural Land Classification (ALC) must be supported by robust science and broad consultation with a representative range of stakeholders. The process should be clear and transparently led by the evidence. Changes cannot be calculated to meet any predetermined policy need or retroactively calculated so that they fit into land use plans.

Taking a policy-led approach to the ALC, rather than an evidence-led approach poses several challenges, including the significant risk of potential grade shifting for convenience at the expense of scientific accuracy. Where this happens, it would at best lead to a technical success, at the expense of any meaningful improvement or appropriate land use change, so care should be taken to avoid this risk and prevent any perverse incentives at the point of classification.

One significant improvement to ALC would be to move towards a system of multi-criteria data, acknowledging the complex interlinkages between many desired environmental outcomes, such as habitat protection and restoration, carbon sequestration, water storage, flood attenuation, and other social and environmental benefits. While handling that level of

complexity within ALC may present challenges, it would be beneficial nonetheless, in pursuit of multifunctional outcomes.

Question 20: Which sources of spatial data should Government consider making free or easier to access, including via open licensing, to increase their potential benefit?

As identified in response to questions 16 and 18, it would be beneficial to consolidation (and improve the accessibility of) as broad a range of data sources as possible. The data landscape is currently very fragmented, making it difficult to access information and leading to a substantial degree of costly duplication of efforts. It is harder to achieve outcomes, and they end up being worse than they could otherwise have been.

Specific sources to consider would include ALC data, biodiversity and ecological survey data, the raw data and outcomes of assessments for impact assessments or Biodiversity Net Gain, soil health and carbon sequestration data, and (where they are robustly evidenced) data from land ownership and public access routes.

To ensure that spatial planning is aligned with water management, it would be beneficial to support long-term planning with evidence from modelling on land-water system interactions, so models are an additional source that should be consolidated alongside existing datasets. Further details on how these data could be consolidated are given in response to questions 16 and 18.

Several of these sources may emerge from outside the public sector, involving a high degree of commercial sensitivity at times, so a mixture of incentives and regulation may be necessary to support the equitable consolidation of data. For example, land ownership data may require financial incentives to promote the public good of data accessibility, or land managers may not take upfront steps to collect data. By comparison, project data may require regulation to overcome commercial sensitivity, as a level playing field will be needed to ensure that all developers are equally willing to share data.

Practically, the accessibility of the data itself should also be considered, on a technical level and in terms of the open accessibility, availability, and presentation of data. Further details are outlined in response to question 16.

Question 21: What gaps in land management capacity or skills do you anticipate as part of the land use transition? Please include any suggestions to address these gaps.

- [Development and planning]
- [Farming]
- [Environment and forestry]
- [Recreation and access]
- [Other (please specify)]

Additionally, skills around regenerative agriculture (including specific methods), tree management, soil health, ecology, and multifunctional outcomes will all be necessary in the transition, with particular emphasis on regenerative agriculture. Practical skills that are likely to facilitate good practice would include IT skills and data literacy.

Question 22: How could the sharing of best practice in innovative land use practices and management be improved?

Practical skills, including good practice techniques, approaches, and regenerative practices are likely to be best shared between land managers and farmers through practitioner peer-to-peer workshops, demonstrations, and conferences. Many events already exist, so further support for events like Groundswell and Carbon Calling could be beneficial, both in expanding their reach and promoting them to those who would benefit from improving practice.

There are also specific concerns around inclusivity in land management, which are set out in response to question 24. To that end, a priority for sharing good practice should be to improve the equality and inclusivity of how good practice is accessed, providing greater opportunities for a diverse range of land managers to engage. To the extent that peer-to-peer learning is a key aspect of developing good practice in land management, efforts to build links between different land management communities will be critical.

Question 23: Should a Land Use Framework for England be updated periodically, and if so, how frequently should this occur?

- [Yes, every 5 years]
- [Yes, every 3 years]
- [Yes, another frequency or approach. Please provide details.]
- [No]
- [I don't know]

Yes, every 5 years. This aligns with the timeline for Environmental Improvement Plans, so would also be an opportunity to link land use objectives back to a longer-term generational perspective (roughly 25 years, which is a level of vision identified in Environmental Improvement Plans).

Ultimately, the timeframe for updating the Land Use Framework will need to be responsive to the dynamics of environmental and social systems, rather than any arbitrary time period. Building on the basis of a periodic five-year review, there should be built-in flexibility to adapt the Framework in the interim where environmental conditions deviate significantly from the evidence base for the current Framework, or where social or economic conditions render the current scale or type of land use change proposed to be infeasible.

Question 24: To what extent do you agree or disagree with the proposed areas above? Please include comments or suggestions with your answer. [Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / I don't know]

Agree.

Vision and strategic oversight will be fundamentally important, as the Land Use Framework presents a unique opportunity to bring together other policies. To that end, there are four key factors that should be embedded at a strategic level in the Land Use Framework.

Firstly, as noted, the Framework should place an emphasis on strategic coherence and collaboration. The Land Use Framework is an opportunity to create clear consistency of approach across policy instruments and regulatory regimes, coherence across geographic spaces and timeframes, and to unite stakeholders with a view to collaboration and shared delivery of outcomes.

Secondly, the Framework should embed a strategic approach to achieving multifunctional outcomes, with clear reference to the full breadth of social, economic, and environmental benefits that can be achieved through land use. The response to question 12 sets out the breadth of benefits that could be secured through a multifunctional and holistic approach, including food security and diversification, nature protection and recovery, energy security, healthier diets, infrastructure and housing development, soil health, climate mitigation and resilience, sustainable economic development, improved social equality, better transport connectivity, and improved air, water, and land quality.

Thirdly, the Framework should take a strategic approach to ensuring that a wide range of stakeholders and systems deliver in the desired way, taking a broad view of the tailored incentives and drivers that will support effective action. This includes both providing resources and incentives for delivery stakeholders like land managers and local authorities, as well as setting a regulatory baseline for secondary stakeholders like developers and the land market.

Fourthly, with a view to the dynamic systems involved and the likelihood of uncertainty, the Framework needs to embed a strategic approach to adaptability, flexibility, and agility in delivering appropriate land use change.

Additionally, the Land Use Framework and this consultation are a significant opportunity to address the current barriers to inclusivity and transparency in land use policy. These should be addressed from the strategic level to ensure that systematic barriers to inclusion are removed. A lack of diversity in land management and agriculture has been recognised consistently, including in findings from the RACE Report. In particular, young people from BAME backgrounds remain significantly underrepresented in land management, agriculture, and environmental professions, and approaches to land use often inadequately address barriers to participation in land management.

Beyond the naturally apparent benefits of inclusion, there is a pressing need to resolve these barriers to expand and diversify the land management workforce, which is currently one of the least diverse in the country and which faces extreme financial pressures, limiting the workforce and its ability to deliver social, economic, and financial outcomes.

Many of these challenges arise from the accessibility of land use and the relevance of land use policy to a broad range of land managers. Engagement with socially and ethnically diverse stakeholders within land use planning should be improved, so that a more representative group is a dedicated part of the land use discussion and actively involved in shaping policy, rather than being 'bolted on' to other engagement. Practically, there are also significant economic barriers to inclusion. Access to land is a substantial barrier to working in food production or land management, so addressing the land market challenges identified in response to question 2 could also support greater diversity within land management. Given the economic barriers, it will be difficult to solve the strategic challenges identified without using the Land Use Framework to address them.

There are also concerns with the accessibility of data and peer-to-peer knowledge sharing, as identified in response to question 22, so increased accessibility and consolidation of data may also help here. Additionally, a broader evidence base for land use decisions may help to improve inclusion by identifying a wider breath of challenges for participation. Evidence such as sentiment analysis can offer valuable insights into the challenges for increasing diversity in land use discussions.

Through a combination of quantitative monitoring against participation and qualitative evidence of barriers, significant steps could be taken to improve the inclusivity and diversity of land management and land use policy.