Visions for Future Land Use in Scotland: Technical Report on Different Views on Land Use/Land Use Change for the Land Use Transformations Project (JHI-C3-1)

Deliverable 9 – Technical Report for Digital Story on different views on LU/LUC

August 2024

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For an overview, see the digital story, <u>Visions for Future Land-Use in Scotland</u>.

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List of Acronyms

CLS	Community	Land Scotland
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- CS Creative Scotland
- CWA Community Woodlands Association
- HES Historic Environment Scotland
- HIE Highlands and Islands Enterprise
- JMT John Muir Trust
- LINK Scottish Environment LINK
- NFUS National Farmers Union Scotland
- OTB Outside the Box
- RTPI Royal Town Planning Institute
- SA Soil Association
- SCF Scottish Crofting Federation
- SLE Scottish Land and Estates

1 Highlights

What were we trying to find out?

We aimed to identify a diverse set of voices which are weighing in on land related issues in Scotland by responding to Scottish Government's public consultations, and to assess the visions of land use futures these voices presented.

What did we do?

We looked at consultation responses from 16 organisations representing a range of interests around land, including environmental protection organisations, farming organisations, planning professionals, landowners, community development, access, and a religious organisation. With the organisation as the unit of analysis, we analysed responses to 17 consultations related to land use, focusing on how stakeholders attempted to persuade governments to take certain actions. Following this analysis, we conducted 9 interviews with organisation representatives to confirm our interpretations of their responses and further explore their perceptions of land use in Scotland.

What did we learn?

Significant themes

- Organisations each identified multiple benefits from land: goods, both public and private.
 These goods include benefits to education, health, and wellbeing; food and timber; and biodiversity and carbon sequestration. Some organisations see land as an empty space on which to host activities, while others recognise the embeddedness of current land uses.
 Most organisations refer to the triumvirate of social, economic, and environmental functions of land; Quakers in Scotland alone speaks about the intrinsic and sacred value of land, not claiming that it needs a purpose to be valued.
- Sectoral views contrasted with holistic views: Some organisations focus narrowly on issues, like Paths for All on transport and walking in Scotland, whereas others take a broader view of land use, like Highlands and Islands Enterprise.
- Organisations often attribute the causes of environmental decline/pressures to other sectors and seek solutions that benefit their own. For example, while there is broad consensus that climate change is an important issue, the Confederation of Forest Industries UK argues that hill farming causes major GHG emissions, and that replacement of pastures with trees would be beneficial. The Scottish Crofting Federation is concerned about climate change and biodiversity and presents crofting as a good model for sustainable food production.
- Social justice issues are raised by all organisations to a greater or lesser extent, with focuses on inclusion, equality, and access to food but not in relation to specific protected characteristics (e.g. ethnicity, gender, sexuality), which are only brought up in responses to specific government questions about these, and most often not even then. Many groups advocate for increased participation in planning and decision-making.
- Rights versus responsibilities are not explicitly included by many, but are by some. Scottish
 Land and Estates and National Farmers Union Scotland take similar stances; land owners
 should have right to use the land with minimal external interference. However, Community

Woodland Association suggests that the public have rights over private land use, like access and management for wider environmental benefits.

• There is a wide variety in appetite for speed and degree or extent of change. Large land management groups – NFUS and SLE – suggest that changes needed are minor in scope and impact, whereas organisations representing community groups or interests (e.g., Community Land Scotland, Community Woodlands Association, Quakers and Scottish Crofting Federation) argue that transformative change is required by the climate and nature emergencies, food system crisis, and land ownership status quo. Scottish Environment LINK claims "We must make large scale and rapid changes in the way we use and manage our land" (Scotland's Third Land Use Strategy, 2021), whereas Scottish Land and Estates feel that changes need to be slower, with long term thinking being the focus, and current patterns of land use and ownership continuing.

Future visions and how to get there

Positive future visions agreed on by many stakeholders across the consultation responses and interviews included:

- people and nature living together supportively;
- increased community agency, democratisation, and inclusion in decision making;
- increased and sustainable rural population; and
- sustainable agriculture.

While the visions seem to align, stakeholder interpretations of some the elements, e.g., 'sustainable agriculture', were quite different, as were the methods suggested to achieve them. For example, Confederation of Forest Industries UK calls for increased forestry where Soil Association raises concern about blanket forestry. Many organisations have fears for the future of land in Scotland if trends continue or issues are not addressed. Feared future visions present climate change as a negative for land use in Scotland. Some organisations also raise fears of disempowerment, with Quakers in Scotland referring to the 'powerlessness' of rural communities.

Organisations have suggestions of how to reach their desired future. These are ideas that repeatedly were raised by several organisations, but it is important to note that no organisation made all of these suggestions:

- tailored financial support/incentives from government;
- relationships over regulation;
- support for capacity building;
- shared power; and
- change in understanding and behaviour.

For a vision to be successfully realised, people need objectives that they are accountable for, and mechanisms whereby accountability is enforced.

What do we conclude?

Our analysis of these diverse voices suggests that most stakeholders in our sample support taking a holistic view of land use and acknowledge the multiple functions of land (e.g., commodity

production, habitat, recreation, flood protection, carbon sequestration, cultural landscapes). Most stakeholders also support land use change to reach environmental and social goals. They also want more say in land use decisions, because of these interrelating aspects of land use and the environmental, social, and economic issues that affect multiple sectors in rural Scotland. Differences are reflected in prioritisation of these issues and in future visions of land use in Scotland and how to get there. While agreement, even within sectors, cannot be assumed, there is sometimes agreement across sectors that may be surprising. This suggests that there is a need for stakeholders to come together and listen to each other, potentially through a more participatory approach to policy design. Fostering dialogue between a wider range of different actors could lead to an improved understanding of different perspectives and to finding solutions that minimise or at least make the most effective trade-offs. Popular support could be enrolled upon the basis of a shared, transparently-created land use futures vision, bringing support for a greater breadth of land uses. Future research could consider cross-sector analysis of a number of other consultations on similar important topics, understanding different perspectives and joining policy issues together. This is important when introducing a policy, such as Just Transition, that multiple stakeholder groups hold strong views on.

2 Introduction

This technical report is a deliverable (D9) from the <u>Land Use Transformations</u> project (JHI-C3-1) within the Scottish Government Strategic Research Programme (SRP) 2022-27. It focusses on the Land Use/Land Use Change Story Telling within the work package, 'Joined up approaches to managing land' (WP3.2). The methodological design was developed from July 2022 to February 2023, and the data collection, analysis and interpretation were undertaken from October 2023 to July 2024.

The purpose of the Story Telling work is to respond to one of the overall Land Use Transformation project research questions (RQ2) to explore whether, by joining up approaches to managing land, it is possible to make more effective use of land in delivering the range of public and private goods. The story telling analysis is focussed on meaning-making and story-telling that can shape societal change, aiming to analyse the multiple understandings of Land Use and Land Use Change by different social actors.

The purpose of this technical report is to present the analysis of government consultation responses and the data from subsequent interviews on Land Use/Land Use Change in Scotland, and to outline next steps.

The aims of the story telling work are:

- 1. To identify a diverse set of voices which are weighing in on land-related issues in Scotland by responding to Scotlish Government's public consultations.
- 2. To assess the visions of land use futures that these voices present.

Research questions to be addressed whilst meeting these aims are:

- Whose voices are put forward in land sector governance consultations?
- What vision of land futures do these voices present?
- What undesirable land futures do these voices argue against?
- What environmental and/or social justice issues are expressed in these responses?
- Which voices are missing from these consultation processes?
- On what grounds do consultation voices claim legitimacy?

This report addresses the first four questions; the last two questions will be addressed in future project work.

The next section (section 3) will outline the research methods and data used, then the findings (section 4) explore what stakeholders believe land is for, the environmental and social issues that concern stakeholders, and their attitudes towards change. Some shared future visions will then be introduced (section 5), followed by some conclusions (section 6) and next steps (section 7). Overall, this report highlights that many stakeholders believe a significant and wider-reaching change is needed to support multiple functions of land for a sustainable future.

3 Methods

Between July 2022 and February 2023 we decided on methods to use to elicit the perspectives of diverse people on land use futures and selected a sample of Scottish Government consultations and organisations responding to these. First, we identified a set of 17 Scottish Government policy consultations published between 2018 and 2022 related to land use (see Table 1). These were selected on the basis of including a wide range of interests with a broad stakeholder appeal, land functions (e.g. food and timber production, environmental protection, housing), and the benefits that these functions offer to humans (e.g. in relation to mental health).

Table 1: Selected Consultations.

Consultation name	Consultation	Related policy	Consultation
	closing date		length
Support for Agriculture and	15 th August 2018		46 questions
the Rural Economy Post-Brexit			
2018			
National Council of Rural	24 th July 2018		10 questions
Advisers 2018			
Rural Assets Strategy 2019	26 th April 2019	Crown Estate Scotland Corporate Plan 2020- 2023	32 questions
Good Food Nation 2019	18 th April 2019	Good Food Nation (Scotland) Act 2022	4 questions
Right to Buy Land to Further	19 th September	Part 5 of the Land	29 questions
Sustainable Development 2019	2019	Reform (Scotland) Act 2016	
Environmental Principles and Governance 2019	11 th May 2019		13 questions
Scottish Crown Estate 2019	22 nd November 2019	Scottish Crown Estate Strategic Management Plan	19 questions
Forestry Strategy 2019-2029	29 th November 2018	Scotland's Forestry Strategy 2019-29	17 questions
Scotland's Economic Performance 2020	20 th December 2020	<u>.</u>	10 questions
Review of Mental Health Law 2020	29 th May 2020		93 questions
Just Transition Commission 2020	30 th June 2020	Commission's final recommendations	6 questions
Climate Change Net Zero	31 st March 2021	Public Engagement	15 questions
Nation 2021		Strategy for Climate Change	
Agricultural Transition in	17 th November	Agriculture Bill	21 questions
Scotland 2021	2021		
Scotland's Third Land Use Strategy	17 th January 2021	Scotland's Land Use Strategy 2021 – 2026	12 questions

Environmental Standards	17 th August 2022	Environmental Standards	19 questions
Scotland 2022		Scotland Strategic Plan	
Draft National Planning	31st March 2022	National Planning	70 questions
Framework 4 2022		Framework 4	
Land Rights and	28 th January 2022	Scottish Land Rights and	20 questions
Responsibilities Statement		Responsibilities	
2022		Statement 2022	

We created a spreadsheet collating organisations' responses to each consultation, yielding a list of 1007 distinct businesses and organisations, omitting responses by private individuals. The frequency of responses by each entity ranged from 1 to 12, and no business or organisation responded to all consultations in the sample. Next, we selected 16 organisations who submitted responses to some of these consultations. These were selected to include a diverse set of organisational aims (e.g. production, recreation, environmental and historic conservation, social welfare and inclusivity), and type of organisation (public sector, charity, member organisation). Our sample also included organisation that responded to fewer organisations, to ensure a broader representation by including those with fewer resources to dedicated to responding to consultations. The final list of organisations is presented in Table 2.

Table 2: Purposive sample for story telling.

	Organisation	Focus	Legal Status/Type	Responses
				submitted
1	Historic Environment	Environmental	Public body, charity, membership	12
	Scotland	protection, heritage	organisation	
2	Scottish Land and Estates	Rural landowners	Private limited company, member organisation	11
3	John Muir Trust	Landscape Protection	Charity, membership organisation	10
4	National Farmers Union of Scotland	Farming	Private limited company, member organisation	9
5	Scottish Environment LINK	Environmental protection	Charity, private limited company	9
6	Community Land Scotland	Community landowners	Charity, membership organisation	8
7	Highlands and Islands Enterprise	Rural businesses	Public body	8
8	Royal Town Planning Institute	Planning professionals	Charity, membership organisation, Chartered Institute	8
9	Community Woodlands Association	Community woodland groups	Charity, private limited company, membership organisation	7
10	Paths For All	Outdoor access	Charity, private limited company	7
11	Scottish Crofting Federation	Crofting	Charity, membership organisation	6
12	CONFOR (Confederation of Forest Industries)	Forestry	Private limited company, membership organisation	6
13	Soil Association Scotland	Organic farming	Charity, membership organisation	6
14	Quakers in Scotland	Religious	Membership organisation	5
15	Creative Scotland	Arts, screen, creative industries	Public body	4
16	Outside the Box	Community development	Charity	3

Between March and May 2023 we conducted the analysis of consultation responses. The organisations' responses to the 17 consultations (109 total responses; see Table 3) were coded using NVivo qualitative data analysis software according to a framework based on Carvalho's (2000) media analysis methodology (see Appendix A: Coding framework for the analytical framework used). Our focus encompassed the issues Sonnino et al. (2016) identified as critical to governance frameworks: "the role attributed to different [actors], their diverse views of rights and responsibility, and the types of interactions that are prioritised to achieve collective goals" (p. 477). We then created a template (see Appendix B: Organisation Template) in which to summarise each organisation's responses to the consultations. These summaries were augmented by information publicly available online on organisations' websites about their overall aims, funding sources, and the scale and scope of their work. Finally, we carried out a comparative-synchronic analysis (Carvalho, 2000) of the various representations of land use by concerned organisations in the 4-year span of consultation submissions studied.

Following the textual analysis of the consultations, all the above organisations were contacted to ask if they would be interested in taking part in an interview. Of those contacted, nine¹ organisations responded that they were interested in being interviewed, and we then, in autumn 2023, conducted semi-structured interviews with representatives from the following nine organisations:

- Community Land Scotland
- Community Woodlands Association
- Highlands and Island Enterprises
- Historic Environment Scotland
- Paths for All
- Quakers in Scotland
- Scottish Crofting Federation
- Scottish Land and Estates
- Soil Association

Prior to interviews we sent summaries of the analysis of their consultation responses to the representatives to check accordance with their organisation's views and goals (Birt et al. 2010). To further understand the visions that these organisations have for land use in Scotland, we asked about their perception of significant changes to land use during their tenure with the organisation, significant achievements of the organisation in regard to land use, their vision for 20 years from now, their concerns, and the steps the organisation will take to achieve the vision (see Appendix C: Interview Guide). This gave us data to further refine our analysis. Analysis of interview data was also conducted using NVIVO following the same analytical framework used to analyse the consultation responses.

¹ One further organisation participated in an informal discussion with the interviewer.

Table 3: Organisations selected and relevant consultation responses.

	SIPI	portor Alain	Educe and Council	The Rural M	Control of the state of the sta	the Bullater of the Bullater o	\$ data further connental Party Scott	Substitute of the country of the cou	s de se lor de la constante de	ke ldo	The Peters	Andrea Parising Chin	a John John John John John John John John	John John John John John John John John	a start 222 start and star	June 100 Ord	hates 122 Sandadas Sandadas Sa	chand 122 taken a 122 taken part 1222 taken bar 122
Community Land Scotland		*	*		*		*				*			*		*	*	
Community Woodlands Association	*				*			*					*	*		*	*	
CONFOR	*	*	*					*					*	*		*		
Creative Scotland											*	*				*		
Highlands and Islands Enterprise					*		*	*	*			*				*	*	
Historic Environment Scotland	*		*			*			*		*	*	*	*	*	*	*	
John Muir Trust		*					*	*				*	*	*	*	*	*	
National Farmers Union Scotland					*	*					*	*	*	*				
Outside the Box		*		*								*						
Paths for All	*						*	*			*	*	*	*		*		
Quakers in Scotland											*	*		*		*	*	
Royal Town Planning Institute			*			*			*		*	*		*	*			
Scottish Crofting Federation	*	*		*									*			*	*	
Scottish Environment LINK	*			*		*		*			*		*	*	*			
Scottish Land and Estates	*		*	*	*	*	*	*					*	*		*	*	
Soil Association Scotland	*	*		*		*		*					*					

4 Findings

The responses to the consultations can be seen as persuasive texts and performances for a (government) audience (Ewick and Silbey, 1995). Responses may employ the government's chosen framing or vocabulary to show agreement or to challenge it. Organisations use persuasive techniques, such as: framing an issue in a specific light by using a certain interpretation, appealing to values, using various types of supporting evidence, and other justifications for their views. For example, Community Land Scotland says that a natural places policy "should reflect contemporary thinking in nature conservation, which presents an appropriate balance of natural and human use, not an imposed artificial concept of wildness" (Draft National Planning Framework 4, 2022). This challenges a well-known concept of wildness, suggests the commenter is up to date with current thinking (e.g. Waylen and Marshall 2023), and appeals to reasonableness with the word 'balance'². These discursive strategies, and the values and norms alluded to, reveal the organisations' understandings and assumptions of what land is for, and, how its ownership, management, and use, should be changed (or kept the same) for a desired rural future.

Notably, none of the organisations in our sample responded to all 17 of the consultations assessed, and none of them responded to the Review on Mental Health Law (2020). However, some consultations, such as Scotland's Third Land Use Strategy and the Draft National Planning Framework 4, garnered responses from almost all the selected organisations (11 out of 15) (see Table 2). In many interviews conducted with stakeholders, references were made to the large number of government consultations that take place and a lack of resources on the part of smaller organisations making it impossible to respond to every consultation that is relevant to their work.

In this section we highlight the main themes identified in both the consultation responses and the interviews, and the views presented by the sample of organisations.

4.1 What is land for?

Our choice of 'multifunctionality' as an analytical framework to look at future land use visions was due to its utility in uncovering different experiences of land and what people value it for. In broad terms, 'multifunctionality' refers to the multiple, often intersecting, and sometimes contested, functions of the countryside. These are broadly inclusive of production (e.g., agricultural commodities, wood products), conservation (e.g., of natural and historic resources) and amenity or consumption (e.g., housing, natural amenities). The multiple functions should offer benefits for humans, for instance, in relation to human health or social cohesion, and likewise secure intact ecological systems (Tzoulas et al. 2007; Lafortezza et al. 2013). In this sense, the multifunctionality literature intersects with thinking about 'ecosystem services' – the benefits people obtain from ecosystems – and indeed, a Web of Knowledge search for the term 'multifunctionality' in the last five years shows its significant use in conjunction with ecosystems (see also Hölting et al. 2019; Garland et al. 2021).

Multifunctionality in the consultation responses is thus more-or-less present, ranging from an acknowledgement of a few functions of land to an in-depth, holistic vision of land's functions.

² In some of the language used by stakeholders, there might be meanings that we have not detected because we don't have the necessary familiarity with the 'code' used.

Interestingly, some organisations seem to see land as something of a blank canvas. Outside the Box portrays land as a space where activities happen, and Paths for All, with its focus on access to land, also views land mainly as a base for recreation, tourism, meetings, and physical activity. Creative Scotland speaks of 'spaces' for tourism and wellbeing, including as venues for events and activities.

Others see land as a resource that provides goods, both public and private. Almost every organisation mentions public goods such as access, aesthetic landscapes, biodiversity, flood protection, carbon sequestration, and other ecosystem services. Sometimes these goods are referred to vaguely, such as in Historic Environment Scotland's response to the Just Transition Commission consultation (2020), which claims that "Inspiring and beneficial landscapes will support economic competitiveness and tourism and will reflect our response to climate change. They provide benefits to our education, health and wellbeing for all". Other times the benefits are detailed, with certain organisations presenting benefits directly related to their remit. For example, the same organisation, Historic Environment Scotland, mentions the role of peatland in preserving archaeological artefacts (responses to Scotland's Third Land Use Strategy 2021 and Draft National Planning Framework 4 2022 consultations) and John Muir Trust mentions deer management across consultations, suggesting that along with reducing pressures on land, it can "restore the natural flow of water, increase soil saturation, protect vegetation and allow native woodlands to regenerate on a landscape scale" (Agricultural Transition in Scotland consultation response 2021). Private goods – food and timber, for example – are also ubiquitous but emphasised to varying degrees. In this view, land is a basis for economic activity, providing personal profit as well as local benefits such as employment or national benefits such as food security.

Environmental functions of land are sometimes presented as having economic or social benefits, such as forests that are carbon sinks while also providing spaces for recreation, tourism, and the inherent economic activity timber production (e.g., Confederation of Forest Industries UK, Forestry Strategy 2019-2029 response, 2019; Highlands and Islands Enterprise, Draft National Planning Framework 4 response, 2022). Soil Association speaks of "natural resources that underpin economic activity" that are supported by agroecological and organic farming methods (response to National Council of Rural Advisors consultation 2018). Environmental functions of land are also proposed as major solutions to environmental problems: peatland and forests for carbon sequestration; space and resources for renewable energy; and various land uses and land cover for biodiversity and wildlife habitat.

Overall, most organisations focus on the triumvirate of social, economic, and environmental functions of land. Quakers in Scotland alone speaks about the intrinsic and sacred value of land, not claiming that it needs a purpose to exist. The degree to which organisations discuss economic functions of land does not vary as much as the degree to which environmental or social functions of land are mentioned (see Figure 1). For example, Soil Association has very few mentions of social functions (e.g., cultural heritage, mental health) and Creative Scotland and Highlands and Islands Enterprise (HIE) mention far fewer environmental functions of land than social or economic. Uniquely focused, Outside the Box, in their few consultation responses, only mention social functions of land. Generally, however, organisations at least acknowledge the 'social, economic, and environmental' aspects of land use, to the extent that it seems a standard framing of benefits and concerns, as in Community Land Scotland's response to the National Planning Framework 4

consultation (2022): "The wording of this policy should include equal reference to the three pillars of sustainability -- economic, social and environmental."

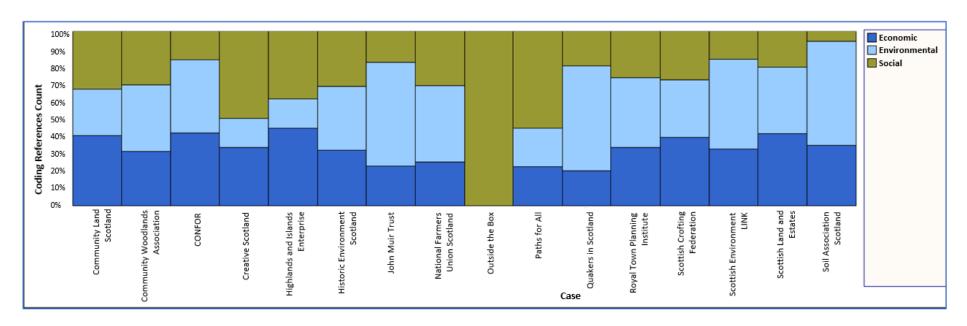


Figure 1: Functions of land mentioned by organisations, by percentage

4.2 Sectoral vs holistic view

Organisations differ on whether land-related issues are seen as discrete (i.e. only involving their own, or another sector) or systemic (i.e. involving links between sectors and issues). For example, in the Good Food Nation consultation (2019), the Soil Association and Scottish Crofters Federation (SCF) link food production to workers' rights, health, waste, and other environmental impacts that need to be addressed systemically. The SCF argues, "We need a Good Food Nation bill to set a holistic framework for a socially and environmentally just food system." Housing is seen it as a systemic social and economic issue by many organisations. It is often portrayed as interrelated with employment, infrastructure, transportation, and tourism. Other organisations have specific focuses; Scottish Land and Estates (SLE) focuses solely on land managers and producers in their response to the Good Food Nation consultation. It is however worth noting that when interviewed, the representative of this organisation emphasised the need for a holistic approach to land management that encompasses multiple land uses.

The organisations also differ on whether they have chosen a narrow or wide range of issues to focus on (Figure 2). Paths for All has a narrow focus on issues to do with transport and walking in Scotland, but speaks on behalf of Scottish society as a whole, whereas the Confederation of Forest Industries UK (CONFOR) represents members of the forestry and wood supply chain and is almost solely concerned with promoting the growth of that sector in its responses. Creative Scotland similarly represent their sector and focus solely on it in their responses. Quakers are the only group to focus significantly on Scotland's impact on and relation to other countries, especially developing nations. Finally, while some organisations portray themselves as representing broader populations in their answers, others represent a definite cohort such as their members. For example, HIE has a broader remit, representing people, communities and businesses in the region, focusing on economic success but also concerned with inclusion and environmental sustainability. National Farmers Union Scotland (NFUS) claims representation of Scottish farmers and crofters to ensure they benefit from any land use or regulation changes, although it also emphasises the importance of farming for wider communities.

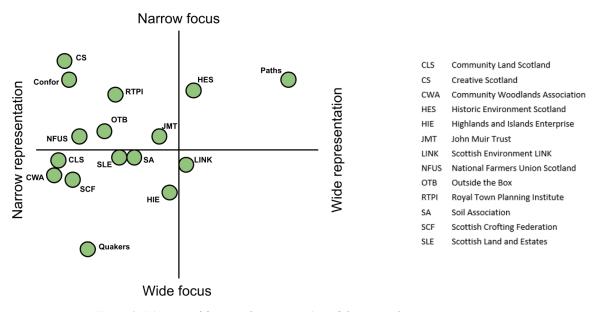


Figure 2: Diagram of focus and representation of the respondent groups

4.3 Looking for change or supporting status quo

The scale of change that stakeholders think is needed on land-related issues ranges from slight to large-scale systems change. The organisations with a focus on landscape and environmental protection – John Muir Trust and Scottish Environment LINK – advocate for far-reaching, significant changes in land use. For example, Scottish Environment LINK claims, "We must make large scale and rapid changes in the way we use and manage our land" (Scotland's Third Land Use Strategy consultation response, 2021). Organisations representing community groups or interests – Community Land Scotland, Community Woodlands Association, Quakers and Scottish Crofting Federation (SCF) – argue that transformative change is required by the climate and nature emergencies, food system crisis, and land ownership/agriculture status quo. For example, Quakers in Scotland refers to "the fundamental reframing of our relationship with the natural world that is required" (Review of Land Rights and Responsibilities Statement consultation response, 2022) from extractive and human-centred to being part of the natural world. Community Woodlands Association argues that

"The main barrier to a just transition is the refusal of the [agriculture] sector and its regulators to recognise the scale of change needed [...] fundamental changes in farming practices and consumer behaviours, and significant land release" (Agricultural Transition in Scotland consultation response, 2021).

Agriculture and estate groups NFUS and SLE suggest that changes needed are minor in scope and impact; NFUS warns that "Any reductions beyond what can be achieved through efficiency and technology would mean reducing the amount of food produced in Scotland" (Just Transition Commission consultation response, 2020) and insists actions on carbon emissions and biodiversity "must not be to the detriment of the economic or financial viability of the agricultural business" (Agricultural Transition in Scotland consultation response, 2021). The two organisations see less need for significant, quick change and argue that changing culture and way of life will take a longer time. For example, the SLE interviewee said:

"we have to think long term, too often we think in terms of 3 and 5 year cycles, it's really unhelpful when you're managing land, because, if you plant a tree, that's an 80-year decision. If you sow a crop, that's a two-year decision, we have to think long term, and if we want to have good thriving communities then we have to have long term plans and strategies in place because that's what will allow people to plan ahead, and that helps create and secure jobs."

Rather than advocating for a wholesale change in the dominant model of agricultural production as Soil Association does, NFUS believes changes are needed to agri-environmental schemes towards outcome-based payments (Support for Agriculture and the Rural Economy consultation response, 2018). SLE supports a continuation of the model of predominantly private land ownership and tenure, limiting the decision-making power of communities when it comes to use of privately owned land and disputing the land reform goal of landownership diversification (Review of the Land Rights and Responsibilities Statement consultation response, 2022).

4.4 Environmental issues

Organisations' views differ on what changes are needed, and what priority environmental issues should have. Whilst there is broad consensus that climate change is an important issue along with associated carbon sequestration and emissions reductions, and government focus on it is not challenged, the organisations suggest different ways to address it. Organisations also widely acknowledge biodiversity as an issue. Other issues are brought up by stakeholders whose activities are more related to the specific concerns, such as water quality, transportation, flood risk, soil erosion, and sustainable tourism.

Some specifically fear the consequences of not seriously addressing climate change. The Community Land Scotland (CLS) interviewee thinks "people aren't scared enough about climate change because it's not really impacted them yet" and hopes that Scotland does not have to have disasters on the scale of Greece's 2023 heatwave and wildfires before significant action is taken. The Scottish Land and Estates interviewee also worries that Scotland will not reach Net Zero "because we're too busy squabbling over silly things, and missing the point sometimes [...] we tinker around, don't deal with big issues, and just create inertia." However, while CLS advocates for community-led and -owned development to "be the centre of a Just Transition" (National Planning Framework 4 consultation response, 2022), SLE uses the example of squabbling over who owns land when it is management of land, not ownership, that is important to addressing climate change (Interview).

Unsurprisingly, environmental organisations have a detailed list of concerns, and environmental issues are a priority for them rather than a way to frame or justify the pursuit of different goals. Scottish Environment LINK is concerned with impacts of the current economic model, agriculture and policy on the environment. It refers to a range of environmental issues, including greenhouse gas emissions, loss of pollinators and biodiversity, and the need for restoration of native habitats. CLS is concerned about environmental issues such as climate change and biodiversity but sees them through a social lens such as Just Transition or land ownership. SLE briefly mentions climate change mitigation and seeks recognition for current activities, arguing that traditional landowners can deliver and fund environmental objectives.

Stakeholders typically attribute environmental problems to other sectors' practices and/or offer proposals beneficial to their own sector as solutions. For example, Soil Association suggests a switch to organic farming can address many environmental problems and Paths for All argues that denser housing with less need for car travel would positively impact on climate issues. The SCF is concerned about climate change (emissions from 'industrialised' agriculture and from long supply chains) and biodiversity. Therefore, crofting is presented as being key for sustainable food production, tackling climate change and biodiversity. CONFOR is primarily concerned with climate change and offer trees as the solution for carbon sequestration, preferably supported by government funding. CONFOR believes environmental and economic goals should complement and support each other.

4.5 Social justice issues

Significant social justice concerns are focused on processes relating to land use. Many groups advocate for democratic participation in planning and decision-making, with special mention of including marginalised groups. The John Muir Trust sees a need to "overcome barriers to

participation such as digital divides, unequal access to information, and also consider the different needs of individuals to participate or engage meaningfully" (Climate Change – Net Zero Nation consultation response, 2021) and the Royal Town Planning Institute notes "issues about how we ensure people have equal accessibility to the things they need" (Just Transition Commission consultation response, 2020).

Another frequent concern is equity - access to land and fair distribution of wealth/benefits from land. Many organisations frame their arguments using concepts such as community wealth, common good, public benefit, sustainable diets, and food security. A quote from Community Land Scotland encompasses all of these concerns:

"the principles of a Just Transition must be embedded throughout all actions. This must ensure that communities are actively engaged in land use decisions and that planning and public support for net zero does not widen existing inequalities. The opportunities and benefits arising from these actions must be shared fairly across Scotland.... through sustainable land and other asset management that retains wealth within communities on a more equitable basis for the common good" (Draft National Planning Framework 4 consultation response, 2022)

Disempowerment is also a worry for some stakeholders. Quakers in Scotland are concerned with the power of absentee landlords to erect barriers to land access and refer to the "powerlessness" of communities to safeguard the environment, resulting in "Scotland becoming a completely green desert" due to unsustainable agriculture (Interviewee). Referring to the increase in private investment in land for natural capital returns, the Soil Association interviewee says, "we could have a situation where communities in particular feel like change is being imposed on them or being done to them and that they don't have a say or an involvement in what's happening."

As with the environment, some organisations, such as CONFOR, only infrequently bring up social justice issues and not in detail. Others, such as Creative Scotland, focus mostly on their sector: they focus on how art can be made accessible and the role that land can play in this, particularly in terms of rural isolation and digital exclusion.

4.6 Rights vs responsibilities

Only few organisations use the language of 'rights and responsibilities', but the concepts can be discerned in others' responses even if not named as such. Scottish Environment LINK, for example, advocates for government incorporating "the right to food" along with "the right to a healthy environment" in the Good Food Nation consultation (2019). SLE advocates for the rights of private landowners rather than communities to decide on land use on private land: "the land management decisions create risk for land managers and that's why we can't always do what everyone wants to do. The decision has to lie with the person taking the risk" (Interview). Similarly, NFUS stresses that farmers should be in a position where they can manage their land with minimal interference. In contrast, the Community Woodland Association argues that land right-holders have environmental and social responsibilities towards local communities. The organisation asserts that decisions about land use should not be limited to what they characterise as "small, heavily subsidised groups of wealthy people" (Draft National Planning Framework 4, 2022).

Often, stakeholders do not directly attribute problems, such as declining biodiversity, to the actions of specific actors or causal forces. Thus, responsibility is portrayed as diffuse and the 'polluter pays' principle does not seem to inform many stakeholders' consultation responses. For example, in their Good Food Nation (2019) response, Scottish Environment LINK states that "inefficient management of nitrogen on farms is a major source of air and water pollution; 48% of nitrogen fertiliser, slurry and manure in Scotland is not taken up by crops or grass". They suggest the resulting emission of nitrous oxide (a greenhouse gas) is a result of intensive land management. In contrast, the NFUS suggest the solution is research into "nitrogen inhibitors and slow-release fertilisers" (Agricultural Transition in Scotland, 2021). Similarly, organisations think of land use change as their responsibility to differing extents. There are some suggestions that the problem is for other sectors to solve, e.g., CONFOR states "Attempts to encourage farmers to diversify by planting some of their land [with trees] must be intensified dramatically" to meet climate change targets (Support for Agriculture and the Rural Economy consultation response, 2018). On the other hand, NFUS is concerned that farmers will (unfairly) carry most of the responsibility and financial cost of taking environmental actions to mitigate climate change and preserve and enhance biodiversity. There are some organisations that propose everyone has responsibility for land use change: HIE advocates for inclusion of businesses alongside people, organisations, communities and places in Climate Change Consultation goals and John Muir Trust advises the government to "Communicat[e] that a Green Recovery will require every sector, every part of our economy, every community, Government and public bodies to align on a shared direction" in the Climate Change - Net Zero Nation consultation (2021).

5 Future Visions and How to Get There

Many organisations have fears for the future of land in Scotland if trends continue or issues are not addressed. Historic Environment Scotland links concerns in a causal chain from decreasing rural population which would mean "we don't have active land management, we don't have succession for land managers, we will start to lose the cultural traditions that are tied to specific landscapes, and the management of specific landscapes, and that in itself weakens communities" (Interviewee). NFUS goes further to predict, with a loss of agricultural production, "economic, environmental, [and] social declines across rural Scotland" (Agricultural Transition in Scotland consultation response, 2021). Stakeholders' visions of a positive future address these concerns and more.

5.1 Positive Visions

While the future visions for rural land use that stakeholders propose are diverse in their detail, there are meaningful commonalities that many share beyond the desire for the less-detailed 'thriving', 'sustainable', or 'healthy' futures that may appear as headlines in organisations' visions. Four common themes are:

- People and nature living together supportively
- Increased community agency, democratisation, and inclusion in decision-making
- Increased and sustainable rural population
- Sustainable agriculture

People and nature living together supportively

In an interview, the SCF expressed concern that unregulated carbon trading and afforestation for carbon sequestration that are "really exclusive of community and people" could result in "having a huge natural reserve which the world might look at in awe and say, 'wow, look most of Scotland is just about species restoration and biodiversity and so on' - but there's no people there". The stakeholders in our sample, however, support the idea of people and nature living together to the benefit of both. As a Community Woodlands Association interviewee described it, Scotland land use stakeholders are "pragmatic" and wouldn't, for example, buy out landowners to create a people-free national park as was done in the United States. The interviewee explained that "pretty much all [large, environmental sector] organisations have had a debate about people or place. Are they protecting the place, or are they creating an attachment between people and place so that people protect the place?" His views have evolved from an ecology-centred perspective, to believing that people should be involved in land and environmental decisions: "My original starting point in all this was the hardcore environmental thinking place first, place people second. [But if] you want long term environmental benefits, it's the people on the land that are going to deliver that in 100 years' time."

The ideal, then, is "thriving rural communities who are managing the changing environment, consciously, and benefitting from it" (Interviewee, Historic Environment Scotland). Scottish Environment LINK suggests that nature benefits from people living and interacting in it, citing the prevalence of owner-occupied land in Norway as a key factor in successful afforestation and suggesting "Funding to support farmers and crofters to protect, maintain and enhance biodiversity

should be a core and significant part of future farming policy" (Agricultural Transition in Scotland consultation response, 2021).

Increased community agency, democratisation, and inclusion in decision-making

Some stakeholders' concerns about social justice included the inclusivity of land use decisionmaking processes. Thus, their desired futures were ones where communities had increased agency, democratisation, and inclusion in decision-making. For some stakeholders, such as Community Woodlands Association, Community Land Scotland, and the Scottish Crofting Federation, this meant more diverse ownership and management of land, including ownership by communities and increasing the numbers of crofts, increasing the agency and power of people and communities and increasing the likelihood of positive benefits to communities. Some stakeholders also envisioned more community participation in decision-making in cases of private land ownership, emphasising landowners' and managers' environmental and social responsibilities to communities. Some stakeholders such as John Muir Trust and Outside the Box were concerned with including lesserheard voices such as youth, people from groups with protected characteristics, and those with poor digital access in decision-making. JMT and Quakers advocated democratic forms of participation such as climate assemblies. This increased participation wasn't necessarily seen as achievable right away, however, by some groups who raised the issue of community capacity. One stakeholder said, "The biggest issue that our members face is capacity, too much to do, too little time. So, if government is trying to make communities the heart of things, how are communities going to deal with that?" (interview, Community Woodlands Association).

Increased and sustainable rural population

Several stakeholders envision a larger, sustainable rural population as a key element of a positive land use future. This population is variously described as healthy, growing, and thriving. Outside the Box is specific, wanting to see older people staying in rural communities and good jobs for young people keeping them there as well. Similarly, Scottish Land and Estates emphasises the role of access to necessary services in rural communities to help them thrive. Housing that is specifically suited to rural communities of various sizes, affordable and 'of the right type', e.g. live-work units in places, is supported by HIE (National Planning Framework 4 consultation response, 2022). SCF paints a picture where "the whole of Scotland is under legislation considered under crofting tenure and that [...] we're starting to see crofts springing up all over Scotland and young families taking on crofts knowing that they've got a secure tenancy so they can invest in the croft and seeing so many more people on our land" (interview). Increasing/sustaining rural populations, however, is not a vision expressed by the more environmentally-focused groups.

Sustainable agriculture

As agriculture is a major land use in Scotland, eleven of the stakeholders comment on at least one agriculture-related consultation. All advocate for agriculture that could be called 'sustainable', although they do not all share the same perspective on what 'sustainable' means and prioritise economic, environmental and social aspects differently. The National Farmers Union Scotland prioritised economic sustainability, seeing it as underpinning environmental and social sustainability. For them, agriculture must be "productive, innovative, and above all profitable" (Support for Agriculture and the Rural Economy consultation response, 2018). Although they speak

of interlinked aspects in their response to Scotland's Third Land Use Strategy (2021), saying "True sustainability is dependent on the interdependence of economic, environmental and social components working together", the stronger message is that "As farmers and crofters play their part in reducing carbon emissions and enhancing biodiversity, this must not be to the detriment of the economic or financial viability of the agricultural business" (Agricultural Transition in Scotland consultation response, 2021). In contrast, Scottish Environment LINK describes a sustainable farming regime as

"one which produces good quality food (in terms of nutritional value, wholesomeness, taste, and so on) in a way that also conserves the natural resources on which production is based and delivers a whole range of public benefits (from carbon sequestration to attractive and accessible landscapes and the spiritual uplift that these can provide)" (Good Food Nation consultation response, 2019)

and also integrates woodlands into other uses. For LINK, economic aspects relating to producers are not a focus.

SCF, Soil Association, Quakers, SLE and John Muir Trust all support some form of environmentally friendly farming: organic, agroecological, regenerative, or agroforestry, with some advocating a wholesale change to these methods and others suggesting them as a smaller diversification alongside current practices.

Finally, local food is a characteristic of rural futures for a few stakeholder organisations. NFUS describes "Shorter supply chains and more opportunities for local supply of higher value markets" (Agricultural Transition in Scotland consultation response, 2021) whereas SCF sees "increasing sustainable Scottish food production for Scottish consumption" as the key goal of a new agricultural support system that secures a "socially and environmentally just food system" (Good Food Nation consultation response, 2019). SCF, NFUS, and Soil Association all see a role for public procurement of local food, which Soil Association suggests would provide "healthier, higher animal welfare, local and organic food, [and] stable markets for farmers and growers" (Good Food Nation consultation response, 2019).

5.2 How to get there?

Organisations have various suggestions of how to reach their desired land use future. Proposed approaches relate to stakeholder perceptions of the extent of change needed, whether understanding needs to change, how much behaviour needs to change, and who is it who should change.

Tailored financial support/incentives from government

Financial support is a frequent topic, but stakeholders differ on who should get it, for what, and how. In the Agricultural Transition in Scotland consultation, a question was posed about capital funding's role in contrast, argues that emissions reductions resulting from improved farming practices "will still leave agriculture as one of the biggest emitting sectors". CWA and the John Muir Trust both argue that capital funding should be limited to environmental benefits. SLE supports capital funding in the short term, but advocates for funding that increases productivity and innovation so the need for public support of the sector would eventually cease. NFUS and SLE point

out that limited cash flow and slim margins prevent farmers making capital-intensive changes that only, or mainly, deliver environmental goods (Agricultural Transition in Scotland consultation responses, 2021).

Regarding biodiversity, the Agricultural Transition in Scotland consultation (2021) asked if actions to benefit biodiversity should be incentivised. Opinions here are somewhat more aligned. Scottish Environment LINK, John Muir Trust, and Soil Association agreed that biodiversity funding should be core to future agricultural policy, and JMT take the view that while regulation and advice will also be needed for the scale of uptake needed, government funding is "especially critical here" because of the lack of income and the costs for farmers related to biodiversity. While NFUS advise that safeguarding biodiversity can be regulated, the organisation "is firmly of the opinion that all farm and crofting businesses should be incentivised to undertake actions which enhance biodiversity. The key word is 'incentivised'".

cutting agricultural carbon emissions. The answers reveal different opinions about the extent of change needed and the role of public funding. The NFUS believes that agricultural emissions can be addressed through increased efficiencies, e.g., crop breeding advancements and precision farming, with capital funding driving productivity and efficiency, "thereby delivering both financial and environmental benefits simultaneously". Community Woodlands Association, in

More generally, SCF and CWA have argued that new support systems should change towards funding more public goods. Several stakeholders (Soil Association, Quakers, LINK) argue for agricultural policy and funding to be directed towards different farming models and thus more environmental outcomes. In addition to payments and capital funding, they add that funding should increase for advisory services, research and training.

Some social justice concerns are expressed regarding government funding. Soil Association argues fairness means that small producers need more support than the biggest landowners on the best land who typically receive the most money and CWA argues that public funding for land management should be accessible to all, rewarding management rather than ownership.

Two interviewees commented on the scale of funding required to deliver on Scottish Government goals. Regarding food production, biodiversity, and climate transition, the interviewee from HIE said,

"the resources that are available to support that policy shift are probably not enough and without significant resource that shift isn't going to take place or isn't going to take place successfully because you're asking people to...deliver multiple outputs, some of which they're not doing at all at the moment."

The Soil Association interviewee says, "We have about six hundred million pounds a year being spent on agriculture in Scotland and the way in which it's being spent at the moment is not going to get us to where we need to go." They argue that "this decade needs to be one of real change and ...we're now almost in 2024 and we haven't quite got there yet [...] I think if we don't do it now then it's going to become a lot more expensive" (Interview).

Relationships rather than regulation

Overall, regulation seems to be a less-popular method of creating change. Some stakeholders see regulations as inflexible, complicated, and distanced from realities. Scottish Land and Estates advocates for a regulatory approach where regulators work closely and positively with land managers and describe the current system as "computer says no" and overregulation (Agricultural Transition in Scotland consultation response, 2021). In the Forestry Strategy 2019-2029 consultation they ask for "a more practical, simplified and less bureaucratic regulatory framework" informed by professional foresters. NFUS, in the Agricultural Transition in Scotland consultation, suggests an adaptive approach that rewards innovation while managing risks, and see the transition as an opportunity to "reduce red-tape on farmers". Its recommendation is that change be "incentivised and rewarded" if not financially remunerative, not obligated (Agricultural Transition in Scotland consultation response, 2021). In contrast, responding to the consultation's question about "simplif[ying] the consumer compliance burden", LINK objects to what it calls the "unhelpful narrative where regulation constitutes red tape for farmers, rather than a necessary control to ensure continued quality, and protection of the environment and natural assets". Soil Association sees a place for some regulation: "public policy can in some cases provide incentives to change and in other cases can provide a bit of a stick, so increased regulation in some areas to incentivise change." Whether regulation is seen as an impediment to certain uses of land or could help facilitate them seems to depend on whether the stakeholder desires change and on their accustomed level of autonomy.

Support for capacity building

The community-oriented groups often posit the government's role as to 'facilitate' rather than 'incentivise'. The Quakers suggest, "A question that should drive the government's approach to communicating climate change policy should be: "how do we enable people to shape and play a part in delivering climate change policy?" (Climate Change - Net Zero consultation response, 2021) and throughout the consultations suggest measures such as resourcing participation in decision making. The CLS interviewee suggests that if communities are provided with more development officer support for capacity building, feasibility studies, and business plans, "communities [will] build their own capacity and go on to do really great things." The Highlands and Islands Enterprise interviewee explained that community ownership asks a lot of a volunteer group of residents and a full-time support person with expertise can play a crucial role in guiding and helping the community. HIE has provided funding for employment costs in quite a few of these situations. The HIE interviewee explains that communities in the Highlands and Islands aren't "looking for somebody to deliver the answers for them" but rather are "owning the challenge and seeking support to do something about it rather than externalising the challenge and looking for somebody else to sort it out for them." The aforementioned desire for more training and advisory services for farmers and land managers is also a request for support in capacity building.

Shared power

Related to some stakeholders' desire for more democratic decision making, some make appeals for sharing power. The interviewee from Community Land Scotland reflected on their experience of the difference that access to power and agency made in addressing local needs in communities that owned assets, compared to the "old system where lairds had a huge amount of power and control and were only controlled [themselves] by statutory means". Historic Environment Scotland

recommends communities be at the forefront of planning and decision-making. Similarly, Scottish Crofting Federation advocates for more involvement of civil society in planning and delivery of strategies, and Scottish Government meeting people directly in places where they live and "asking people, what is it that you would like to see happen" (interview). The Quakers strongly suggest devolving power to communities, community councils, and citizen assemblies, prioritising engagement of the least privileged. John Muir Trust advocates for public participation in policy including children and young people as a norm.

Change in understanding and behaviour

Many of these visions and the methods for reaching them require changing mindsets and behaviours, both in institutions and individuals. Commenting on the impending National Planning Framework 4 (2022) as one way to assist with a Just Transition, the Royal Town Planning Institute advocates shifting "From short term thinking to long-, medium- and short- term thinking; From an opportunistic, reactive approach to development to a planned, proactive approach; From shortterm, project focussed investment to a planned long term holistic vision" (Just Transition Commission consultation response, 2022). SLE agrees with a holistic, systemic approach, saying that "people have a single issue that they want to drive ... land management doesn't work like that. It all has to be integrated, it has to work together" (interview). Especially in a sector where, for example, trees might take 80 years to mature, they say people must think long term and have plans and strategies in place to take away uncertainty (interview). This implies a broader, coordinated approach to change; Paths for All suggests it requires a "significant shift to a more people centred approach" and a "move away from a focus on individual action to ... a systems based approach" (National Planning Framework 4 consultation response, 2022). The Quakers suggest the mindset that needs to change means measuring success in terms of "emissions reductions, and a range of indicators for equality and wellbeing", rather than by GDP (Just Transition Commission consultation response, 2020). HIE advocates perception change via a change in communications where Net Zero and other environmental goals should be embraced as opportunities rather than seen as burdens.

Some stakeholders speak about individual change needed. John Muir Trust talks about the importance of learning to love nature beginning with young children, and their programs to help children develop this value. It sees change brought about largely through behavioural change rather than technological solutions. Community Woodlands Association suggests a fundamental change in consumer behaviours will be needed to cut emissions (Agricultural Transition in Scotland consultation response, 2021). However, the Soil Association interviewee warns that although

"everyone agrees with net zero and the public are fully supportive of environmental measures to get there [when] you say, 'okay it's going to cost you money' or 'you're going to have change your lifestyle' then people aren't quite so enthusiastic about it and that makes it very difficult for policymakers."

Based on his work in Scottish communities, Shucksmith (2018) suggests that encouraging "collective imagining of alternatives" (p. 164) is necessary to dislodge the status quo and assist radical, holistic thinking. He proposes that utopian thinking be incorporated in local, democratic planning processes for rural development. We would suggest the visioning described in this report can offer insight into understandings of interlinked issues and a possibly more inclusive frame for

land use changes in Scotland. Suggestions organisations have made to address issues of concern often involve different ways of thinking that can inform significant change processes.

6 Conclusions

This analysis of responses from 16 organisations to 17 different consultations on land use in Scotland, followed up with 9 interviews with stakeholders, encompassed a broad range of stakeholder voices and their visions of land use futures. These stakeholders are relatively well-resourced and/or able to voice their perspectives in other fora such as media, partnership working, and interest groups. Indeed, some responses have a confident, even forceful tone that assumes a government hearing. While the individual organisations may have more or less impact on policy, they nonetheless represent sectors (e.g., community ownership, land management, religion, heritage) that are fairly prominent in Scottish society. Whilst some may not necessarily expect, but rather hope, government will reflect their views in policy, they see the consultations as an opportunity to have their voices heard, contributing to – as the Community Land Scotland Interviewee put it – "mainstreaming [their perspectives] in the policy debate".

It is unsurprising that land use issues are complex and organisations have somewhat different perspectives and stances depending on their remits. Whilst some organisations in some responses take a narrow view of land use, amongst others it is broader. This more holistic view may come about as a result of the expected multifunctionality of land use in Scotland. These differences are also reflected in future visions of land use in Scotland and how to get there, with some organisations' future visions addressing interlinked issues: the sustainability of rural populations, biodiversity and climate change, needed changes in agriculture, and inclusions in decision-making.

Amongst the positive changes that stakeholders desire, there are warnings of a more dystopian future if current land use trends continue and perhaps accelerate. These include a deepening/worsening of climate and biodiversity crises, rural depopulation, and deepening inequality. In some scenarios, rather than collaborating and unifying to bring about change, land users are pitted against each other. However, while it's evident that there are multiple, and often conflicting, demands made on land, there are also commonalities in what people want to see in the future. These require joint efforts across sectors, and, despite their differences, many stakeholders suggest tackling issues through a more joined-up, collaborative, and participative approach, which understands issues in a holistic way and enables shared understandings of land use. To this end, policy design could adopt a more participatory approach; while policy consultations lend themselves to stakeholders trying to convince policy makers of their particular point of view, an approach that fosters dialogue between different actors, could lead to an improved understanding between different perspectives and to finding commonalities between these (Jager et al 2019; Wyborn et al 2020). The aim here would not be to strive for win-win solutions, which can obscure differences in perspectives and the need for trade-offs (e.g. Chaigneau and Brown 2016), but rather to find solutions that make the best possible trade-offs (Gavin et al 2018). This approach may include government providing diverse and accessible avenues that widen the breadth of participation. Some affirm that collaborative action is necessary to deliver good outcomes from certain policies (Historic Environment Scotland and John Muir Trust, National Planning Framework 4, 2022; Creative Scotland, Climate Change Net Zero Nation, 2021; Royal Town Planning Institute,

Rural Assets Strategy, 2019). Stakeholders also provide many examples from their own work of successful partnerships and cross-sector collaborations. There is also acknowledgement by many organisations that to achieve future visions that take into account various uses of land, wider reaching changes will be needed. To this end, popular support could be enrolled by Scottish Government upon the basis of a shared vision across land use policies, enabling shared understandings of a greater breadth of land uses.

Future research on impending issues could consider cross-sector analysis of a number of consultations, joining policy issues together and looking at issues on different scales. For example, responses to the upcoming fourth land use strategy could be analysed along with responses to the Climate Change Plan and Natural Environment Bill. This would help with understanding how similarly the various stakeholders feel on a range of related issues, important when introducing a policy, such as Just Transition, that multiple stakeholder groups hold strong views on. This approach also has synergies with the work done within the Land Use Transformations project by Blackstock et al. (2024) on policy coherence of Scottish Government land use policies. For example, they found that climate change adaptation and related issues of justice were not given much attention in land-based policy documents. Climate change and justice, however, are clear concerns seen in the analysis across the spectrum of consultation responses in our sample, albeit with some conflicts between stakeholder interests. The agreement on desired outcomes may be a fruitful avenue to pursue.

7 Next steps

This report has analysed views on land use and land use change from stakeholders who responded to our sample of government consultations, but does not address the perspectives of those who may not have the resources to respond to these. To address this gap, our next steps will involve individuals who are representative of those who do not usually take part in responses to government consultations on land use. Following recent completion of an ethics application, walking video interviews with individuals from groups of lesser-heard voices will be conducted in the coming months. This will address the research question 'Which voices are missing from these consultation processes?' and investigate what visions of future land use these voices present. This will be useful to the wider Land use Transformation project exploring Scotland's landscapes of consumption and the Quantitative Story Telling cycle, and will contribute to the project's overall purpose of exploring whether joining up approaches to managing land can lead to more effective use of land in delivering the range of public and private goods. This part of the research will be published as Deliverable D14 'New/Alternative Land Use Stories', due in February 2027.

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Appendix A: Coding framework

Coding framework used to analyse both the consultation responses and the interview transcripts. This is based on Carvalho's (2000) media analysis methodology and includes the issues Sonnino et al. (2016) identified as critical to governance frameworks (see Methods section).

Node	Description								
Actors	Who is mentioned and how are they represented?								
Agents	Subjects who act								
Characters	Objects who are discussed								
Discursive Strategies and Processes	Interventions on reality to achieve a certain effect/goal. How do they suggest we achieve the ambitions?								
Angle	Approach to issue/problem								
Framing	Selective simplified interpretation/construction of reality								
Legitimation	Credibility, appeal of agents								
Logos	Inductive/deductive reasoning, sources of evidence cited, examples given								
Narrativization	Storyline								
Ideological Viewpoints	What morals, norms, or values are alluded to?								
Future	Positive and negative visions								
Language and Rhetoric	Language used to represent a certain reality, e.g. metaphors, hyperbole, repetition, writing style, tone, etc								
Objects	Topics/themes constituted by discourse								
Functions of Land	What functions of land are emphasized?								
Economic									
Ecosystem Services	Provisioning, regulating, supporting, cultural								
Cultural	Physical health and mental wellbeing, tourism, knowledge and learning, recreation, sense of place, inspiration, spiritual and religious connections								
Provisioning	Food and drink, medicines, water supply, materials, energy								
Regulating	Clean air, carbon storage, flood management, erosion control, water purification, disease and pest control, pollination								
Supporting	Healthy soils, photosynthesis, nutrient cycling, space for wildlife								
Environmental	(includes biodiversity)								
Housing	(both an economic and social goal)								
Social									

Appendix B: Organisation Template

Template used to summarise each organisation's responses to the consultations (see Methods section).

Name of organisation:

INFORMATION ABOUT THE ORGANISATION

Sources:

1.

2.

Overall aims of the organisation

Scale and scope of the organisation's work

Who is this organisation representing?

How is the organisation funded?

ORGANISATION'S RESPONSE TO CONSULTATIONS

List of selected consultations this organisation has responded to:

What vision of land futures does this organisation present? (and what undesirable land futures does it argue against?)

What environmental and/or social justice issues are expressed in these responses?

Appendix C: Interview Guide

List of topics used to guide the semi-structured interviews (see Methods section).

Land Use Change Story Telling Research

Interview guide

Interviewee background:

- What is your background with the [organisation name]? (i.e., how long have you worked there, how did you come to be employed there)

Verifying consultation analysis results:

 How accurate do you feel the research team's interpretation of the [organisation]'s consultation responses is?

Personal Experiences:

- What is your personal experience of the countryside in Scotland?
- Have any experiences in particular strongly shaped your views on it?

Further developing [organisation]'s vision for land use in Scotland:

- What are the most significant changes to land use in rural areas that you've seen in the time you have been working with [organisation]?
- What achievement of [organisation] relating to land use in rural areas do you think is most significant?
- As you imagine rural areas 20 years from now, what is the most important thing you would like to see?
- What are you concerned might happen in the future?
- What steps do you think need to be taken to move forward with rural land use?
- When [organisation] makes decisions or takes action to bring about the future state you'd like to see, how are views from members/supporters, which may differ, taken into account?

Thanks and close:

- Chance to give any final thoughts, discuss anything that the interviewee feels has been missed etc.