

# Consultation Response: “Agricultural Transition in Scotland”

## Baselining

### **1. Should agricultural businesses receiving support be required to undertake a level of baseline data collection?**

- a. Yes ✓
- b. No
- c. I don't know

*Please explain your answer:*

Scotland has enormous potential to deliver major carbon reductions by transforming the way land is managed. The John Muir Trust believes that in order for Scotland to reduce greenhouse gas emissions and improve outcomes for nature, as well as achieve other environmental, social and economic improvements such as soil management and reduced water pollution and downstream flooding, agricultural businesses need to understand the baseline situation on their farms through auditing and data collection. This data can be used for a number of purposes, including identifying areas for improvement at farm level, benchmarking against other businesses, contributing to measuring progress against national climate change and biodiversity indicators and targets, and predicting future emissions reductions based on actions already undertaken.

The John Muir Trust has developed an innovative proposal for a Carbon Emissions Land Tax, which was included as a recommendation in the Climate Assembly's "Statement of Ambition and Recommendations" (cf. pages 42 and 86 of their report). This proposal would band landholdings over 1,000 ha according to their land uses and estimated negative or positive emissions (i.e. the tax would not affect crofters, small family-owned farms, or smaller landholdings). The baseline data collection could also be utilised for tax banding assessments, and agricultural businesses that take steps to cut emissions and increase sequestration and storage could expect to move down tax bandings following an evaluation. Conversely, landholdings whose emissions increased could expect to move up the scale. This proposal would incentivise landowners to modify harmful behaviour and complement existing support schemes.

If farm businesses are to continue to receive substantial levels of direct payments in the future, then undertaking a level of baseline data collection should be a minimum requirement. Moreover, direct payments should help farmers to deliver public benefits/goods in terms of improvements for climate and biodiversity.

### **2. Should collected data be submitted for national collation?**

- a. Yes ✓
- b. No
- c. I don't know

*Please explain your answer:*

We are facing a nature and climate emergency and need relevant and up to date information to guide action and measure success. In addition to collecting and collating data relating to climate

action and greenhouse gas emissions, it would be hugely valuable to collect farm level data about biodiversity and collate this at national level. While some wildlife is relatively well surveyed and monitored, e.g. through the Breeding Bird Survey, there is considerable scope to improve the infrastructure for “recording, managing, sharing and using wildlife data”, according to the Scottish Biodiversity Information Forum.

Improving information and understanding of the state of nature, i.e. species and habitats, on farmland in both the lowlands and the uplands would be highly valuable and support the implementation of the Scottish Biodiversity Strategy. It would also enable the measurement of progress in relation to nature recovery targets, which the Scottish Government has committed to introduce in the forthcoming Natural Environment Bill (cf. Programme for Government 2021-22). Data from biodiversity audits would also help to identify what activities farmers are already taking that help nature, what activities are damaging and need to stop, and where there is scope to improve outcomes for nature. The Scottish Government could use such farm level data to inform the targeting of schemes and payments. The data could also be aggregated to understand the collective impact of farming activities across multiple farm holdings within landscapes or regions.

**3. What are the next steps that can be taken to commit businesses to continuous improvement utilising the information presented by carbon, soil, biodiversity auditing?**

*Please explain your answer:*

The information presented by carbon, soil and biodiversity auditing should be used to improve Farm Environment Assessments under a new and improved system of agricultural payments. Additionally, information could be used to prepare whole farm environment plans. These plans should identify: a) where urgent action is needed to reduce or minimise environmental impacts; b) activities/practices that should continue in order to maintain existing good practice; and c) opportunities for action to enhance and improve environmental performance. The preparation of plans should be supported by farm advisors. Plans could identify sources of government financial support and grant aid for the activities included.

The John Muir Trust’s proposal for a Carbon Emissions Land Tax would further incentivise landowners to take the requisite steps to undertake continuous improvement based on the baseline data in order to minimise their tax burden. Implementing the tax will require carbon assessments for land, but multi-disciplinary teams and partnerships are already developing models to understand the carbon storing potential of land. This year, the John Muir Trust partnered with the Langholm Initiative and South of Scotland Enterprise to tender through the Government’s CivTech programme for innovative solutions to measure the carbon storing potential of land. The ideas will be piloted at the Tarras Valley Nature Reserve. The aim is that with these insights, land managers can implement nature-based solutions to climate change through how the land is managed (e.g. which trees are planted where).

**4. How can baselining activities be incorporated into common business practices across all farm types?**

*Please explain your answer:*

Baseline activities can be incorporated into common business practices across all farm types through: a) greater emphasis on the provision of education and training for farmers and continuing professional development; b) the provision of information, support for knowledge transfer initiatives and funding advisory services for farmers; c) supporting whole farm planning as a means to access

government schemes and payments; and d) provision of grant aid and support for baseline activities in some instances.

Collaboration with other landowners outwith the agricultural sector on methodologies for baselining should be considered in order to promote a coherent and best practice system for baseline assessments. Any methodologies used should be published and made freely available in order to promote transparency and accountability.

## Capital Funding

### **5. Should capital funding be limited to only providing support for capital items that have a clear link to reducing greenhouse gas emissions?**

- a. Yes
- b. **No** ✓
- c. Don't know B.

*If not, why not?*

As mentioned above, we are currently facing a nature and climate emergency, and both aspects must be tackled together. Capital funding will be required in some cases to help farmers take action for wildlife and must therefore also be made available alongside funding for items that have a clear link to reducing greenhouse gas emissions. As noted in the consultation paper, capital funding has been an important component of the Agri-Environment-Climate Scheme and will continue to be needed in the future to deliver biodiversity outcomes.

In all cases, capital funding must deliver good value for public money, and its use must be limited to circumstances where assistance is needed to deliver positive outcomes for nature and the climate. Where capital items are likely to improve farmers' financial returns through improvements in productivity and efficiency, and therefore make good business sense, offering capital funding should not be seen as the first option. It may be more appropriate to help farmers pay for such items through loans, if there is a need to help increase the use of such items.

### **6. What role should match funding have in any capital funding?**

*Please explain your answer:*

Match funding should be required where the Scottish Government wishes to increase the uptake of capital items needed to achieve climate and nature outcomes, but when capital funding is also likely to improve the financial returns of a farm business through e.g. improved efficiency. The greater the level of private benefit likely to result from providing capital funding, the higher the requirement for match funding should be.

### **7. What capital funding should be provided to the sector to assist in transformational change, particularly given that in many instances the support called for was directly related to productivity or efficiency that should improve financial returns of the business concerned?**

*Please explain your answer:*

As mentioned above, capital funding should be limited primarily to helping the purchase of capital items that deliver measurable climate and nature outcomes and where uptake might otherwise be low. The Scottish Government should assess which items called for fall into this category. For items where both public and business benefits are likely to result, or where the benefit is largely for businesses, match funding should be required, as should other means of financing such as investments (e.g. preferential loans). Capital items required to deliver biodiversity outcomes are most likely to deliver benefits that are public goods. Therefore, some level of capital funding should continue to come from public funding. However, given the need for transformative change across society in meeting climate targets, the level of public funding for capital costs, as well as other subsidies, should be tailored according to the carbon emissions associated with the use of machinery/equipment/other capital items, the onward chain of production and implications for carbon emissions. Tailoring funding to climate policy outcomes or applying conditions to funding to achieve climate policy outcomes would support the long-term aims to reduce carbon emissions.

## **Biodiversity**

### ***8. Should all farm and crofting businesses be incentivised to undertake actions which enhance biodiversity?***

- a. Yes ✓
- b. No
- c. Don't know

### ***9. What actions would be required by the farming and crofting sectors to deliver a significant increase in biodiversity and wider-environmental benefits to address the biodiversity crisis?***

*Please explain your answer:*

The John Muir Trust is of the opinion that funding to support farmers and crofters to protect, maintain and enhance biodiversity should be a core and significant part of our future farming policy. Delivering a significant increase in biodiversity and achieving wider environmental benefits in the farming and crofting sectors requires greater effort across all farm and croft land to: a) protect and prevent damage to existing soil, air, water and biodiversity resources; b) manage cultivated and non-cultivated land to maintain the existing biodiversity value, especially where this is already significant; and c) enhance, restore and recreate wildlife habitat on farms and crofts that is degraded or has been lost, or where there is an opportunity to create new habitat.

A wide range of appropriate actions at each of the abovementioned three levels, for all types and sectors of farming, are already known and understood to be effective for biodiversity and the wider environment. These actions can be grouped according to their relevance to: a) cultivated land, e.g. cropped and grassland with requirements related to pesticide and fertiliser use, livestock grazing levels, etc.; b) field margins and features around cultivated land, e.g. hedgerows and scrub; c) permanent habitats that are not cultivated, e.g. peatland, heathland, native woodland, etc.; and d) specific species management, e.g. for corncrake, geese, breeding waders, pollinators, etc.

The Scottish Government should undertake an exercise to draw together this information on biodiversity measures and use it to inform policy development. The completion of a biodiversity audit and whole farm/croft plan by every farm and croft would establish a baseline for species and habitats and could be used to identify activities that need to stop, continue and be introduced in

order to help wildlife. Many of these activities will also deliver climate benefits through e.g. peatland restoration or woodland creation.

A combination of policy tools is likely to be needed to secure the necessary scale and level of uptake of action for biodiversity, including regulation, incentives and advice. Government funding is especially critical here, given that delivering for nature does not yield income for farmers and can entail significant costs. Many of the above-mentioned actions for biodiversity are already options in the Agri-Environment Climate Scheme (AECS), and farmers with existing agreements are being supported financially to help nature. Continuing funding for AECS in the immediate future and ensuring that the measures within it continue to be part of new farming schemes and payments, in one form or another, is essential. AECS support to the conversion and maintenance of organic farming must also continue in the future. Overall, more funding is needed to increase the area of farm and croft land that is managed organically or under agro-ecological farming approaches such as agro-forestry or regenerative agriculture, which can deliver biodiversity and climate benefits. Collaborative work across multiple farm holdings to connect habitats should also be rewarded.

## **Just Transition**

### ***10. What do you see as the main opportunities for farmers and land managers in a Just Transition to a net zero economy?***

*Please explain your answer:*

The John Muir Trust believes that a Just Transition to a net zero and nature positive economy is needed. This would present many opportunities for farmers and crofters, including: a) the potential to reduce input costs and transition to more efficient and profitable farm businesses; b) creating more resilient businesses in the face of climate change and other risk factors; c) producing food sustainably and responding to consumer demand for low carbon and nature positive products; d) the potential to diversify into new enterprises and potential income streams; and e) being properly rewarded for the delivery of biodiversity and other environmental public goods that the market does not currently pay for.

Managing land for the public good, e.g. carbon capture and biodiversity, also has the potential to deliver benefits for local communities and rural employment; for example, more nature and climate friendly farming could be more labour intensive, which would provide an employment boost in the sector. Further to this, the Scottish Government should consider creating rural apprenticeships for young people in order to diversify and strengthen Scotland's aging farming population.

### ***11. What do you see as the main barriers for farmers, crofters and land managers in a just transition to a net zero economy?***

*Please explain your answer:*

The main barriers for farmers, crofters and land managers in a Just Transition to a net zero and nature positive economy are likely to be: a) a lack of knowledge and skills to help transition, unless there is significant public investment in information provision, advisory services and training opportunities; b) lack of capital in some cases to make the necessary changes and transition; and c) challenges for tenant farmers, who wish to make changes but are unable to within the terms of their tenancies.

## Sequestration

### ***12. How best can land use change be encouraged on the scale required for Scottish Government to meet its climate change targets?***

*Please explain your answer:*

The Scottish Government has stated that we face a nature and climate emergency, and that these two issues are inextricably linked. How land is used and managed has a major role to play in addressing both of these challenges, while also producing food and other market goods such as timber. Changes in land use and management are needed if climate change targets are to be met and the loss of biodiversity is to be halted.

Encouraging the necessary land use change at the scale required will need strategic land use planning at national and regional level through processes such as the National Planning Framework, Regional Land Use Partnerships and Regional Land Use Frameworks.

Securing change will also require the Scottish Government to deploy the right combination of policy tools, including the use of regulation, incentives and advice. Incentives play a particularly important role in shaping business decisions about land use and management. The Scottish Government must ensure that the large sum of public funding allocated to the farming and land use sectors is used in effective and targeted ways to secure the scale of change needed in the face of a nature and climate emergency.

As mentioned above, a Carbon Emissions Land Tax could also be significant in contributing to land use change at scale. Taxes are a tried and tested mechanism for discouraging harmful behaviour and persuading people to do the right thing, whether at individual or societal level. For instance, we have long-established taxes on petrol, diesel, alcohol and tobacco. In recent times, the Soft Drinks Industry Levy has been successful in reducing calorie intake; the Scottish Plastic Carrier Bag Charge has removed millions of plastic bags from circulation; and London Congestion Charge has cut carbon emissions, pollution and traffic congestion. A banded tax system, in which land is graded according to current and forecasted emissions, would encourage land managers to give greater priority to carbon reduction and biodiversity uplift, and could make a major contribution towards the Just Transition to Net Zero.

Scotland's land – farmland, moorland, peatlands, uplands and forestry – has the potential to sequester huge quantities of carbon from the atmosphere and store it in soils and vegetation. The greater part of Scotland's land is of marginal agricultural value, and our uplands in particular could support extensive, thriving ecosystems of native woodlands, healthy peatlands and pasture, storing millions of tonnes of Carbon Dioxide Equivalent (CO<sub>2</sub>e). Most of that land is, however, bare and impoverished as a result of human activity over many centuries, and Scotland's land is currently a net producer of greenhouse gases, emitting over two million tonnes of carbon every year. In a recent report, it was found that the land sector emits more CO<sub>2</sub>e than the international aviation and shipping sector in Scotland. A portion of that damage is linked to land management practices that focus exclusively or primarily on sports shooting of deer and grouse, which perpetuate overgrazing by red deer and extensive burning, draining and trampling of peatlands.

As recognised by the Hill Upland and Crofting Group in the consultation paper, high deer numbers have an undeniably negative impact on fragile key habitats like peatlands and native woodlands. By increasing deer management and reducing the pressures on our land, e.g. through the introduction of a Carbon Emissions Land Tax, we can restore the natural flow of water, increase soil saturation, protect vegetation and allow native woodlands to regenerate on a landscape scale. Moreover, much of our productive agricultural land could be managed more effectively for carbon storage through lower intensity farming practices and a return to traditional, rotational natural grazing.

Decisions made about the use and management of publicly owned land e.g. on the National Forest Estate or land owned by local authorities, could also be significant in contributing to land use change at scale and by demonstrating what is possible and desirable.

## Productivity

### ***13. Would incentives for farm plans specifically targeting flock/herd health, soil health, and crop health (for example) demonstrate real improvements in productivity over time?***

*Please explain your answer:*

Farm plans are a first but important step in delivering change; they are needed to help farmers and crofters transition to low carbon and nature positive farming. Providing financial support and advice to farmers to help them produce plans is justified. The farm plans themselves will however only result in improvements over time, if farmers implement the actions identified in them. Whether this happens or not is likely to depend on a range of factors, including: a) the financial viability of taking action; b) the level of knowledge and skills of the farmer; and c) the availability of advice and training. It is appropriate for the Scottish Government to provide financial incentives to support action identified in plans, where this helps to deliver public benefits – this will especially be the case for action that helps nature or improves the environment. The rationale for using public funds to deliver improvements in farm productivity is less clear, since the benefits from e.g. increased yields are largely private. The Scottish Government needs to be clear on why it is providing financial support to the sector and for what purposes and outcomes.

### ***14. Should future support be dependent on demonstration of improvements in productivity levels on farm?***

- a. Yes
- b. **No** ✓
- c. Don't know

*If so, how would this be measured?*

No, future support should be dependent on delivering positive environmental outcomes and helping farmers to improve the profitability of their businesses.

## Research and Development

**15. In light of ongoing research activities supported by the Scottish Government and the 2022-2027 research strategy, are additional measures needed to ensure research is supporting the agriculture sector to meet its climate change targets?**

- a. Yes ✓
- b. No
- c. Don't know

*If yes, please specify:*

The research strategy does not make any mention of research activities that will help to improve the development and expansion of agro-ecological farming systems that have climate and nature benefits, including – but not exclusive to – organic farming. Greater research effort overall should be focused on identifying what more sustainable farming and food production systems look like and how such systems could be encouraged.

## **Knowledge and Skills**

**16. What importance do you attach to knowledge exchange, skills development and innovation in business?**

*Please explain your answer:*

Knowledge and skills are of high importance and developing these requires greater investment and focus by the Scottish Government in the future to help the farming and land use sectors transition to more sustainable business models that deliver for nature and climate.

**17. What form should tailored, targeted action take to help businesses succeed?**

*Please explain your answer:*

Farmers and other rural land management businesses would benefit from a wide range of help including: a) knowledge transfer and innovation support; b) information and advisory services; c) training and skills development and support for apprenticeships.

**18. Should continuing professional development be mandatory for businesses receiving public support funding?**

- a. Yes ✓
- b. No
- c. Don't know

*Please explain your answer:*

If the Scottish Government intends to invest in training and skills development in the farming and land use sectors, then ensuring continuing professional development seems logical. One way to ensure this happens would be to make it mandatory for businesses that receive public funding. Continuing professional development is also important, given that research is constantly showing new practices and our understanding of what is considered good agricultural practice may change,



as new scientific evidence emerges and as practices go through a period of trial and error. Scottish farmers should be up to date on current practices that will help tackle the climate and biodiversity crisis.