OFFICIAL REPORT
AITHISG OIFIGEIL

Rural Affairs and Islands Committee

Wednesday 19 March 2025

Session 6

The Scottish Parliament
Pàrlamaid na h-Alba

Wednesday 19 March 2025

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RURAL AFFAIRS AND ISLANDS COMMITTEE

10th Meeting 2025, Session 6

CONVENER

*Finlay Carson (Galloway and West Dumfries) (Con)

DEPUTY CONVENER

*Beatrice Wishart (Shetland Islands) (LD)

COMMITTEE MEMBERS

*Ariane Burgess (Highlands and Islands) (Green)
*Tim Eagle (Highlands and Islands) (Con)
*Rhoda Grant (Highlands and Islands) (Lab)
*Emma Harper (South Scotland) (SNP)
*Emma Roddick (Highlands and Islands) (SNP)
*Evelyn Tweed (Stirling) (SNP)
*Elena Whitham (Carrick, Cumnock and Doon Valley) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

George Burgess (Scottish Government)
Mandy Callaghan (Scottish Government)
Nick Downes (Scottish Government)
Dr Vera Eory (Scotland's Rural College)
Jim Fairlie (Minister for Agriculture and Connectivity)
David McKay (Soil Association Scotland)
Professor Dave Reay (University of Edinburgh)
Dr Mike Robinson (Royal Scottish Geographical Society)

CLERK TO THE COMMITTEE

Emma Johnston

LOCATION

The Mary Fairfax Somerville Room (CR2)

Scottish Parliament

Rural Affairs and Islands Committee

Wednesday 19 March 2025

[The Convener opened the meeting at 09:01]

Decision on Taking Business in Private

The Convener (Finlay Carson): Good morning, and welcome to the 10th meeting in 2025 of the Rural Affairs and Islands Committee. Please ensure that all electronic devices are switched to silent.

The first item on the agenda is a decision on taking business in private. Do we agree to take agenda items 6 and 7 in private?

Members *indicated agreement.*

Subordinate Legislation

Scottish Public Services Ombudsman Act 2002 Amendment Order 2025 [Draft]

09:01

The Convener: The next item on the agenda is consideration of a draft Scottish statutory instrument. I welcome to the meeting Jim Fairlie, the Minister for Agriculture and Connectivity. I also welcome the minister's officials, George Burgess, director of agriculture and rural economy; Mandy Callaghan, deputy director, agriculture and land transition; and Nick Downes, deputy director and chief digital and data officer, agriculture and rural economy.

I remind our witnesses that they do not need to operate their microphones, and I invite the minister to make an opening statement.

The Minister for Agriculture and Connectivity (Jim Fairlie): Good morning, and thank you for inviting me to introduce this draft Scottish statutory instrument. The draft instrument amends the Scottish Public Services Ombudsman Act 2002 by adding the Scottish pubs code adjudicator and Quality Meat Scotland to schedule 2, which lists bodies that may be investigated by an ombudsman. The instrument also removes five organisations that no longer exist. The Tied Pubs (Scotland) Act 2021 seeks to rebalance the relationship between pub-owning businesses and tied pub tenants. The act requires ministers to publish a Scottish pubs code and appoint a Scottish pubs code adjudicator who has responsibility for overseeing and enforcing the code.

The Scottish pubs code will come into effect on 31 March 2025, and the adjudicator has already been appointed. The adjudicator has published an internal complaints procedure. As it is another significant national body, ministers consider it appropriate for the adjudicator to be added to schedule 2 of the Scottish Public Services Ombudsman Act 2002, giving individuals and businesses a means of escalating complaints and giving the ombudsman the ability to investigate cases, if that is required.

It transpires that, at the time of its creation, in 2008, Quality Meat Scotland was not added to the list of organisations in schedule 2 of the 2002 act. We do not know the reason for the omission. Quality Meat Scotland has a complaints procedure, but we consider it appropriate for QMS to now be covered by the 2002 act, and we are looking to correct the omission through this instrument.

We are also taking the opportunity to tidy up the legislation further by removing the names of five organisations that are listed in schedule 2 but that no longer exist. I believe that the changes to the 2002 act are appropriate and proportionate and that they will contribute to the effective governance and oversight of public bodies in Scotland. There is no requirement to consult on the changes to schedule 2. However, we have liaised with the adjudicator and Quality Meat Scotland, and they are aware of our intentions. As is required by the 2002 act, if the instrument is approved, it will be signed by the Privy Council rather than by Scottish ministers. We understand that it has a meeting scheduled in early April.

I am happy to take any questions.

The Convener: My questions revolve around the lack of information in the policy note and the reasons for that.

Some of the detail that the minister is covering today is not covered in the policy note. There was no information relating to the Scottish pubs code adjudicator, and there was no reason why that was not in there. We also cannot quite understand why QMS was not included in the schedule right from the start or why it has now been included, given that—as the minister said—it has its own internal audit system. The biggest issue that we have is that that information was not included in the policy note.

There was also no commencement date in the policy note. The minister is telling us this morning that the commencement date is 31 March, but that was excluded. We are simply trying to understand why the policy note was so lacking. It did not even mention the five organisations that are gonnae be removed.

Jim Fairlie: George Burgess will answer on the technical side of that.

George Burgess (Scottish Government): The policy note needs to be read in conjunction with the explanatory note, which is part of the instrument itself and which indicates what is being done about the removal of the bodies. The reason for that is simply that they do not exist any more. There is not very much more that can be said on that.

I believe that the policy note is probably of a similar nature to other policy notes in relation to instruments amending the Scottish Public Services Ombudsman Act 2002. However, if the committee is concerned that it is on the brief side and would prefer us to dilate at greater length in future policy notes, I can feed that back to those who might be responsible for other similar ones.

In relation to the absence of a specific commencement date, it is—as the minister said—a draft order in council, so it is therefore not directly in the gift of ministers to give a date. The instrument provides that it comes into force on the day after the date on which it is made. The minister has indicated that we understand that there is a Privy Council meeting scheduled for a particular date. Ultimately, however, it will depend on when this Parliament approves the draft instrument—if, indeed, it does—and when that gets to the Privy Council and when His Majesty in council agrees to the making of the order.

As the minister said, however, the bodies that are affected by it are aware of the policy.

Jim Fairlie: On the convener's question about why QMS was not included in 2008, I do not know. I do not think that my officials understand why it was not included in 2008.

The convener also made the point that QMS has an internal complaints procedure, which is absolutely correct. However, that does not give a complainant a second body to go to if they are not happy with the procedure that has been carried out by QMS. The ombudsman gives the complainant—whoever they may happen to be—the opportunity to go to an external body and say, "I'm not comfortable or happy with this, and I'd like you to have another look at it." That is the reason why QMS is being included as a body under the ombudsman's jurisdiction.

The Convener: The five organisations that are being taken away have not been in existence or operation in Scotland for quite some time. Is there any reason for the delay in removing the likes of the Meat and Livestock Commission?

Jim Fairlie: I can only assume that there was an omission sometime in the dim and distant past, long before I, or any people that I know of, were involved. George Burgess may have more of an answer to that than I do.

George Burgess: I do have greater form when it comes to the ombudsman, having been involved in setting up the transitional arrangements in 1999 and then in the preparation for the 2002 act.

The omission in 2008 is curious. QMS was set up by a parallel order at the same time as the Agriculture and Horticulture Development Board. In that order, amendments were made to the Parliamentary Commissioner Act 1967, which set up the United Kingdom ombudsman. I would have expected amendments to have been made to the Scottish act at a similar time.

As the committee will be aware, there are a number of pieces of legislation that list bodies. Different approaches are sometimes taken, which might involve individual pieces of legislation making amendments or—for instance, in relation to parliamentary disqualification—things being

gathered up into an omnibus order and all the changes being made at the same time. I believe that, in this case, the required change simply fell between the cracks. The opportunity was not taken to add QMS to the list at the time, at which point the Meat and Livestock Commission would have been removed, and there was no omnibus order shortly thereafter, which would have been the other opportunity to address the issue.

However, having spotted that error, we are now seeking to put it right.

Tim Eagle (Highlands and Islands) (Con): Good morning. What consultation was done on the order? What was the response from QMS?

Jim Fairlie: No consultation was done, as none was required. However, QMS is aware that it will be covered by the ombudsman.

Tim Eagle: Was there no feedback at all from QMS?

George Burgess: I have spoken to QMS, and I think that it recognises that it is perfectly appropriate for it to be included in the list in the 2002 act.

Tim Eagle: So, QMS is not worried about this.

George Burgess: No—there is no issue with that.

The Convener: The Delegated Powers and Law Reform Committee identified an issue with the updating of schedule 2 to the 2002 act, which will create a duplicate paragraph 32AAA. How will that be resolved?

Jim Fairlie: Again, that is a technical question, so I will ask George Burgess to respond.

George Burgess: Apologies—

The Convener: The order proposes to insert "Quality Meat Scotland" in the 2002 act by adding paragraph 32AAA to schedule 2. Similarly, the Education (Scotland) Bill proposes to insert "Qualifications Scotland" in the 2002 act by adding paragraph 32AAA to schedule 2. The DPLR Committee identified that issue.

George Burgess: I apologise, convener. I was unaware of that. I was under the impression that the DPLR Committee had not raised any issues. I can take that away and discuss it with the legal directorate. It might be possible for that issue to be dealt with as a printing point.

The Convener: We have previously raised concerns about a lack of detail in policy notes. The policy note to the order that we are considering today certainly ranks very highly from the point of view of providing as little information as possible and requiring the committee to go away and seek out the information. That is not helpful. Therefore, I would appreciate it if you took that message away, to ensure that future policy notes detail the important issues. In this case, not naming the five organisations that are to be removed from the list in the 2002 act seems a significant oversight.

As members have no other comments to make, we will move on to formal consideration of the motion to approve the instrument. I invite the minister to speak to and move motion S6M-16490.

Motion moved,

That the Rural Affairs and Islands Committee recommends that the Scottish Public Services Ombudsman Act 2002 Amendment Order 2025 [draft] be approved.—[*Jim Fairlie*]

Motion agreed to.

The Convener: Is the committee content to delegate to me the authority to sign off our report on the instrument?

Members *indicated agreement.*

The Convener: That completes our consideration of the instrument. I will not suspend the meeting, because the minister's support team is already in place.

Future Agriculture Policy

09:13

The Convener: Our next item of business is a short evidence session with the minister on future agriculture policy. At the end of last week's meeting, members agreed that it would be useful to follow up on a few points that had arisen in the discussions about the ability of future agriculture policy to facilitate a reduction in carbon emissions from agriculture.

I ask the minister to make a short opening statement.

Jim Fairlie: I thank the committee for inviting me back to discuss agricultural reform following last Wednesday's evidence session with key stakeholders.

Our message to Scotland's agricultural businesses and to the wider industry is very simple: the Scottish Government is fully committed to supporting the sector. Agricultural businesses are the bedrock of our rural communities—they underpin thriving rural communities. As we confront the twin challenges of climate change and biodiversity loss, we stand united with our farmers and crofters in striving to ensure that the sector has a prosperous and sustainable future.

We have seen from the experience in England what happens when decisions on future support are poorly thought through and rushed. Therefore, we are taking our time to make the right decisions, making progress now and engaging with communities and stakeholders on our future direction.

09:15

Change is never easy, and I am determined that we get it right for Scotland. Active farming and sustainable food production remain at the core of our agenda. That is underpinned by our commitment to maintaining direct payments, which offer stability in an increasingly volatile world and enable our farmers to produce food sustainably. In return for public investment, we are asking farmers and crofters to join us in doing more for the climate and nature.

As I outlined in February, our approach focuses on delivering five key outcomes and delivering reforms that balance those requirements. Those outcomes are high-quality food production, thriving agricultural businesses, climate change mitigation and adaptation, nature restoration and support for a just transition, and they will ensure that we move towards a sustainable and greener economy in a way that protects the industry, supports communities and, just as important, leaves no one behind.

We are dedicated to modernising the way that we work by driving efficiency and creating an intuitive, seamless information technology experience for farmers and crofters. They need a modern, user-friendly service that allows them to focus on what they do best: farming in a way that protects our environment, boosts our efficiency and helps their businesses to thrive.

By working with the sector, we will use this opportunity to deliver a truly bespoke solution that is tailored to the unique needs of Scotland's agricultural community. Achieving that vision will require a comprehensive organisational redesign and a revamping of systems, processes and capabilities to build a future-ready framework. In the immediate term, we are using the tools that are currently at our disposal. We are simultaneously deeply engaged in co-developing the future operating model and transition plan with stakeholders.

That collaborative approach has been undertaken in all our proposals. For example—to name just a few—it has been undertaken in the Agriculture and Rural Communities (Scotland) Bill, the enhanced greening scheme and the code of practice. Just this week, my officials met with the food and agriculture stakeholder task force group. As part of that process, we have planned follow-up meetings in May and a list of other stakeholder engagements.

Each time we have those conversations, they lead to a refinement of policy proposals, additional detail and analysis, which all feeds into the advice that I receive and the decisions that the cabinet secretary and I then take.

Let me be clear: profitability and sustainable farming do not have to be opposing forces. With the right support at the right time, and while safeguarding our planet, we can get this right for the sector, the planet and the resilience of our food supply.

Those five outcomes are interconnected and require a delicate balance, but I know that success relies on farmers and crofters being economically viable to deliver the vision for agriculture. I will continue to work as hard as I can, and I will ensure that there is regular engagement not only at the official level but at the ministerial level as well. We will continue to develop our thinking, which will provide practical solutions to all the challenges that we face.

We will not get everything right, and folk will not get everything that they want. However, I will stretch every sinew to get it as right as I can for as many people as I can. I hope that the industry continues to engage and becomes even more

engaged to help us to fulfil the ambitions that we have set out for ourselves.

The Convener: Thank you, minister. We appreciate your statement and we have previously heard a statement along similar lines. However, last week, we met with four significant representatives from the agriculture sector and their views on the progress that has been made by the Scottish Government on future agricultural policy were largely critical. They had concerns about the lack of effective implementation, a lack of communication and the constraints that the IT system puts on future development.

To highlight some of their perspectives, I will provide some quotes. Jonnie Hall from NFU Scotland said:

"we are still operating the legacy common agricultural policy schemes".

He also said:

"We need to move forward with a degree of pace, because, as we know, the expectations on the agriculture sector to deliver not only on food production but on climate and biodiversity are increasing all the time."

Pete Ritchie suggested:

"We were expecting a big bang, but there is just a very small squeak at the moment. ... we have not come up with a coherent way to help farmers to reduce their emissions through the subsidy scheme."

Kate Rowell said:

"There is a real lack of certainty among farmers. They do not know what is coming. That has resulted in a lack of investment for quite a few years."

Jim Walker said:

"The lack of coherent agricultural policy in Scotland has held the industry back".

He also said—excuse my language—that

"The computer system is knackered and has been for years—it has been held together by Blu-Tack and sticky tape since I can remember."—[*Official Report, Rural Affairs and Islands Committee*, 12 March 2025; c 3, 4, 4, 4, 5.]

Finally, Neil Wilson of the Institute of Auctioneers and Appraisers in Scotland said, regarding co-development:

"All the way through the farmer-led groups to ARIOB and other committees, the Government has absorbed a massive amount of industry time, investment and knowledge and it does not appear to have taken much of that on board or moved forward with it." —[*Official Report, Rural Affairs and Islands Committee,* 12 March 2025; c 15.]

I would like to hear your comments, because the industry is telling us that what you say is not happening and has not happened in the past few years.

Jim Fairlie: I watched that meeting. I was disappointed by some of the comments and am very disappointed by some of those that you have just read out. I disagree with all of them. I absolutely accept that there will be tensions in the room—I very much took on board the criticisms of ARIOB. However, when I reflect on that, I think about where we were and where we are trying to go.

We talk about co-development and a just transition until they become just words and phrases and people start switching off, but the processes and principles behind them are absolutely essential. Co-development is about sitting down in the room with the stakeholders who are going to have access to more than £640 million of public funds. There will be differences of opinion when those diverse groups are sitting in the room, and being part of the co-design does not mean that you get what you want every time you ask for it; it means getting the opportunity to speak directly to ministers and officials and to talk about the requirements for the part of the sector that you are really passionate about.

Our job is to take that away, distil it down and think about how to take all the competing views and the requirements on us, as a Government, to reach the policy objectives that Parliament has agreed on. We have to pull all of that together to get a coherent policy. That is hard—it is not easy—but what underpins all of that is our absolute determination to continue that co-development and those conversations and to continue taking diverse views as we consider how to get this right.

We have made progress. We have the calf scheme, the whole-farm plan and the audits. We have things in place. We do not want to listen to what everyone says and then tell them that there is a system that they have to go with, because that would be a cliff edge. That might sound like a cliché, but that would be the cliff edge that the cabinet secretary committed not to take the Scottish system towards. We have seen what happened when other parts of the UK went down that road, and the Scottish Government is determined that that will not be the case here. I think we are on a trajectory that will let us allow farmers to put baselines into their own farms and work out where they are on the trajectory, so that they know what they need to do to move forward.

I absolutely take on board the criticisms that the committee aimed at us last week. We will consider those criticisms and will justify our reasons for agreeing or disagreeing with them, but I am more committed to ensuring that we continue our engagement in order to get the best possible policies.

The Convener: Those are not the committee's criticisms: we are reflecting what we heard. You say that you will continue the dialogue, but that dialogue is not working at the moment. We heard

concerns about an SSI from the crofters, who suggested that there is a lack of understanding of their issues, and Jonnie Hall told us that

"communication has been absolutely woeful—in fact, it has been completely lacking."—[*Official Report, Rural Affairs and Islands Committee*, 12 March 2025; c 24.]

Not only do those in the industry think that they are not being listened to; the communication of your message is just not happening. Jim Walker told us:

"ARIOB is a fig leaf for not doing anything. It is a way of pretending to engage with the industry, then doing what you like and picking bits from other reports."—[*Official Report, Rural Affairs and Islands Committee,* 12 March 2025; c 18.]

We do not appear to be in a particularly good place.

Jim Fairlie: On that—

The Convener: Sorry, minister. I see George Burgess laughing, but those are serious concerns.

Jim Fairlie: We are taking those concerns on board.

The Convener: Last week was the first time that the committee had the opportunity to hear evidence from members of ARIOB and other stakeholders and to ask them questions. What we heard was not good—the co-design is not working. Are you planning to change how you approach your engagement with stakeholders?

Jim Fairlie: The co-design is working, convener. There may be individuals who are not getting what they want, but that goes back to my original statement: the purpose of ARIOB, the FAST group or any other discussions is not for individuals to say, "This is what I want the Government to do, now go and do it." It is for stakeholders to give us as much information as they possibly can in order to allow us to consider how to fit those things into our budget and policy objectives and to ensure that we keep our communities resilient. I will look again at the issues that were raised at the committee's session last week and think about whether I believe that the criticisms are justified. If I believe that they are, they will inform my thinking and the thinking of the Cabinet Secretary for Rural Affairs, Land Reform and Islands as part of the co-development and co-design process.

We have made it crystal clear from the start that this will be done only if the farming community comes with us—and it is doing that. On numerous occasions when he was the president of the NFU Scotland, Martin Kennedy said, "You cannot do this unless the industry is coming with you." I understand the frustration and that this is not all being done in one fell swoop, but if that were to happen, we would get it wrong. Therefore, we are doing this piece by piece, stage by stage and issue by issue, in order to try to get it right. As long as we continue to do that, we will get to the place where we need to be within our current constraints.

Rhoda Grant (Highlands and Islands) (Lab): Part of the problem is that it feels a bit like a jigsaw puzzle. No one sees the full picture that we are aiming for and it is all very piecemeal. SSIs on various bits are lodged at committee, but when we highlight issues raised by farmers and crofters, you say, "Oh, but that was discussed at ARIOB and they never said anything." When we go back farmers and crofters, we discover that they have said things at ARIOB that they have then relayed to committee members in order to try to raise their concerns, which turn out to be huge issues when we are looking at the statutory instruments. Obviously, something is not working. I think that you would agree that some of the issues that have been raised by the committee about the statutory instruments were crucial and should have been sorted out earlier.

If the ARIOB process was working, stakeholders were being heard at those meetings and the department was listening to what they say, we would have overcome the issues. It seems to me that ARIOB is not working and that there is no vision for agriculture in five or 10 years' time, so people feel as though they are running around like headless chickens, trying to see how their business fits into the various piecemeal aspects of legislation. Surely, that is not the way to work. What can we do about ARIOB to ensure that it works? Is there another mechanism that we can use? What is your vision for agriculture? What will be happening in the sector in five or 10 years' time?

Jim Fairlie: You have made a number of points and I am writing them down in the hope that I do not forget anything.

There is no doubt that it is a jigsaw, because there is no one-size-fits-all solution for any one type of semi-upland livestock farm, let alone agriculture as a whole. We need to put together a huge number of different components. Clearly, the last time that I was at committee to discuss an SSI, I did not properly articulate that we will be building the jigsaw piece by piece, bit by bit, and that the SSIs will be brought to committee having been given the fullest consideration that we can give them.

I seem to remember that the committee was of the view that, although the Agriculture and Rural Communities (Scotland) Act 2024 is framework legislation, we needed the full picture. At the time, we said that we could not get the full picture in one go and that we would have to build it piece by piece, therefore, it is a jigsaw—I agree with you.

The Government has created a vision for agriculture. It is out there—it is available for anyone who wants to see what it is. It is a vision of a world-leading, sustainable, regenerative agricultural practice, which our farmers and crofters are right behind as they produce top-quality food while maintaining good biodiversity on their farms. They are the custodians of our landscape. That is the vision, and I do no think that anyone will disagree with that.

09:30

Rhoda Grant: Can I—

Jim Fairlie: Could you let me finish answering the question?

Rhoda Grant: Okay.

Jim Fairlie: You are saying that ARIOB is not working, but I dispute that. ARIOB is working. That is where we have some robust, long conversations in the room. I reiterate that, if someone is in ARIOB and puts their point across, that does not mean that they get exactly what they want. We have to go away and distil the information, consider what it means, consider how it fits into the jigsaw and then determine what we need to do to achieve the vision that we have set out.

Rhoda Grant: If there are glaring errors in that jigsaw, and if your explanation to us for that is that the matter was not mentioned at ARIOB, but we go to the members of ARIOB and they say, "Yes, it was," then that is not working. If members of ARIOB are pointing out things that you appreciate, from talking to us, are issues, but you are not hearing it from them, then the arrangements are not working.

Jim Fairlie: I go back to the point that I made earlier. You are saying that there are glaring mistakes. They will not necessarily be mistakes, however. If they are, I will be more than happy to go back and say, "Okay, maybe we have got that wrong, and we will change it." That was the whole purpose of making the legislation a framework bill. I absolutely accept that we will not get everything right. As we start to implement things, if we need to change something—and we have the ability to do that through secondary legislation—we will do so. We could not have done that if everything had been set out in the bill itself, as was constantly demanded by the committee.

If there are things that become a real issue, I am more than happy, as minister, to look at them and ask whether we are getting things right and how we can change them. In fact, I think I gave that commitment at my previous evidence session, when I said that we will look at things as we develop the policy. The 2025 single application forms will come in, we will see what happens with them, and that will allow us to ask whether the processes that we are implementing, which we are asking people to be part of, are working. If they are not, why is that? What do we need to do to make them work? Do we need to change them?

That is part of the co-development of policy. I am repeating myself but, if we had told the committee and the industry, "There's your policy. Get on with it," we would have got it wrong. We have seen how it is possible to get it wrong—all you need to do is look south of the border.

Rhoda Grant: But if ARIOB was working, this would not be the case. Take the instrument on calving intervals—the Rural Support (Improvement) (Miscellaneous Amendment) (Scotland) Regulations 2024. That gave rise to an issue for rural areas and islands, and you have admitted that. You have said that you will look at that again. That was discussed at ARIOB, yet we got an instrument that created real concerns in the industry. If ARIOB was working, those concerns should have been ironed out there, and we should have got a piece of legislation that nobody commented about.

Jim Fairlie: I agree that that would have been the ideal scenario. As I stated at the time, I did not understand why we were getting pushback at the very late stages—but, for whatever reason, we did. If concerns were raised, they were taken into consideration. There was an awful lot of official engagement at the grass-roots level to make proposals about how to make the measures work and to ask if everybody was on board with that.

I accept that the crofting situation is slightly different. I have given you a commitment that the force majeure provision will be in place this year, and it will be a matter of looking sympathetically at any issues that crofters in particular or people farming in the most remote areas have, particularly concerning smaller herds. I have given that commitment before.

If the policy is not working, I am prepared to take another look at it. I have given that commitment before, too. To me, that is part of co-development and getting it right. If we try something and it is not working, we will consider how to change it. Does it still achieve the policy objective?

I spent my weekend travelling round the crofting counties for exactly the reason you are talking about: if there are things that we are not picking up in one forum, I want to go to another forum. I went round Lewis, Harris and Skye, and I met large numbers of crofters. Our discussions were largely on the proposed crofting bill, but we also touched on other things. That engagement and level of interaction is exactly what will allow us to develop the policy.

I get that it is frustrating. I understand that. However, we cannot make a one-size-fits-all piece of legislation and say, “Here it is,” because that will not work. We want to make sure that we do it in a way that gets to the end of the route map that tells us what the policy looks like. Even once we get to that, policy will continue to change and evolve as circumstances change. That was the beauty of using a framework bill.

Rhoda Grant: I do not want to hog the session, but I have more questions.

To me, that is an indication that ARIOB is not working. The committee is not part of that co-production—maybe we would like to be a part of it—but we are supposed to scrutinise and vote on legislation. It is surely not right that things that are discussed with the industry end up before us as issues.

On the vision, to go back to the jigsaw analogy, most of us look at the picture of the finished thing as we put the bits in place, but in this instance, no one sees that picture as the bits are being placed. That is creating uncertainty in the industry. People do not quite know what the finished product will be.

For instance, we hear a lot about emissions from beef and dairy animal rearing. People who are involved in such rearing do not know what the Government is going to do or what it will encourage, so numbers in animal breeding are falling, which means that we are importing meat from other countries that do not have anything close to our ability to offset carbon.

How can people work with that? Everyone is happy that there is no cliff edge, but they need at least to know the direction of travel so that they can move in that direction. That is missing.

Jim Fairlie: George Burgess has been itching to come in for a minute or two, so I will let him come in, but I will come back to your specific points.

George Burgess: To pick up on your jigsaw analogy, yes, it is being done piece by piece. However, we have the picture in place on the front of the box, which is the vision for agriculture and—although I know that people do not necessarily like the terminology—the road map. What is staying in place from the existing schemes, and for how long, is already set out, and there is clarity on when bits of the new schemes and policy decisions will come along. That is not the answer to every question, but it gives people a degree of clarity as to what is coming and when.

On the wider comms theme, the convener has identified why I do not play poker. I would describe my expression as more of a wry smile than a laugh.

Jonnie Hall said that communication had been non-existent, but there has been an awful lot of communication: letters to individual farmers; materials on the website and on social media; the succession of appearances by my officials, myself and ministers at agricultural shows and marts around the country, engaging directly with farmers; written material that has set out very clearly what is happening and what is available under the preparing for sustainable farming scheme. That is an awful lot of communication to be called non-existent.

The Convener: If there has been all that communication, why, without exception, did everybody last week say that communication had been woeful?

Jim Fairlie: You would need to ask them why they think that. I genuinely cannot understand Jonnie Hall’s position. When we were initially talking about the suckler beef support scheme, I had conversations with my officials over concerns that information on it had not been disseminated widely enough and on what the NFUS and the Scottish Beef Association had done. I asked, “Have we written to every single farmer?” and the answer was, “No, not at this stage, minister.” I asked why not, and they answered that they were working through a process of getting stuff out. I said, “From here on in, we will write to every single farmer if a change will be relevant to them.” That costs money, but it means that we are not disavowing ourselves of the responsibility of getting the information out. We will continue to do that.

The rationale behind that thinking was this: when I was farming, if I got a letter from the NFUS, the National Sheep Association, the National Beef Association or anybody else, I would put it on the rainy day pile and get to it eventually, because I was too busy working. However, if a Scottish Government letter came through my letterbox, I stopped what I was doing in order to find out what it wanted me to know or what it was telling me was going to happen. Therefore, writing to every farmer is what we committed to do. It is simply not the case that there has been no communication, and I am disappointed that Jonnie Hall made that statement.

Rural payments and inspections division officials have been at roadshows and shows, where we know where farmers are going to be, right around the country. Farmers have been given very clear and simple leaflets about what is coming. As George Burgess said, we have been at numerous committee sessions and engaged widely. My officials are speaking to FAST, which represents a huge number of people, so constant engagement is on-going, and that will continue to be the case.

I am going to ask Mandy Callaghan when communication started, but my understanding is that it has been on-going since the start of the process.

Mandy Callaghan (Scottish Government): The amount of engagement has increased exponentially. Off the top of my head, there were 25 official meetings, which were on various things, such as the changes that are coming in 2026. There was a substantial amount of co-development, engagement and testing of ideas and thoughts, such as the 2026 changes, in particular, but also all the things that have been announced to date.

Coming up, we have a programme of deep dives with stakeholders. We want to openly share what some of the big challenges will be, and the difference between what we are doing now with what we have and what we will be able to do with what we are designing for the future.

This week's meeting with FAST was really good.

The Convener: When did you first meet with FAST?

Mandy Callaghan: This week's meeting was the first that I have had with FAST, but my teams have regularly met all sorts of stakeholders, including FAST. We certainly want to ratchet up some of that engagement. We can always engage more, but we are taking information and hearing opposing views.

Some decisions that need to be taken involve balancing the five outcomes that the minister talked about. A balance must be had between those positions, which is at times quite challenging, and different stakeholders have different views.

Jim Fairlie: FAST was established in 2022 and, since then, engagement has been on-going at various in-depth levels. The type of engagement depends on where we are at any given time.

As a minister, I am not an expert on every single thing that comes across my desk by any stretch of the imagination. I like to have policy teams on this side and stakeholders on that side and listen to the arguments of the different voices around the room, so that we can then say, "What does that actually look like if we are going to try to develop that into a policy?" That is the right way for me, because if I allow people to have arguments, I can pick out the bits that I do not understand or that I fundamentally disagree with, which forms the thinking around how we develop a policy going forward.

That process is not going to happen overnight. It will take us time, but, if we do it right, we will get the right results in the end.

The Convener: I am conscious that we are going round and round, so I am going to bring in members now. Emma Harper, Tim Eagle, Ariane Burgess and Evelyn Tweed have indicated that they want to speak.

Emma Harper (South Scotland) (SNP): I will not take up a lot of time, convener.

Minister, you mentioned having stakeholders on one side and your policy people on the other side. We talk about the transition for farmers, but we talk about a just transition in other areas as well. That involves thinking about co-development, co-design and diversity of food production and food security. It is different for sheep, beef, dairy and arable, so I assume that that means that there has to be a lot of diverse engagement. We know that, as Jonnie Hall said, one size doesnae fit all, so there has to be wider engagement.

I am looking at the number of farmers. There are 66,800, so I assume that 66,800 letters went out. How do we know that they are reading the letters? I know that you are engaging—that is my understanding—but how do we close the communication loop?

09:45

Jim Fairlie: You will be aware of the phrase, "You can take a horse to water, but you cannae make it drink." We are providing as many opportunities as we can for farmers to engage in the process. If there is a farmer who does not know that a process is on-going, I do not know where they have been, because it has been talked about since the decision was taken to leave the European Union. It has been talked about and discussed, and we have been going through the process, so farmers are bound to have noticed that things are happening. There is a certain amount of responsibility on individuals to ask, "What does this mean for me and my business?"

You are absolutely right about the diversity in the numbers and types of farms. When I was on a hill farm, I had 2,200 hill yowes and 75 cows, and the breed had a very specific purpose. Three miles down the road, there was another livestock farmer, and the breeds that he was using had a completely different purpose. There is massive diversity among the sectors in the whole agricultural scheme in Scotland, so we are gonnae have to do it in this way, but there must also be a degree of responsibility on the part of the individual businesses and the individual farmers to ask, "What does this mean for me, how do I get the knowledge that I need and how am I going to make the new system that is being developed work in my favour?"

Emma Harper: The Scottish Government's rural payments and inspections division's tent was next

to the Conservatives' tent at the Dumfries agricultural show last summer—I stopped and spoke to the team—so there was visibility of the Government there.

Jim Fairlie: Agricultural shows are a vital part of our ability to communicate with folk, because that is when a farmer might say, "Do you know what? That's been bothering me. I've got 10 minutes—I'll just pop in." If that gets them reading our leaflets and they think, "Oh, I need to get more involved in this," the process is doing its job. However, we can only ensure that we make the information available to people; they then have the responsibility to pick it up and act on it in the most appropriate way for them.

Tim Eagle: I want to go back to a couple of things that you have said. You have made two criticisms of what is going on "down the road", by which I presume that you mean in England. That is slightly improper, because what we are talking about here is Scottish agriculture. Your party and my party have argued that agriculture is fundamentally different in Scotland, which is why we have things such as the less favoured area support scheme.

However, you have also mentioned three times individuals not getting what they want. Over the past 10 years, your party—your Government—has put in place farmer-led groups and given them very specific remits, and they have gone out and done that work, but you have then completely ignored that work and decided to put something else in place. Surely this is not about individuals not getting what they want; it is about the industry feeling that it is not being listened to. That is what was picked up in last week's evidence session.

Jim Fairlie: I disagree. When I talk about farming systems down south, I am merely giving an example. If you get something wrong, it is catastrophic and, as you and I will agree, a system of inheritance tax has been brought in that is going to be catastrophic for family farms—

Tim Eagle: On that, I agree with you.

Jim Fairlie: A number of different schemes that are going to be or have been absolutely catastrophic have been brought in because people have just not bothered to get involved. I am giving the committee an example of how we are trying to co-produce a policy system that will allow every farmer in the country to engage. I am also giving an example of what happens when that is not done in a way that absolutely takes on board the views of the industry. We are absolutely committed to making sure that we avoid making the mistakes that are being made down south, so I make no apology for making that comparison.

The farmer-led groups were not completely ignored—that is absolute nonsense. The farmer led-groups gave their views on what was right for their sectors—that is what they were looking at.

For example, the beef sector looked at the beef sector. I think that I am right in saying that Jim Walker said, "This is what we do for the beef sector," and he probably presented a brilliantly comprehensive programme of work for the beef sector, because he is an incredibly clever guy who knows exactly what he is doing and how that will benefit his business. However, he added, "But you'll need to pick up another policy of some kind and give that to the crofters." Well, we are not in the business of making crofters an afterthought. Crofters are part of our agricultural and community set-up just as much as beef farmers are.

It is not that the farmer-led groups were ignored; the information that was taken from those farmer-led groups has fed into ARIOB, into our engagement with other stakeholders and into my thinking about going and speaking to the crofters in Lewis, Harris, and Skye. However, I will go back to my point that you are not gonnae get everything you want; you are gonnae get a balanced policy that will fit within the policy objectives that we, as a Government, and this Parliament have agreed to and within the budget that this Government has available to it.

Tim Eagle: Maybe there has been a slight communication breakdown between you and the groups, because even Jonnie Hall said last week:

> "Each and every one of the groups' reports set out significant recommendations, with the groups under the impression that they would be taken forward."

Kate Rowell talked about a lot of recommendations coming from the groups. Is what Pete Ritchie said not true? He said,

> "We are in a holding pattern and we have been for some time."—[*Official Report, Rural Affairs and Islands Committee*, 12 March 2025; c 14, 4.]

The communication failures that are happening are not because you have gone out but because you have no detail. What is the future of greening? Are you going to cap payments? Are you going to front load payments? Industry needs certainty if it is to know how to invest in the future. Is the problem not that it does not have that certainty at this point in time?

Jim Fairlie: Again, I fundamentally disagree with you.

Tim Eagle: Tell me the answers, then. What is the future of greening? Are you going to cap or front load payments? What is tier 2 going to look like?

Jim Fairlie: Those decisions will be made by me and the cabinet secretary after we have been in consultation with the stakeholders. We will bring those policies forward in SSIs, as we have done

before, as we build the jigsaw puzzle that Rhoda Grant mentioned. We will bring those SSIs to the committee, and you will get time to scrutinise them and to take evidence. You will then be able to have me in front of the committee, giving answers on any of the specific areas of policy that we are going to develop.

Tim Eagle: I am not talking about my time; I am talking about the industry's time. How do I make an investment now, when, in 12 to 18 months' time, you will potentially change things? I have absolutely no idea what greening will look like, but you and I both know that, practically, having an idea about that would make a huge difference on a farm. What is the future of the agri-environment climate scheme? What money will go into that? What am I going to get from direct payments? If I want to make an investment now in a building, in bringing in more cattle or more sheep, or in doing something on my farm such as putting in hedgerows or woodland, I need detail. Given all the evidence that we received last week, the communication breakdown seems to be because that detail simply is not there. A minute ago, Mandy Callaghan said that you were testing particular ideas. What are those ideas? I do not know what they are, because the detail simply is not there.

Jim Fairlie: You are saying that there has been no progress. We have already said that we are gonnae have four tiers. Tiers 1 and 2 will take up 70 per cent of the budget—

Tim Eagle: A 70:30 split, yes.

Jim Fairlie: I do not have the figures just now, but we will bring those to the committee. We will bring the detail to the committee as we build the jigsaw puzzle so that people will know what is coming their way. We have already done that with whole-farm plans and with the calf schemes, and we will do it with greening. We will do it with every bit of the jigsaw as we put it back together.

As I have said to you before, we will do this bit by bit in order to get the complete picture, and people will be able to feed into that as they are affected by it. We have done the co-development. We are talking to the groups. The convener can shake his head as much as he likes—you might not like it, but that is the process that we are in. It is that process that will deliver the policy that will allow us to achieve the vision for agriculture that we have all agreed on. That is how it will develop.

Tim Eagle: We are shaking our heads because, whether for you on the hill farm that you had in the past, or for me on my little hobby farm at home, the detail simply is not there to allow us to make the investments in the future that we need to make. Although the high-level vision that the Government likes is there—the four tiers—that is meaningless to a farmer on the ground.

I will ask one more very quick question, because I know that we are pushed for time. At one point, you released a whole screed of information about what might be in tier 2. We are now being told that the computer system fundamentally cannot deliver that, which means that it does not look like anything will change in greening—and yet greening has not really been that helpful. Can you give me an assurance now that you and the IT system are going to able to deliver the changes that you want to see and that you have spoken about in the past?

Jim Fairlie: If we are gonnae talk about the IT system, I will let Nick Downes and Mandy Callaghan deal with it.

The Convener: I suggest that, before we move on to that, we pick up some of the other questions about ARIOB. Then we can move on to the IT system—I think that we want to look at that separately.

I will bring in Ariane Burgess and then Evelyn Tweed.

Ariane Burgess (Highlands and Islands) (Green): I want to pick up on a few points. In the Parliament, we hear quite a bit about co-design from the Government. This may just be a comment, but we hear "co-design" and then we hear "dissatisfaction", not just on this committee or on this particular issue. Before I got this job, I used to do design thinking. Is something in the co-design process causing that dissatisfaction? Is there a process that is clearly laid out for the people that you are working with? The double diamond process is an example of a model that gets used a lot. Do people really understand the process that you are taking them through?

Another point is that people are burnt out with consultation. We have heard from colleagues elsewhere that people do not feel as if they are really being heard. It goes beyond being listened to. It is one thing to be listened to, but it is another thing to be heard—you see that there is an outcome because somebody has heard what you have to say.

There is something interesting in there about process, and it leads on to my next point. Last night, the cross-party group on crofting met. The suckler beef SSI came up again as a concern, as well as general concern about the design and roll-out of the system. SSIs are coming—potentially, they will be coming thick and fast; we are not sure—and we do not have a lot of time to scrutinise them.

Minister, it was good to hear that you have visited crofters and built those connections and

relationships. I want to get a sense that you are working with crofters, and other farmers before the committee even sees the SSIs—"behind the curtain", as I would put it—so that people have time to contribute to the co-design in a genuine way. Last night, quite a bit of concern was expressed about that in relation to crofters' experience.

Jim Fairlie: There were a couple of points in there. I will bring in Mandy Callaghan on how ARIOB was designed and its function.

Mandy Callaghan: Ariane Burgess asked a technical question about the approach. I am not the expert in my team, but I do have an expert—there is a head of service design whose role is specifically about user testing.

There are two elements to the co-design. One is more traditional policy development, which involves engaging with groups and representatives. That is an iterative process: we get feedback, we test it with others and the policy picture is built up. The other element is user testing by individual users, and there is an open opportunity for any farmers to sign up to that. Support is available to make sure that everybody can take part in it. There has been quite a lot of take-up—I do not want to say the numbers, but I could provide some technical information from my teams about the farmers who have engaged and the way that they done so. I am happy to commit to coming back to the committee on that.

The work on the measures that Tim Eagle mentioned is part of our future work. There are some challenges associated with having a system that was designed for the common agricultural policy, with 30 years of scheme upon scheme built up in it. It is a complex situation. However, those measures and that vision for what farmers will need to do in the future are continuing to develop and they will be part of the work that we do in the future. The two things are not separate, and the work is continuing—it is has not finished.

Ariane Burgess: That is helpful. If you would send on that detail, that would be great.

Mandy Callaghan: I will send details of the plan and the user-testing approach.

Ariane Burgess: It would be good to understand that.

George Burgess: Briefly, I will add something on the process in ARIOB. Members of ARIOB are clear that it is a discussion forum and that the decisions are taken by ministers. The discussion within ARIOB has not been rigid; it has flexed over time. Maybe, in the early days, some members were concerned that we were bringing things to them when they had already been quite well worked out, and there was less opportunity for them to have input. So, we flex: there are some issues for which we go to ARIOB at a very early stage of thinking.

To respond to Mr Eagle's point, we have had a couple of quite detailed discussions about the enhanced greening policy, what percentages should be set and what new options we should add to that. Different sectors are represented on ARIOB, and what might suit one sector will not necessarily suit another.

10:00

That all goes into the mix and forms part of ministers' thinking. We want to make sure that we do not end up in a situation in which there are people who find themselves faced with an obligation—a greening requirement on part of their land—that they can do nothing, in practical terms, to meet. That is why we are doing that thinking.

Ariane Burgess: Specifically on the issue of getting crofters behind the curtain and co-designing—

Jim Fairlie: I have been trying to get to the crofting counties for the past six months. It is incredibly difficult—the diary demands are intense, to say the least, and such visits have to be fitted in around other engagements. It is not an easy process. However, I specifically demanded that I get to the crofting counties, because there are important things happening in those areas. In my submission, I said that we should not meet "the usual suspects". I make that point clearly, because we are all guilty of hearing from the same people. When I was a member of this committee, we would see the same faces again and again, and we would have the same discussions over and over again.

Therefore, I wanted to get "behind the curtain", as you put it, to speak to people who might not be engaged in such processes and might not know that there are organisations that are having discussions on their behalf, because they are not members of those organisations. Those are the people I was specifically targeting. I used the experience of my previous life as a farmer to approach individuals and say, "We want to have a discussion on these issues. Can you get some people together?" They then spoke to the officials, who pulled those meetings together.

I am more than happy to do that—in fact, I will insist that we do not only bring in the usual suspects, who can talk eloquently all day, but who might not have the same thoughts as people who work on farms from day to day.

That applies not only to crofters. I recently visited the Soil Association Exchange, which invited me to meet an ordinary farmer—an

ordinary guy who is doing his job. The Soil Association Exchange had contacted him and asked him whether he would like to take part, and I went to meet him. He is exactly the kind of person we need to be talking to, because he is the kind of person who will make the decisions that will allow us to establish a baseline for where we want to get to and how we will build up to that. He is not engaged politically. He is not engaged in the NFU. He gets letters in the same way that I would when I used to farm. I used to say, "Yeah—I'll get to that."

It is really important that we get to people like that farmer, which is why I made a point of going to speak to him. That highlighted to me the language that ordinary farmers use—the language that they live by—and the need to engage those folk in order to take them with us on this journey.

Ariane Burgess: Okay, but how do you make sure that what people such as that farmer say when they meet you feeds into the co-design of the policy that will affect them on the ground in the future? It is one thing to meet people, but how do you ensure that that shows up in the policy?

Jim Fairlie: I think that you are asking me whether I am hearing them or simply listening to them. Every time I have such conversations, I take them away, chew them over, rack my brains and think, "How do we make that work? Is that gonnae work for them? If this is gonnae be a problem, how do we mitigate that?" That is the job. That is what we have to do.

We will not always get it right. We will not always be able to say, "You know what? We can fix that," because we cannot always fix things. However, I will do my utmost to hear what people are saying and to work out how I can make that fit into what we are trying to do and how the system will allow them to be a part of that process. That is in my thinking all the time. It is not easy.

Ariane Burgess: I understand that it is not easy, but I am also a bit concerned about the fact that that is all in your thinking—I hope that it has been disseminated across your team.

Jim Fairlie: Let me clarify. There is a whole team of people who feed into that. I do not just sit on my bed thinking, "That's what we're gonnae do."

What happens is that I will say, "How about if we do this?" and the army of people behind me will say, "You could do that, minister, but these will be the consequences." Then I have to say, "All right, okay, I'll need to have a rethink." There is a whole army of people looking at this, but, ultimately, it will be up to me and the cabinet secretary to say where we are going to go.

Evelyn Tweed (Stirling) (SNP): Thank you, minister, and your officials, for your answers so far.

It was clear from last week's evidence session that the Government is using various methods of communication. I asked a question about that, and some witnesses said that it would be good to have more face-to-face communication, so it is good to hear the minister saying that the Scottish Government is going to agricultural shows and so on. I also take his point that farmers actually have to come to say hello and engage with what the Government is offering, but what steps is the Government taking to measure the effectiveness of its communication strategy?

Jim Fairlie: That is a fair point. I will turn to George Burgess to explain how we measure that.

Now that you have asked me that question, I remember being on this committee when we were concerned about the number of people who were taking up the schemes, because that was not happening quickly enough. I distinctly remember the convener, in particular, saying that people were not taking up the schemes, which meant that the message was not getting out.

We now know that the numbers have risen exponentially, which is a measure of whether our message is getting out. I do not know whether there is a technical thing that we do to measure engagement—I honestly cannot tell you that—but I do know that we get the results of the things that we are putting out and how that transfers into people taking action. A huge number of people are now getting involved in the things that have been made available to them, which is in stark contrast to where we were 18 months to two years ago, when I sat on this committee.

George Burgess: The minister has said most of what I would want to say. It is going to be very difficult to say that a farmer has done something as a result of meeting the RPID team at a particular show, but that is all part of the general communications. We have letters, face-to-face meetings and social media, and different people will get the information from different sources.

To be positive, the NFUS has done a good job of communicating the measures to its members. Part of its remit is to support its membership, and the roadshow work that Jonnie Hall and Martin Kennedy have done has been quite positive. There are people who will listen to them who might be less inclined to listen to the Government. Those things have worked together and, particularly in connection with measures on preparing for sustainable farming, we have seen a significant increase in uptake, as the minister said.

Jim Fairlie: George has just made a really fundamental point. The roadshows that Jonnie and

Martin did have been incredibly valuable for exactly that reason. If farmers hear a Government minister such as me sitting here, talking about policy, policy, policy and what that means for them, they go, "That's just the Government," but when their president and their—I do not actually know what Jonnie Hall does—

George Burgess: He is the director of policy.

Jim Fairlie: When their president and their director of policy are going around the country saying, "You need to be aware of this," that is tremendously effective. I am delighted that we have a working relationship with the NFUS and can have conversations and say, "We need to get this out to your members. What's the best way to disseminate that? We will do our bit as Government, but, if you do your bit, too, through your relationship with your members, that helps us to get the information out there." That is a fundamental point.

The Convener: That is helpful, but that is not part of the co-development or co-design; it is about delivering what the policy is going to be. Having the NFUS going out there and saying how it is going to be is different from talking about the issues.

Jim Fairlie: I would challenge that. When Jonnie Hall and Martin Kennedy of the NFUS did their roadshows, they were doing what Neil Wilson spoke about last week. They were gathering voices, concerns and information as they went along, and they told us that, by and large, people were buying into this and thinking,"Okay—I can get behind this. It feels okay and we're comfortable with what's coming down the road." That is part of the co-design. If they had done 15 roadshows and come back and said, "Look, this is an absolute disaster. We cannae get people tae buy intae this," we would have had to stop and think, "Okay. What do we do now?"

The Convener: I suppose my point is that there is still confusion about ARIOB. I am glad that Mandy Callaghan suggested that she will set out exactly what it is. We keep hearing that ARIOB is really important. Kate Rowell said:

"Things are discussed, everyone around the table gives their opinion".

Pete Ritchie said:

"We have spent a lot of time on very small institutional issues with the delivery aspect of the rural payments and inspections division"

and on

"tweaking small details".—[*Official Report, Rural Affairs and Islands Committee*, 12 March 2025; c 17, 16-17]

However, when it came to the crunch, the panel more or less agreed that, although it is not a decision-making body, ARIOB has, to date, made no tangible difference to policy direction.

Jim Fairlie: That is simply not the case.

The Convener: That was a panel of witnesses, two of whom sit on ARIOB.

Jim Fairlie: Convener, I fully understand that. I sat and listened to the meeting, and I was really confused and disappointed that that is what the committee was being told.

The convener is absolutely spot on that ARIOB is not, and never was, a decision-making forum. I think that it was Beatrice Wishart who asked whether we take a vote. The answer is that, no, we do not. Ultimately, the only people who will make decisions will be me and the cabinet secretary, as the elected representatives. We were elected to do the job, so we will make the decisions and stand by those decisions, one way or the other.

On the point that ARIOB has made no tangible difference to policy direction, Mandy Callaghan has been involved with it for far longer than I have, so I will let her give examples of where ARIOB has gone through its process and that has made a tangible difference.

Mandy Callaghan: ARIOB was set up a couple of years ago, and, as George Burgess mentioned, there were discussions early on. For example, papers were perhaps presented on a proposition and people were asked, "What do you think of it?" Arguments were then discussed as to whether it was right or wrong.

From an official's perspective, we have done quite a lot of work on two key things. One is to align the work that it is doing with the resources that we have internally. If it debates and discusses an issue but we do not have the capability, capacity and people in the civil service to take it on, it becomes old and lost and people get frustrated. We have therefore aligned the work plan with the available resources so that, when we are taking issues to ARIOB, we are taking them at a time when we are ready to do something with them.

Some of that has been around big, visionary stuff that is quite hard to get to an answer on. We are trying to explore quite big, visionary concepts with it, which will become more specific over the next few months. However, we are starting quite high, which may feel quite challenging and very different from where we have been.

At the same time, we are also doing specific things when ministers are on the cusp of making a decision. That is, when we have already had those big, high-level discussions, we are then bringing it down and saying, "These are the options that are left." Obviously, we do not share advice that is

given to ministers, as is standard; it is about looking through those options and presenting them in an open way so that, just before ministers make a decision, they are also hearing that debate and discussion. That is how we are trying to specifically align the decision-making process with the things that ARIOB is saying. There are times when ARIOB members will be saying opposing things, and that is the debate that ministers need to hear in order to then be able to make a decision.

It is very difficult to say that ARIOB has made a particular thing happen, because that is not its role. However, from my perspective, at every single ARIOB meeting, I come away with a big list of things that we are doing differently as a result of that meeting.

Jim Fairlie: Although I am disappointed at some of the stuff that was said in your meeting last week, I give the commitment that I will ask for it to be put on the agenda for the next ARIOB meeting that we will have a discussion about whether people feel that they are disenfranchised or disengaged or that this is not working for them. We will have that conversation and work out how to take matters forward. That co-design is essential to our getting this right. It is not something that we can do ourselves. If we do, we will get it wrong. When we go back to ARIOB—I am not sure when the next meeting is—we will have it on the agenda. We will have a discussion about why people are feeling the way that they are. That way, at least we will air some of the grievances that youse iterated here last Wednesday.

10:15

The Convener: That would be helpful. If you could correspond with the committee on how that goes, it would help to give us an understanding of what is happening at ARIOB.

I am going to move on—I am conscious of the time. I have questions from Rhoda Grant and Tim Eagle.

Rhoda Grant: My question follows on from Tim Eagle's question about the computer system. Last week, we heard real concerns that the computer system was a blocker on policy and that the policy was designed around the system rather than the system being designed around policy. How much of a blocker is it, and what is being done to make sure that it is not?

Jim Fairlie: Nick Downes will speak to the technical aspects in a moment, but I can assure you that it is not the computer that decides policy, which was what was implied at last week's meeting.

Nick Downes (Scottish Government): Given some of the comments that were made last week, it would be fair and appropriate to note that the existing system is currently extremely performant. Its system availability is more than 99 per cent, and, in the last scheme year, it has already paid out £475 million. We cannot stop doing that, because we rely on that system to deliver the business of RPID, to process agricultural payments and to support a range of other agencies.

Again, it is fair to note that the core technologies on which that system was designed were selected in 2012. In IT terms, that is a long time ago. It is also fair to note that the system—or those capabilities, because it is a range of systems—was designed to serve the common agricultural policy of the time and to minimise disallowance. Those purposes are evolving and changing in line with the policy that is being developed.

We have not been sitting on our hands since then. We have been modernising a lot of those systems, applications and capabilities, making investments in the infrastructure on which they sit and the cyber capabilities that sit around them and, indeed, evolving and piloting new capabilities that sit within it to provide a solid platform implementation of the agricultural reform programme.

The target operating model work that has been referenced several times is particularly important in setting out the clear business and technical capabilities that will be required from a future system. As the IT provision part of the agriculture and rural economy directorate, it is our job to align and develop our capabilities to serve those needs.

Rhoda Grant: Why are we hearing that the system is a blocker on policy direction?

Mandy Callaghan: We are in a transition at the moment, because we have a set of capabilities in the system that deliver the CAP. What we need now is to develop that, and that is what the co-production is about. It is very difficult to do that for some of those things, but we also have great opportunities to exploit things that did not exist back in 2012. We want to make sure that we are plotting those capabilities in the best way and for the next 20 years. We want to get that right.

There is a transition between what we have now and where we need to go. The future policy is not being limited by what we currently have, because we would expect those capabilities to change. However, the transition means that we need to keep making payments and supporting farmers as they are and make the changes that are possible for the immediate term. It is a transition, so the "right now" is limited by some of the capabilities that we have, but we are transitioning from where

we are now to something that looks far more modern and capable of delivering that full vision.

Jim Fairlie: I cannot remember who it was that said it, but somebody said something last week—forgive me if I misheard or I am misquoting—about how the system is more focused on delivering on time than on developing the new system. I find that curious, because I am absolutely committed to ensuring that the funds get into farmers' bank accounts on time. I clearly remember—as anyone who was involved in agriculture at the time will—that, when we transitioned from the previous single-farm payment to the basic payment scheme, there were massive delays, which caused mayhem in farmers' bank accounts and cash flows. The critical point is that we continue to make payments on time.

The fact is that the Government has made a rod for its own back in when those payments are made. They were made earlier and earlier when they could have been made much later, and we could have given ourselves more time, but we got so good at it that the payments came in earlier. That became the accepted norm for farmers, when, in reality, the payments could have been delayed until much later in the season.

The delivery of payments is one of the most fundamental things to ensure that we get right every time. The team that is in place is doing a phenomenal job, and I want to ensure that it continues to do that job.

Rhoda Grant: No one is arguing that payments should not be made on time. The big issue is that we cannot change what we pay. If you want to increase screening and put more into the system to change the direction, the computer system will not work. Are we really saying that we need a new system? I remember when the system came in. It was a disaster. I sat in committee sessions looking at what went wrong. At that point, it was clear that it could not be put right. Are we really in need of a new system? We have to keep the current one in order to make the payments, but, if we are going to change what we do and move away from the CAP, we need a new system that will do that.

Jim Fairlie: George Burgess knows the history of that.

George Burgess: Can we teach an old dog new tricks? Yes, and we have done. The system was not set up to prepare for sustainable farming, but my colleagues were able to create mechanisms to allow that new set of grants to be paid. We are implementing the whole-farm plan this year, which required IT and guidance changes to be made to the single application form. Those changes have now been made, the window has just opened and more than 100 farmers have already gone in, so the system is clearly working.

It is not a case of "Computer says no". That said, there are areas where we have not been immediately able to do what we wanted. Mr Eagle mentioned the work that was done, largely on the basis of the work of the farming-led groups, to identify the menu of options for tier 2. At the moment, we are not able to implement that exactly as we would want to, hence the work that we are doing on enhanced greening. It would be possible to implement it, but it would probably take a fair amount of time and money. It would perhaps not require a whole new system, but enhancements would have to be made to allow us to do it.

There is a balance to be struck. Do we want to spend north of £100 million—I think that that is what it cost the last time round—on a computer system or do we want the limited capital resources that we have to go out to farms, to help farmers to make the transition that we need them to make? There is a balance of how much we invest in our own systems versus how much we invest in the farming sector.

The Convener: We are way over time. Tim Eagle has a question, but it must be very to the point.

Tim Eagle: I have to be to the point—that is a bit of a shame.

I declare an interest in that I farm, which I always forget to say.

I still think that there is a massive, gaping black hole of practical detail that we would need on the farm when we are out every day with our sheep, but we have run out of time to talk about that.

Rhoda Grant is absolutely right that receiving payments on time is critical. Why would any of us not want that? But that is not what we are getting at. Kate Rowell said:

> "Unfortunately—and this brings us back to the computer system—there seems to be no way of implementing that list."—[*Official Report*, *Rural Affairs and Islands Committee*, 12 March 2025; c 13.]

That goes back to the greening measures that the Government put out.

George Burgess talked about investment in the system. If you want to fundamentally change the system to deliver a much wider scope, in order to give options to farmers on the ground, you have to fund it. When I worked in the department, in 2015, we were working with three or four different computer systems—I do not know what you are doing now. Can you give me an absolute assurance, here and now, that the money is in the budget to implement the system in 2026 and that, in the next year or year and a half, you will ensure that the computer system is able to deliver the changes that you would like to see?

Mandy Callaghan: The changes for 2026 are being made so that we can use the capabilities that we have now—we have that assurance for 2026. A bit more detail is being developed for the work that we are doing for 2027. It is important that we build capabilities for the longer term and that we consider what we have now and how to transition. We may need to adapt and build on what we already have, or we may have to build something new and innovative. We still have to do the work to map that out.

I do not know whether Nick Downes has anything to add.

Nick Downes: That is where the target operating model work is particularly important, because it will give us the space and time to breathe. One of the criticisms in Audit Scotland's report on the rural payments IT project was that the requirements were laid only days in advance of the build and it was difficult to keep up. Globally, we know enough to recognise that that is a really bad and fraught way to go about an IT implementation.

Tim Eagle referenced the number of applications or systems, as you would recognise them, when he worked in the department, but we have more than that now. I provide an assurance to the committee that I would in no way, shape or form advise that we try to do something at scale in the way that we did with the CAP futures programme. The IT world has moved on since then. Trying to lift out an entire engine block and drop in a new one is neither best practice nor something that I would advocate. Our approach to implementing the system will be to evolve and add new capabilities—I think that the minister used the word "revamp". We will focus on continuous improvement, modernisation and exploring new capabilities such as low-orbit satellite imagery rather than trying to do a wholesale block replacement of what is already there.

Tim Eagle: I am no IT expert. If that is the way to do it, that is great. However, why did Jonnie Hall and Kate Rowell, who are two leading, significant industry figures, say at last week's committee meeting that the IT system is a problem? If the communication is working, why did they give me that message?

Jim Fairlie: Perhaps they are not IT experts either.

Tim Eagle: Fine.

The Convener: I have two brief questions. The minister has previously spoken about system limitations, but there was a technical upgrade between 2022 and 2024, which was the largest technical update to the payment system. How much did that upgrade cost? At the last meeting at which she gave evidence, Ms Callaghan said that the future cost of updates is not yet known. Can you give us a ballpark figure for the cost of the upgrade that we have just gone through and the estimated cost of future upgrades to deliver the Government's ambitions?

Nick Downes: There are three questions in there. The first was about the cost of the middleware upgrade. As I understand it, that is the single biggest upgrade of a middleware product that the auditors could find globally. It cost in the region of £4million—I will write to the committee with the exact figure. Forgive me, but I do not know it off the top of my head.

Industry standard practice would recommend that 20 per cent of the initial build cost be spent on any system annually for maintenance and modernisation. That is not to introduce new capabilities or new schemes, as we would understand it; it is about keeping the system cybersecure, modern, in support and performant. All the money that we are spending on our modernisation programme comes out of my division's budget, from the agriculture and rural economy directorate and the digital directorate. We are not asking for additional programmatic cost, and we have a rolling programme of legacy modernisation that we are continuing to deliver.

The Convener: Minister, you said that you would write to us with further detail, which would be useful. In the last evidence session, you gave a commitment to write to us about any potential issues in the development of the system. Do you believe that the existing system is, and will continue to be, good value for money for taxpayers?

Jim Fairlie: I believe that, if the people behind the system who are employed to do the job are giving me the reassurance that it can deliver, then it is value for money. At any time, if they have concerns about it, they will bring the issue to me.

The Convener: I thank the minister and his officials for joining us, and I appreciate the extra time that you have spent with us, as we covered a lot of ground.

I suspend the meeting to allow a change of witnesses.

10:30

Meeting suspended.

10:37

On resuming—

A Climate Transition for Scottish Agriculture

The Convener: The next item on the agenda is an evidence session on the climate transition for Scottish agriculture, ahead of our scrutiny of the climate change plan in the autumn. This follows on from our evidence session with stakeholders from the farming sector last week, and I welcome a panel of academics and climate experts.

Before we begin, I remind participants that they do not need to operate their mics. I will invite all witnesses to introduce themselves and to briefly tell us about their backgrounds.

Starting on my right, we have Dr Vera Eory, reader, Scotland's Rural College; Dave McKay, co-director, Soil Association Scotland; Dr Mike Robinson, chief executive, Royal Scottish Geographical Society; and, joining us remotely, Professor Dave Reay, executive director, Edinburgh Climate Change Institute at the University of Edinburgh.

I invite Dr Eory to begin.

Dr Vera Eory (Scotland's Rural College): Thank you for inviting me; I am pleased to be here. I have been working on climate change and agriculture for the past 18 years, mostly on options to reduce greenhouse gas emissions from agriculture production, specifically on farm, but also beyond that. I also look at cost effectiveness and what farmers think about the issue, the policy options that we have and the policies that we should be developing to move forward with reducing emissions not only from agriculture, because that is only part of the story, but from the whole food supply chain.

I have also worked on nitrogen and other related pollution, and I have another hat: I am a member of the European Scientific Advisory Board on Climate Change. I am not here in that role, but, because of that, I have insights into European policy making, especially in the areas of agriculture and land use change.

As part of the work we have done in the past 18 years, we have informed the Climate Change Committee, the Scottish Government, the Department for Food, Environment and Rural Affairs and other bodies on how to reduce emissions. We have produced more than 15 reports, which roughly tell the same story. The latest report was published by the Climate Change Committee on 21 February as part of its seventh carbon budget report.

David McKay (Soil Association Scotland): Good morning, and thanks very much for inviting me. I am co-director for Scotland at the Soil Association, which is a membership charity that dates back to 1946. We work across the whole of the food system, including sustainable public procurement through the food for life programme in Scotland. We do a lot of work directly with farmers and crofters, facilitating peer-to-peer knowledge exchange and innovation support.

In recent years, we have done a lot on policy development, particularly in relation to agroforestry, integrating more trees and woodlands into farming and crofting systems.

A couple of years ago, we set up a new commercial spin-off, Soil Association Exchange, which is a new baselining and monitoring service that provides advice to farmers for more profitable and sustainable farming.

I sit on various groups, including the Scottish Environment LINK food and farming group. My wife and I are organically certified small-scale fruit and veg growers, based in north Aberdeenshire.

Dr Mike Robinson (Royal Scottish Geographical Society): Thank you for inviting me. I am the chief executive of the Royal Scottish Geographical Society. I have been involved in climate for the past 25 years or so—probably most obviously in helping to set up Stop Climate Chaos Scotland, which is an amalgamation of all the non-governmental organisations and civil society across Scotland.

In 2010, I chaired the short-life working group in the Parliament to help to set the annual climate targets, and, in 2020, I was on the First Minister's business leaders forum, which aimed to bring all the business leaders in Scotland together around the agenda.

With Dave Reay, I helped to set up a climate solutions qualification for public and private bodies, which has been doing very well, with around 100,000 people having gone through the course.

I was asked to co-chair the farming for 1.5° inquiry some years back. We produced a very thorough report on how farming could start to move towards a net zero future. We also produced a magazine, in case anybody did not read the boring report—although it was a great report. I now sit on the ARIOB.

The Convener: Dave Reay, you do not have to answer on whether the report that you co-wrote was "boring", but it is very nice to see you, despite your participating remotely. Please introduce yourself.

Professor Dave Reay (University of Edinburgh): I recommend the report. It is not

boring, but brilliant. For the record, I finished my tenure as director of the Edinburgh Climate Change Institute at the end of 2023. I am a professor of carbon management at the University of Edinburgh. I have worked on climate for more than 30 years—in particular, on land use and agriculture and the mitigation of emissions.

I am also co-share of the Just Transition Commission in Scotland. Clearly, some of the issues that we are looking at with your committee today are key for us in ensuring that the transition to net zero is a just one for farmers, crofters and everybody else who is involved in the land and in rural communities.

The Convener: Thanks. We will now move to questions, and I will kick off.

The rate of emission reductions that has been achieved in the agriculture sector to date is lower than that in other sectors, having reduced by only 12 per cent from 1990 levels. Last week, we heard from farming representatives who suggested clearly where the issue was. However, from a scientific perspective, will you set out why you think agricultural reductions have somewhat stalled and are not keeping pace with other sectors?

Dr Eory: That story has two parts. Agriculture is just one part of the food chain, so we should probably not talk about production without talking about consumption and trade.

However, most importantly, in all the studies that we have done in the past 18 years, we have found that, when it comes to an uptake in practice shifts and technological shifts—for example, the use of feed additives to reduce methane, fertiliser additives to reduce nitrous oxide emissions or clover in the grass so that it does not need as much synthetic nitrogen—even if 60 or 70 per cent of farmers adopt those methods, you will get a 15 per cent or perhaps 20 per cent reduction in agricultural emissions if you are lucky. However, even that assumes very strong regulatory and payment policies, and strong monitoring.

There are two parts to the story. One is that we cannot achieve a lot more with only technological and practice change on farms. We need a major shift towards the production and consumption of a food basket that has a much lower emission intensity. The other part of the story is that, in the past 20 years, despite multiple advice reports from the industry and from science, there has not been much movement in agricultural policy structure. We estimate that 80 per cent of CAP payments subsidise the highest emission-intensive production in agriculture, which is livestock—that is the EU average, and Scotland emulates that. We cannot reduce emissions if we are dishing out money to produce and consume something that contributes to high levels of emissions.

10:45

The Convener: Are you suggesting that there are some farmers who are innovating at the moment? You talked about clover or whatever. Are any such improvements despite policy decision making at Government level?

Dr Eory: I am not saying that it is “despite” that, because, for the past 10 or 15 years, there were always little nuggets of financial incentives to be taken up to cover slurry stores, for example, so Government support probably helped farmers a bit to do certain things. Quite a lot of such changes provide efficiencies, which are important, especially given high nutrient prices. In that sense, the innovations are happening not despite Government policy but alongside that, due to market changes in input prices and so on.

David McKay: I am not an academic, but I will base what I am saying on the evidence that we glean from the work that we do on the ground with farmers and crofters. As I mentioned, that work is around knowledge exchange in particular. We are finding that there are some practical, policy and confidence barriers. On the policy piece that Vera Eory mentioned, I absolutely agree that there is a sense out there that there has been something of a vacuum. We have been promised transformational change, and farmers are not seeing that yet. The witnesses last week covered a lot of this, but at the moment we are sticking with quite a rigid system that the Government’s own analysis has shown does not deliver on environmental outcomes, and that stifles innovation and productivity. The NFUS representative last week described it as incentivising inertia. That is one issue.

On the confidence issue, the policy vacuum does not help, but there is also a sense that farmers know that they need to be doing something. They are aware of the emissions targets. There is an awareness that we are not going far enough, fast enough. Sometimes, though, there is a lack of confidence, from a technical standpoint, that the policy support will be there for some of the things that farmers might want to do. The issue can be to do with making that initial change. People often describe the current system—the conventional approach—as an insurance system. Inputs go in, outputs come out, and they know what they are going to get. There is a role there for policy, as well as other areas. For example, lenders could de-risk that transition process, which on farms can take anything up to six years, and there may be impacts on production during that period.

Regarding yields, for example, it is important that policy supports farmers through that transition.

We are probably missing some easy wins as well. For example, we could be making much more progress on reducing synthetic nitrogen inputs. We are wasting too much nitrogen, particularly on grass and hedges. On the train down last night, I was reading the Climate Change Committee's seventh carbon budget, which I am sure that we will get to. A very straightforward measure would be for the Government to incentivise hedgerow creation.

Woodland Trust Scotland figures show that, in the last century, we have lost 6,000 miles of hedges—half of all Scotland's hedges. There are lots of reasons for that: some of it was driven by policy and the way that the agriculture sector developed. At the Royal Highland Show in June, the Government could announce a target and budget for hedgerow creation, and we could crack on and do it. For us, that feels like it would be an easy win, and we are not currently picking up easy wins.

Dr Robinson: I agree with a lot of what has been said. A lot of good, progressive farmers are out there, but a lot of what they do is not necessarily supported by policy and certainly not by payments, which is partly why we are having the conversation about transforming agricultural subsidies across the board. Clearly, the current system does not quite meet all our different public needs. Exactly what public goods we wish to prioritise and how they can be transformed and brought forward at scale is a very clear question. It is not enough for lots of progressive farmers to do really good things in isolation or around the edges, so we need to capture such work.

Those farmers are not fully represented at the moment. It is perhaps difficult to find out exactly how we give them more of a voice. If I am honest, the whole conversation got a bit bogged down and became a one-dimensional one about meat, and it did not really go any further than that. The farming for 1.5° inquiry team was partly set up to broaden the conversation out to all the different ways that agriculture plays a role in order to help to move that work forward.

Professor Reay: I agree with everything that has been said. On Vera Eory's point about the transition from the CAP, if you had to point a finger at one reason why our sector has not reduced its emissions by anything like some other sectors have, and certainly not as much as it needs to reduce them in order to be line in with climate targets in Scotland, you would point to the policy regime.

That is where we have a big risk. We look towards 2045, when Scotland plans to reach net zero, and 2040, which is the year that the new climate change plan goes up to, but our sector is always going to be a net emitter, because producing food emits greenhouse gases. We could do a lot to mitigate that, but emissions are always going to be part of the process.

The point that David McKay made about netting off some costs through on-farm carbon sequestration is crucial. It all comes back to aligning the policy regime with where we want Scotland to get to: meeting its climate change and nature commitments while supporting farmers. The regime is certainly not delivering a reduction in emissions, but, as you heard in the previous session and last week's session, the regime is not delivering for farmers either.

The Convener: Given the pathway that we are on—we heard earlier from the minister that we want to get it right—is there a fear that, if we do not take action now, we will never get it right, we will always be chasing our tail and that we need policy to start delivering now? I know from my time on the Environment, Climate Change and Land Reform Committee in the previous parliamentary session that you gave evidence then to the effect that the longer we wait, the more we will have to do, and that the interventions will have to be harder and go further, so the earlier that we start, the better. Do you have any confidence that the current trajectory will deliver and that emissions will start to reduce at a greater pace?

Professor Reay: I have low confidence. A lot of secondary legislation would need to be introduced to make that happen. As the committee was discussing earlier, we have not seen any detail around that.

There is the whole argument that we cannot have a cliff edge of massive changes in how support is delivered and who it goes to. I completely get that. However, if you extrapolate through to 2040 with the next climate change plan, we are headed at the moment to our sector sticking out like a sore thumb as the highest emitting sector. I know that we compete with transport, but our emissions are sticking out more and more. The sector across Scotland is hugely dependent on public support, and that makes us vulnerable. It brings us to a different, and perhaps more dangerous, cliff edge in the future for a lot of farmers, crofters and land users in Scotland.

The upcoming advice from the UK Climate Change Committee will give us our trajectory on emissions in terms of carbon budgets. I am sure that agriculture will be a key focus for the CCC in respect of the lack of progress so far in comparison with where we need to be. That will mean rapid action—it will not be a case of saying, "Oh, we've got a nice vision post-2030, and it's business as usual until then," because the

atmosphere and the climate are not going to wait for us. In fact, it would be doing the whole sector a disservice if we were to essentially try to protect business as usual while also trying to address the post-2030 aspect. If I am honest, it feels like that is where we have been for the past 10 years; the committee might be able to tell from my tone that I am a bit frustrated.

Dr Robinson: I share Dave Reay's frustration. We have not seen huge progress for some time; even now, the progress that we are talking about is still very uncertain and still not even immediate—it is for the future, for 2027 and 2028 onwards. Everything about it is just being pushed into the long grass, as it has been for at least five years, although I would quite happily agree that it has been 10 years, as Dave said.

How do we overcome that reluctance to move, or to shift or change? How do we deal with the urgency of the issue, which is clearly accelerating all the time? Scotland cannot achieve its emissions targets if agriculture and land use do not play a role—they absolutely have a critical role to play.

In addition, the sector itself needs protection. There is the issue of adaptation, which will become more and more obvious. Last year, I was called out to two quite major flood incidents where agriculture had lost a lot of topsoil—there was a business in Fife that nearly went under because it was absolutely full of seed potatoes and about 2 feet of mud. There are some real issues in that regard right now.

One of the things within the subsidy system that has been talked about but has still not been clarified is the principle of ratcheting up the requirements that are attached to each of the different tiers of subsidy payment. That is really important. If we can agree something quite quickly, there is the facility to ratchet up. I do not particularly want to rely on that ratchet, but, at the end of the day, it is a way of starting to influence things a bit more quickly. We do not have to wait to get it all right before we move—if we do, we will be waiting until 2035.

Dr Eory: I totally agree with the previous points. We need to think very much about the long term—the policy in the past 10 years has not delivered that thinking, which is quite sad. I agree with Dave Reay—I have very low confidence that we can now see that policy development will deliver much.

The plan, not only from the Government but from all parties in Scotland, is to have a very clear long-term view to 2050 and beyond, and I would like to give a bit of detail on that. By 2045, we have to reach net zero. Beyond that—although it is not written in law—we have to be net negative, because we are going to overshoot the 1.5˚C target, which will be devastating. If we do not get net removals from the atmosphere, it will just get worse.

Based on that, if we look at Scotland's emissions and what is projected in the latest climate change plan, which was produced a few years ago, the plan is banking on roughly 10 per cent of today's emissions as net removals. We have not seen much progress on net removals from actual carbon capture and storage—not from fossil-fuel burning, but from direct air capture and biomass capture and storage. If we kept agriculture to 6 million tonnes, or even if we reduced it by 15 per cent—we could do that by forcing all farmers to do everything that they can—we would still be left with roughly 5 megatonnes. If there is no consumption change and no shift in production, we would be left with around 5 megatonnes just in agriculture. Of course, land use, land use change and forestry, the cement industry and the transport industry will all be emitting. How will we get 10 megatonnes or however much net emission removals to make us net zero?

11:00

Even the EU's most advanced scenarios, which count net removals, think that probably 5 per cent of today's emissions can be removed by 2050, so we cannot get faster technological development. If that holds true in Scotland, it means that the best guess might be 2 megatonnes removed in 2050, and we would be left with 5 megatonnes in agriculture, not counting all the other industries. We just will not get to net zero, not to mention net negative, without a major shift in consumption and production.

David McKay: I have a point about policy development. I listened to last week's meeting with some interest and I found myself agreeing quite a lot with the analysis of where we are and some of the difficulties. To put a slightly more positive spin on it, when the Government published its vision for agriculture in 2022, we broadly agreed with that—we thought that it was the right vision. The thinking behind the national test programme was also right and it still is. That baselining and monitoring at the farm level is really important. The adoption of a whole-farm approach is absolutely the right thing to do.

The objectives of the Agriculture and Rural Communities (Scotland) Act 2024, linking high-quality food production with improved animal health and welfare outcomes, climate mitigation, adaptation, nature restoration and enabling rural communities to thrive, are all the right objectives, because we have to look at this in the round. It is not only about reducing emissions.

The list of measures for tier 2 that were published in February 2023 included a good range of practical on-farm actions that would make a difference to the climate and nature targets. As your witnesses last week said, where that has fallen down is in the apparent failure or incapability of the IT system to deliver on what was intended. After all these years of policy development, it seems quite incredible that that is the case, but if it is, we need to overcome that and do so quite quickly because, as I mentioned earlier, the rigid system of tweaking the legacy CAP schemes, as Vera Eory has outlined, is not going to get us to where we need to go.

The Convener: Emma Harper has a supplementary question.

Emma Harper: Good morning. I want to pick up on what Dr Mike Robinson said. I should have written the words down, but I think that you said that people are reluctant. In your personal experience or perception, who is reluctant to progress?

Dr Robinson: It is quite hard to answer that, in a way. I would say that, within ARIOB, there is a huge amount of agreement around the table, but there is certainly some sort of institutional dragging of heels, if I am honest. The farming community, and NFUS in particular, are a little wary of some of this change and quite anxious about it, which is quite reasonable. It is purported to be transformational, so that is not a surprise. There is an awful lot of need to clarify some of the devil in the detail.

In reality, the issue is that I rarely meet anyone who does not agree that this needs to happen in some form. There needs to be much more focus on net zero and biodiversity in agriculture. That is fairly well understood and accepted across the board, but we are just not seeing anything shift. We are not seeing actual commitment to action other than from a number of individual progressive farmers who have chosen to pursue that line themselves and, to a degree, those who follow some of the greening ideas. It is a slow process.

Some of that is about the nature of the current payment systems, the extraction from the European Union and all of those things, but I feel that there has been a bit of backpedalling in recent years. In 2019 and 2020, NFU Scotland really stepped up to the plate and understood its responsibility, with a national commitment to meet those targets. It started to show real progress, but I feel that that has just slid back the way. I do not know whether that is because it has just taken too long to get through the weeds in which we seem to be slightly lost and get some commitment to future policy—it is difficult to say.

I am not the only one who has tried to do this—in one or two areas, there were a lot of key findings. In producing our farming for 1.5° inquiry report, we brought a very robust group to the table. It is the only report in which I have been involved where people have privately come up and shook my hand for it; it clearly resonated with a lot of people.

However, it has not instantly, or obviously, led to the adoption of any further measures, or even led towards steering what we are now talking about to some degree. One of the measures in the report is agroforestry. There is a bit of pushback on that from farming, for all sorts of different reasons. One reason is that it is not a traditional farming method—well, it is, but not in recent years. Some of it is about a lack of understanding of the process, but some of the reasons are pretty legitimate. That aspect has not moved forward, so we sat down and wrote a paper on how we would encourage the uptake of agroforestry on Scottish farms, and we submitted it. To be honest, I have no idea where that went.

Beatrice Wishart (Shetland Islands) (LD): Good morning. The Scottish Government is setting a new level of emissions reduction ambition in regulations later this year. The previous level of ambition was a 24 per cent reduction in agriculture emissions between 2018 and 2032. Is that adequate, or does the level of ambition for the sector need to increase with the next climate change plan?

The Convener: That may be one for Vera Eory to kick off on.

Dr Eory: If the target is for 2032—if I remember correctly—a 24 per cent reduction would be very ambitious and on the right track. However, we have to think long term, and that is not the end goal—it is just an intermediate goal, and we have to go beyond that.

Of course, we need to produce food and we will have nature, and we cannot reduce emissions fully, but I think that a 24 per cent target would be in line with the 2045 net zero goals. However, setting a target is not enough; we have to think about the progressive policy package that will drive us there and ratchet up, and provide support for research and development, innovation and peer learning while, at the same time, setting clear goals. That could be done to some extent, initially, in regulatory ways, but we would then need to introduce carbon pricing signals to the agriculture and food sectors. Without those pricing signals, we will not get much.

If we look across different sectors such as transport, building and industry over the past 30 or 40 years in the UK and in Europe, we see that the highest reductions were achieved where we could

introduce the emissions trading scheme, which means pricing emissions. We cannot do it without pricing emissions—it is not really possible. That is what the history of the past 30 or 40 years shows us. A goal of 24 per cent would be great if we achieved it, but we need a policy vision, and we need not only the current Government but all the parties to sign up to that, carry it through and then move further.

The Convener: There is a supplementary question from Ariane Burgess.

Ariane Burgess: Vera, you talked about carbon pricing signals. Can you elaborate on that a bit more?

Dr Eory: Yes. By "carbon pricing" I mean a mandatory policy set-up whereby either the emissions are priced or someone gets a subsidy—a negative tax—for reduction. There are various policy solutions for that. The UK and the European Union emissions trading schemes for industry are one option, whereby every actor has a quota. If they produce fewer emissions, they can sell the difference; if they produce more, they have to buy more allowances.

There are other ways. Denmark, for example, will, in the next two years, introduce a carbon pricing policy for agriculture. That is going to ratchet up—first, it will be only on livestock. For nitrogen fertilisation, a subsidy system will be introduced; if a farmer goes below the optimum that is set, they can get the subsidies. For livestock, Denmark will have a per-head tax for now. Those measures can always be given some nuance by particular subsidy systems. If the farmer shows, for example, that they are covering their slurry storage and saving a lot of methane because they are capturing and burning it, or even burning it and feeding the heat and electricity into the system, there could be further subsidies.

In a sense, pricing means that the polluter pays. Someone is paying for the pollution, because, unless we put the pollution on the market, no one cares. That is what we have been saying.

Ariane Burgess: It seems that we may need to do that, as Denmark has. If we were to bring in something like that, would we need a database? How would we deal with that?

Dr Eory: Yes, definitely. Stronger monitoring would be needed—as Dave Reay mentioned, that is important—as well as some sort of centralised data about farmers and farm activities. However, we do not need a full-blown system to start with; we can start step by step. The Danes are slightly ahead because they have a much better system for the management of field activities and livestock, not only on numbers but on other things. Nevertheless, we could move towards that—a relatively rough system could already be set up now, with further improvements to come.

Ariane Burgess: Could we build on the back of anything that currently exists in tracking farming activities, or would it need to be something new?

Dr Eory: From my very limited knowledge—I have been involved in some discussions with the Scottish Government and other colleagues—the current problem is that all the different databases cannot really talk to each other, not only for informatics reasons but because of data protection issues, such as who is the data owner and who shares soil-testing data—that is the most infamous example, but I am sure that others can elaborate.

The right pieces are there; we just need to put them together to have a functioning system, and we can make it better later.

The Convener: Before I bring in David McKay, I will get Emma Harper to ask her question on baselining, because it dovetails well with what we are discussing. Once Emma has asked her question, you can signal if you want to come back in.

Emma Harper: I will pick up on what Ariane Burgess said about data. Last week, representatives from the farming sector told us that there was a lack of baseline data for the agricultural sector that makes it challenging to measure progress.

I know that that is a challenge—most emissions are from nitrous oxide in the soils and methane from livestock and manure, for instance—but we know that there are differences between emissions from beef-fed cattle that are out on the hill and from dairy cattle in sheds. We cannae just put all beasts in one shed, so to speak.

What are your thoughts on the wider aspects of capturing data and even working with other countries such as Denmark to build on what they are doing?

David McKay: There are two points there, with regard to a national inventory and then what happens at a farm level. I think that the committee covered some of that last week. I bumped into the Minister for Agriculture and Connectivity in the corridor and he said that he had told the committee that he was out on a farm with us last Thursday, in Lanarkshire, where we were demonstrating Soil Association Exchange.

There are other providers out there, but I will talk about ours, because I know about it. Soil Association Exchange is a comprehensive baselining and monitoring service for farmers across six impact areas, looking at soils, carbon, water, animal welfare and the social impact of the farm. There are 42 different metrics.

We were able to show the minister that the farmer we were visiting was able to see, on his mobile phone, all the data that had been gleaned from all the soil sampling and everything that had been done within the farm. That was in the palm of his hand, alongside all the recommendations that he was given for what he might do to improve the sustainability and profitability of his operation. When the farmer was talking to the minister, I was struck by how that information had empowered him to feel that he was in control of decision making. He said, “This is my farm, and I get to decide what happens on it.” The recommendations included things such as rotational grazing, reinstating hedges, shelter belts and manure management. Some of those things he picked and some of them he disregarded. The point is that he felt that he was in control of the process.

11:15

There is a big issue and disconnect—it was noted by the Climate Change Committee’s agriculture advisory group—between the high-level models and the headlines that appear, and the reality as farmers see it on the ground. If we are to empower farmers and encourage them to make changes, we have to provide that data. We are talking to the Scottish Government about the need to standardise and scale that up. At the moment, we have covered 2,000 farms across the UK, including close to 300 in Scotland. That is a very small sample of the roughly 16,000 to 17,000 basic payment scheme recipients in Scotland. For us, providing that data is the way to empower farmers and get them on board with what we are trying to do.

Emma Harper: According to the Scottish Government website, the number of carbon audits has dramatically increased. Is it a slow burn to get that data? That relates to my question to Dr Robinson about reluctance. There are early adopters, and there are folk who will need to be supported.

David McKay: There is a big spectrum. We have been running a knowledge exchange programme on whole-farm planning, which is funded by the Scottish Government through the knowledge transfer and innovation fund. We have been walking people through what the requirements will be for basic payments from April onwards, and we have found that there is a vast spectrum. Some farmers think, “What on earth are you talking about? I’ve been doing this for years.” However, there are others who have not been doing that and who have not really thought about it.

What has been missing from some of the comms and messaging is why farmers are being asked to do this and how the data that is being gathered on carbon, soils and biodiversity can be translated into practical change that will help to deliver on profitability and sustainability. The collection of the data is not an end in itself; it is what you do with it that matters.

Professor Reay: Those are excellent questions about where we are at and how we unlock the transition and achieve greater emissions reductions and greater resilience. Tier 4 of the payments will be a key part of that. I do not think that it gets enough attention, certainly from the point of view of budgetary support.

When it comes to capacity building, as David McKay just said, we need to have a differentiated approach. Some farmers and crofters will understand this, but many do not have the capacity to spend a lot of time learning how to use apps—for instance—without any support. Good monitoring and evaluation, which we need, will be easier for some farmers and crofters than it is for others. For a smallholder or a crofter, that capacity is a key part of what tier 4 needs to help to deliver so that they can do this stuff and do their job, which is to successfully manage their land. That is often a greater burden for a smallholder or a crofter than it is for a big producer.

When the minister gave evidence earlier—I do not know whether he would say that he had a hard time—he said that he and the Scottish Government try to hear from voices that are not normally heard from, which I applaud. That is an on-going challenge, but hearing from those voices is a key requirement for a just transition, and it is something that we provide scrutiny and advice on. In the agriculture sector, there are lots of voices that are never heard. The committee will hear from the people who are on this panel and the union and industry leaders, but many smallholders and crofters might be struggling with day-to-day living, so they will not have the capacity to watch this meeting or be involved in the process, or to learn how to use some of the tools or how to report. A key requirement for the Government is to help them to do that.

The Farm Advisory Service is an important mechanism for that. It could do a really good job, although it needs to have sufficient capacity with regard to advisers. For a lot of us, that service is our main way of interacting with the Government from day to day. If I have a question about what subsidies are coming down the line or whether I am doing the right thing, it is the Farm Advisory Service that I go to. For us, working on a small scale, it can play a big part in how we report and comply, and in how—David McKay mentioned this—we understand why we are doing what we are doing.

Only by taking a differentiated approach will we unlock the huge potential that exists across

Scotland. That includes not only the big landowners and those who have someone working on these things almost full time, but the small producers and the crofters who will deliver a lot of the nature and climate benefits that we need. At the moment, they do not have the capacity to spend a week looking at the latest advice and the latest reporting requirements. The capacity building at tier 4 is really important.

Dr Robinson: Building on what Dave Reay said, I agree that this is a complicated matter, so measures need to be taken in the round. That is partly about scaling up some of the farm support services and scaling up skills and education. It is not just about physical measures on the ground; we need to have a full package of measures.

In every single climate space, the problem is that there is a desire for perfect data. That is absolutely understandable, but that should not be at the expense of doing anything. We need to find a balance between those measures that can be implemented at scale quickly and those that require baselining. If we are serious, we need to invest in that baselining as quickly as we can. Otherwise, data is a barrier. Sometimes it is used as a reason not to do the thing that we know we needed to do 10 years ago.

Rhoda Grant: The seventh carbon budget report identified measures that needed to be taken to lower emissions in agriculture, such as adopting low-carbon machinery and reducing livestock numbers. What measures do you think are the most important and require the most attention from Government when it comes to lowering emissions? Those could possibly be different things, because there might be some easy things that could be done, but also some things that cannot really be done without Government intervention.

Dr Eory: On the last part of your question, about whether things can be done without Government intervention, if I am blunt and simplify it, I would say that there is nothing that can be done, because those things have already been done.

Let us take the example of sexed semen in the industry, which makes it possible to produce a lot more beef meat from the dairy sector because of artificial insemination and separating male and female semen. That became profitable for dairy farmers and those beef farmers who buy in and rear. It works for them, to some extent. That required no Government intervention; it came about because of technological advances, markets and so on.

Sometimes such things happen. However, things happen in the other direction as well, so we cannot let ourselves rely on markets. We have been doing that for the past 200 years, and that is why we are here. We need to think about strong Government intervention.

I will highlight two of the actions that we could focus on. The easiest option for most farmers, which might provide some financial savings—or, at least, not much loss—for many of them, although it comes with some difficulties, would be to reduce synthetic nitrogen use on grasslands by the inclusion of clover and legumes, which provides nitrogen through biological nitrogen fixation. That can mitigate quite a lot of emissions.

On the other hand, the one thing that would bring about the biggest reduction in emissions would be a strong shift in our food basket to more plant-based food and a lot less livestock-based food, especially ruminant-based food, by which I mean beef, sheep and milk products. That would have the biggest impact. If I had to pinpoint one thing to change, that is the one that I would recommend.

Rhoda Grant: Before we get the views of the other witnesses, I will come back on that point. We see that our cattle and sheep numbers are falling, but if our imports will increase to fill that gap, we will—while our balance sheet might look a bit better—be importing something that is not fed on grass, which is a carbon store. How do we get the balance right in that regard? We are not an island on our own in all of this.

Dr Eory: That is why I started my contribution at the beginning of the meeting by emphasising that we cannot look at production on its own—we have to look at the whole food supply chain, and at consumption. The Government and subsequent Governments, and all parties, need to act strongly on shifting consumption patterns and, at the same time, make sure that the trade balances, if necessary with some sort of carbon border adjustment mechanism or something similar down the line.

I am not saying that we should reduce livestock numbers in Scotland but continue to eat just as much beef and drink just as much milk, because that would simply increase emissions elsewhere around the globe. I agree with you that that would not contribute to mitigating the climate threat globally. We must focus on consumption at the same time, in parallel with having strong policies.

The Convener: I am glad that Rhoda Grant touched on that. I know that we have previously had conversations about the CCC's apparent obsession with reducing livestock numbers in the United Kingdom. It is quite obvious, when we look at global emissions, that the emissions from livestock in the UK are insignificant—they are not significant at all. They might be significant in the

context of UK emissions, but, globally, they are not.

Do we get the balance right? Do we look at the impact of removing cattle and sheep ruminants from our hills, our grassland and whatever? Do we look at what would replace that, and how it would all balance out?

Right now, we have a rapidly declining national beef herd; I would suggest that we are almost at a critical mass. We are seeing record prices for livestock because there is a shortage. It is not because we are producing better meat or because the demand is higher—the demand has flatlined—but we are seeing a shortage, and meat prices are at record highs.

How should Governments approach that? We will not stop people eating beef, lamb or pork overnight, but some of the interventions need to take place now. Should we simply ensure that we recognise that livestock in the UK is produced with a carbon footprint that is significantly lower than elsewhere in the world? How do we get the balance right?

Dr Eory: I do not really see it as a balance, and I do not see the emissions from a single cow—or a single car—as insignificant, because it all adds up. I could say, "Oh, I can take a flight to Florida because it's nothing compared with global emissions, so I don't care," but if we keep saying that about everything, we will not change anything.

The purpose of this meeting is to recognise that every little counts. In that sense, my milk consumption counts as well as China's steel production—although, of course, that is bigger. We have to take action on every front, because otherwise we will keep the status quo. If we keep the status quo, we will end up with agriculture still emitting 6 megatonnes or more in 2050, we will not get to net zero and we will experience climate impacts that will cost us a lot more.

I feel that we get stuck in the debate, because we never talk about the future costs, which include tomorrow's costs from fire, flooding and everything else as a consequence of not taking action. We must take action, down to the last cow and the last glass of milk, and on every single car. We cannot just say that it does not matter. That is my opinion, from what I have been studying over the past 20 years.

The Convener: I will explain where I was coming from. I was talking about getting the balance right with regard to the impact of removing livestock from our hills or wherever. Is there a balance? Is there sequestration? Is there preservation of the natural environment? If we remove livestock, do we need to appreciate that there is another side to the equation, if you like?

11:30

Dr Eory: With this one, we are extremely lucky—it is a win-win situation. If we reduce livestock, that means that we free up land for nature restoration and peatland restoration, and for afforestation. Afforestation is not only the maximum way to go about temporary carbon removal—it is always temporary—but it can be done in a way that balances the need for biodiversity. Usually, if afforestation is done for biodiversity, it results in a little bit less carbon sequestration. There are synergies, although not fully.

If we take quite a chunk of the livestock away from our land, that means freeing up a lot of arable land, because those livestock feed on barley and other cereals, and soya in the Amazon. We are in a win-win situation for nature and carbon sequestration. There is no need to strike a balance, because those are not trade-offs but synergies.

The Convener: I will not keep labouring the point, but I am concerned that we are reaching a critical mass when it comes to livestock in Scotland. If we fall below a certain level, we will not have any at all, because there will be no abattoirs, no markets and no agricultural agents, and there will be nobody on our hills. I am worried about falling below the critical mass and reaching the tipping point. I do not think that we are far away from it.

I see that Dave Reay wishes to come in.

Professor Reay: Do not get me started on tipping points, convener—as with the North Sea, for example.

On emissions, Vera Eory used the phrase "every little counts". To support what she said, I want to quash the idea, which keeps coming up—whether in relation to Scotland or the UK—that we produce only a small amount of global emissions, and we could therefore say, "Oh, China's only 25 per cent, so why should we do it, as 75 per cent of the rest of the world?" That is a false argument in terms of tackling climate change. Everything is important. The convener used the crucial word "balance" in his question. In my view, there needs to be a balance in relation to how we reduce emissions in a sustainable and just way.

The key point, if we are looking at the change in land use, whether it is a reduction in livestock herd for arable or a reduction in both of those for other use, is that the balance needs to be seen in relation to the people who are living with it. That is particularly important with regard to the support that they get. If we want to see a change in expectation, we need changes in support. If we want to have a reduced herd and we are looking for afforestation—planting trees—or for peatland

restoration, the support to enable people to do that needs to be balanced, and it needs to be there. Otherwise, we will just see the loss of community and of people's livelihoods.

Yes, we are going to have to see a change, in particular in many areas of Scotland in comparison with the UK as a whole, because the UK is relying on us for a lot of the sequestration. A lot of that needs to be done on our farms, but it needs to be balanced in how it is supported—otherwise, it will simply have negative consequences, not only for emissions reduction and nature but for the communities that are part of the road, or pathway, to net zero.

Rhoda Grant: I want to push a little further on that. I totally get where animals are being fed, but a lot of our animals are grass fed—they are on the hill. That is not arable ground; it is different. They are there, and they are providing a nature benefit as well. We have seen that, where livestock numbers have crashed, that has had an impact on the natural environment. How do we get the balance? At some level, having animals grass fed on the hills is providing a nature benefit. What happens if we lose that? There is always a balance between carbon and nature and what we do to protect both.

Dr Robinson: I will have a go at answering that.

There are several issues. Agriculture does not exist in isolation, of course. It is determined by the market more than anything else. After the market come subsidies and what is encouraged through grant giving.

When it comes to the balance, we are sitting at this table mostly because, as is clear from the remit of ARIOB, the balance is currently wrong; otherwise, we would not have a climate crisis or a nature and biodiversity crisis. It is clear that there are other things that need to be dealt with. There are also the social and community aspects of agriculture, which are a huge part of the rural economy. There are many things to balance, which is why it is so blooming complicated—let us be honest.

There are moments when cattle on wild ground can enhance habitat; in the right places, that is absolutely true. However, there is also the market. There are lots of issues in relation to the point that we should just stop producing livestock and import them. We already do. We also export a lot of the livestock that we produce, by the way. There is no logic there, because it is dictated by the market. The logic is the market. The problem is that we have a market that does not really make sense—it just does what it does, and farmers respond to that.

Subsidy is the chance to rebalance the equation and bring in other factors that we view as being of significance and importance in relation to what the whole of agriculture can deliver for the rural economy, and for nature, wildlife and climate. That is the balance. Everybody wants to see surety and security for rural communities, but that has to be achieved within the scope of all those different pressures.

David McKay: Our view is that ruminant livestock in well-managed grazing systems are essential for a sustainable food system in Scotland, given our climate and land type. However, I have not seen any modelling that does not involve some form of reduction in livestock across the UK if we are to meet the targets that the Government has set and which every political party signed up to at the time.

The question about balance is an important one. It is absolutely the case that, in some parts of Scotland, in particular, we would probably have a net biodiversity loss if we removed grazing livestock. Our view is that, primarily, the significant cuts need to come from the overly intensive livestock sector, which is dependent on grain, which results in land being taken up that could be used for growing food for human consumption or, in some cases, grain being imported and having a climate footprint overseas.

Any reductions must be driven by dietary change. There are some signs that our diets are changing, but they are probably not changing as quickly as some of the pathways would like them to. There is sometimes a misconception about that. Last year, there was an interesting study—I think that Food Standards Scotland commissioned the University of Edinburgh to do it—on what would happen if everybody in Scotland actually ate the recommended diet of the "Eatwell Guide" plate, which is a healthy, balanced diet. The study found that red meat consumption would come down by 16 per cent; the target for 2030 is 20 per cent, so it is not that far away.

If you step into social media for five minutes, it often becomes a binary argument, with people saying, "The Climate Change Committee wants us all to be vegan," but that is absolutely not what it is saying at all. It is important that we have some context around this. Yes, diets can shift, but that actually means simply eating in line with what we are being told to eat already. The problem is that we do not do that.

To go back to the grazing livestock issue, another element is that we are of the view that we need to integrate as many trees and as much farm woodland into that landscape as possible to help us to make progress towards the targets that we have for tree planting and woodland creation. Over the past few years, we have spent a lot of time working with Woodland Trust Scotland to develop

detailed policy options for integrating trees on farms.

At last year's Royal Highland Show, we launched a report in which we costed in great detail low-density, small-scale silvopastoral and silvoarable options, biodiverse hedgerows and small-scale woodland. We presented it to the Scottish Government. The headline figure was that, with an investment of £10 million, it could double the land under agroforestry systems in Scotland. That is not a lot of money for quite a significant gain, but we need to go much further than that.

We hope that that is under consideration in relation to what happens with the schemes that come forward under tier 3, in particular, on the future iteration of the agri-environment schemes. However, at the moment, we do not know what is happening with that.

The Convener: Ariane, you indicated that you had a supplementary question.

Ariane Burgess: It was on headage, which you covered, convener.

Emma Harper: I have a question for Dr Eory. Correct me if I am wrong, but you said that people should drink less milk. However, when we look at milk processing and the supply chain, more cheese, high-value products and protein yoghurts are being made. In my work on the Health, Social Care and Sport Committee, I am keen to make sure that folk have nutritional foods as well.

David McKay mentioned Food Standards Scotland's "Eatwell Guide". My understanding is that milk, which has calcium, B12 and other such things, is more nutritious than soda pop, which is carbonated water that rots your teeth. Are you suggesting that folk should drink less milk?

Dr Eory: That was my shorthand for saying that we should reduce milk-based product consumption as well as meat consumption, because that is the recommendation in the "Eatwell Guide". At the moment, we are consuming not only too much ruminant red meat but too many milk-based and dairy products. Dairy products can be quite high in saturates, which are the major cause of strokes and cardiovascular disease, which have a very high cost for our health systems.

The Convener: We are getting into a completely different argument by talking about the health impact of reduced dairy and beef consumption. I do not think that we want to go there.

Dr Eory: Sorry—milk was my shorthand for dairy products.

I totally agree with the balance. I argue that carbon sequestration and reducing livestock's GHG emissions are a win-win, because balancing is not needed. A balance is needed when we talk about biodiversity and livelihoods and making sure that abattoirs are working and that the remaining five cattle are not scattered around Scotland with no processing chain in place. However, when we are talking about greenhouse gas benefits, going to zero livestock would be best.

We have to remember that, without livestock, there would be forest instead, and that provides a lot more carbon sequestration than a grazed grass-based system.

I totally agree that balancing is needed for so many other reasons.

Dr Robinson: That is exactly why this is such a difficult conversation: it ranges all over the place. Admittedly, there is always anxiety about there being some sort of attack on meat and dairy. The science is fairly clear on their impact—that should not be a surprise to anyone. However, if we are talking about the issue within the realms of a subsidy system for agriculture, that aspect is slightly to one side and irrelevant, because things will be largely dictated to by the marketplace. As we all know, the marketplace is hugely important in agriculture—that is what farmers are growing for most of the time. If the market dictates something, that is what will have the biggest impact.

The fact of the matter is that having better grown, lower-carbon and less greenhouse-gas-intensive meat will be positive, because that is the way that the market is going and how customers want all of their meat and other produce to be presented. It is not for farmers to dictate the market, because they cannot; they respond to the market. Customers, retailers and others usually dictate the market.

In the farming for 1.5° inquiry, we were quite clear about the distinction, because it was not our job to change customer demand; it was our job to understand what the science was telling us and how to protect agriculture in that space. It is worth saying that out loud.

An earlier question was about how we would direct funding and what sorts of things we would lean towards. It would be towards things that we are currently not doing and need to do more of. To pick up David McKay's agroforestry point, that is a classic case in which we are improving the land and improving the carbon sequestration on the land while still having livestock roaming around the trees. However, there is pushback even on that.

11:45

There are things that we could be doing, and we should be starting to put effort into those, and there are things that we probably should not be bothering to put money into that we currently do. I do not think that reducing nitrogen is necessarily one of the things that we need to subsidise. The biggest single impact of the reduction in nitrogen use was that the price went through the roof because of the war in Ukraine, which has probably served that function. Again, the market has intervened in a way that means that the Government does not need to.

Everybody knows that there is not an endless pot of money. It is about the things that we want to see prioritised and the things that we cannot and probably should not influence through the subsidy system.

The Convener: We will move on to our next theme, which is the Scottish national adaptation plan. Evelyn Tweed has a question.

Evelyn Tweed: Good morning—it is still morning. The 2024 national adaptation plan identifies growth in pests and diseases, flooding and drought as some of the critical risks to Scottish agriculture. We recently had storm Éowyn. This weekend, we are putting out alerts for extreme risk of wildfire in my Stirling constituency. We are coming to the stage where, every few weeks, we are thinking about another event in relation to climate change. How are those specific issues impacting Scotland's farming sector?

I will come to you, Mike Robinson, because you gave an example of somebody who was having issues because of flooding and whose business nearly went under.

Dr Robinson: Yes. Last summer, I was called out to two incidents because they were of real concern. One in five households in the UK is theoretically at high risk of flooding at some point. It is a real, very live issue and it affects every person.

There are two sides to that for agriculture. First, I am sure that every farmer could tell you about the unpredictability of the seasonal weather and some of the issues that that presents. The problem with heavy rainbursts and storms is that, apart from anything else, they take away a lot of the topsoil, which is the productive soil. There are some very real and live issues for a lot of the farming community, but I do not know whether anyone has quantified them.

The other thing that we also have to think about is what we want from farmland. In both of the cases that I was brought into last year, the way in which the land that was next to the incidents was farmed was a factor. It was not the only factor—there were 10 things that caused the flood. However, one of them happened to be the fact that, in both instances, they were planting tatties downhill, which created channels for the water right to the road edge. They did not have a shelter belt and no rig was cut across a field to protect the road. Those things had not happened, I think, because the farms had been rented out to potato planters and they did not bother to follow the guidance. Most farmers generally do the right thing, but they sometimes get it wrong. In both of those cases, they got it wrong and it caused a significant inundation of mud into households, properties and businesses in the two areas that I was brought into.

This might be irrelevant, but I will say it anyway. The issue that I had at the time was that a lot of people were quick to blame each other for why the flood happened but nobody seemed to be doing much to prevent it from happening again. There are usually several overlapping factors that cause a problem of that nature. If you solve two of them, you can usually alleviate the problem. There therefore needs to be a bit more focus on what we are going to do about it. Farming has an important role to play in that, because the land that farmers manage is often on the edge of urban areas. If farmers are encouraged to use slightly different practices, it will protect their topsoil and probably their crops, and it can protect the communities that they serve.

David McKay: I agree with Mike Robinson that there is very rarely one cause and that there is not one solution. Unsurprisingly, we have focused our work on soils and soil management as an adaptation strategy. As Mike said, certain things that happen, such as planting tatties on a slope, are probably not a great idea. You see a lot of bare soil as you drive around. I live in Aberdeenshire and I remember driving through Angus after storm Babet. Enormous amounts of topsoil had washed on to the roads after the storm and the fields were still bare. It was not just fertile topsoil for growing but nutrients that washed into watercourses and overloaded our streams and burns.

There is a whole host of things that farms can do to help with building resilience. Some of that goes back to the whole-farm planning that the Scottish Government has been trying to do. When it comes to soils, you can reduce compactions by limiting heavy vehicle movements on soil over time. Where appropriate, you can grow cover crops, particularly over winter, thereby avoiding bare soil. If that is not possible, you can leave stubble from the previous crop.

We have spoken before about integrating trees, and Mike Robinson mentioned hedges and shelter belts. You can think about plant composition—

mixing shallow and deeper-rooting plants to build and improve the soil structure and the infiltration capabilities of soil to store water. You can also apply bulky organic manures and compost.

I am not about to tell you that those things will solve the problem—with the extreme events that we are getting, they will not be a solution. However, they can make an individual farm more resilient to what we know will keep coming.

The Convener: I see that no one else wants to come in on that. Have you got a supplementary, Evelyn?

Evelyn Tweed: Yes—just a short one. What more can the Government do? I put a similar question to the witnesses at last week's meeting.

Professor Reay: I will answer that. First, on the adaptation front, David McKay and Mike Robinson covered lots of good examples of resilience. A lot of those can be combined with mitigation and cutting emissions. One key thing—this point is sounding like a broken record—concerns capacity building and education. We are seeing new or increasing risks that we are not that familiar with, such as wildfires—which is the case at the moment—and summer heat. If you work outdoors, there is an increasing risk from heat.

We need a bit of advice, particularly on working practices—for example, on the clear explosion of vector-borne diseases, such as from ticks. Those kinds of things need to be part of the support system and part of how we make everyone who works on the land safer in the context of a changing climate. It is not just about living with what we have seen previously; some of the risks are also changing.

Then there is that bigger question of what the Government should do. From my perspective, the Government is doing some good stuff. I know that you talked in your previous evidence session and in last week's meeting—that was really interesting—about the frustration, which I share, of the speed of progress on climate action in the agriculture sector, and that applies to mitigation and adaptation. However, I applaud the principle behind the consultation process and listening to people, particularly in the industry. As I said, I applaud the minister for talking this morning about trying to hear from people we do not normally hear from.

There will be a key test before the end of this parliamentary session in relation to the advice from the Climate Change Committee. We have had CB7 for the UK, and it will advise the Scottish Government on what Scotland needs to do with our carbon budgets and our climate change plan.

Within that plan, my main plea to the Scottish Government on agriculture is to be realistic. We had a discussion earlier on the 24 per cent reduction in agricultural emissions by 2032, which was in the plan and was based on the advice and the different sectors doing their part. However, the Government needs to be realistic about where we are now, where we need to get to and the speed at which we need to go this year and certainly in the next parliamentary session.

Vera Eory made a point about this not just being a matter for the current Administration. Whoever forms the next Government after the next parliamentary elections really needs to get on top of climate action in agriculture in a way that delivers for climate and nature and that works for all of our communities who work on the land around Scotland.

As we have just discussed, that is complex, but we can do it. We have a great research background and a great community of people with skills and expertise across Scotland, working on the land and pushing forward new innovations to cut emissions. Essentially, we need real courage to do it. Some things will not be correct—we will get things wrong—but, given where we are with the climate and nature emergency and, I would say, a rural emergency because of depopulation, for example, we cannot wait for the parliamentary session after next before we come back to the matter and the committee comes back to it, asking "Well, where did we get to?" The answer might be that we are still high emitting, we are not competitive internationally and we have hardly any farmers left because everyone has left the countryside.

My main plea would be that you should get on it and do what you are doing by way of the consultation and your involvement, but you should not leave it to the next session. Do it this year to show a tangible improvement in tackling climate change and other issues in agriculture.

Dr Eory: Resilience and adaptation is a long-term process—resilience needs to be considered in the long term. If someone owns and manages an asset, whatever it might be—a pipeline or farmland, for instance—they are, of course, managing it for the long term, as it is their capital. If someone else manages it, there is a disjoint in the incentive system. One thing that can potentially help to fix that is having some sort of resilience and adaptation plan, including as part of a whole-farm plan. It might even be something like a soil passport, whereby someone has to show what quality their soil is and how resilient it might be to forthcoming changes, such as water shortages and storms, 10 or 20 years down the line.

That is a bit like the idea of energy efficiency checks for flats, which were brought in for similar reasons regarding the disjoint between ownership

and management. We have seen a lot of that with the ownership and management structure in Scotland. Such a measure could help to bring in long-term planning, keeping the incentives and goals of the manager, the owner and potentially the buyer on the same line.

Dr Robinson: I will respond with a couple of stories. First, there are certain win-wins in this space, and we need to see them for what they are. For me, one of those is agroforestry. The reason why one of the main proponents of agroforestry in Scotland came across it is that, after a significant storm, he could not find his cattle. One of the fences at the top of the farm had fallen down, and the cattle had all run into the woodland to hide, because it was better for them. They could rub on trees, they were happier in the woodland and they escaped the worst of the storm. Most of the time, we stick cattle in the middle of a field and we hope that they will be all right—although we sometimes take them inside, too. It was because of a humane issue that he instigated agroforestry in his fields: he saw the cattle's response.

Farms that are hit by storms often have very thin woodlands as shelter belts—single-tree shelter belts or hedgerows—which are not surviving particularly well with some of the inundation that we are getting. If farmers bolster those, they are delivering against some of their biodiversity targets as well, so they bring in other things, and it protects the farm.

Those are the sort of things that feel like complete win-wins. My question would be, since the last wave of storms—there have been quite a few—how many shelter belts have you seen being replanted? I live in Perthshire and I have seen none being replanted. Everybody just says, "Oops—they all fell over." Those trees can be 200 years old, but people just watch them fall over and do nothing to replace them, let alone bolster them or improve them.

What is my appeal to the Government on what it can do? There are lots of things that the Government can do. We keep, perhaps accidentally, reiterating the need for advice and guidance and the importance of investing in a farm advisory service. That is new knowledge for some people. The average farmer is aged over 60, and they have probably not had many people giving them much education or training in new skills in a long time, but we are asking them to transform the way that they manage the land.

I have been involved in climate work for 25 years, and my biggest regret is that I did not think that we had time for education when I started. I now realise that it is our single biggest problem. There is a skills deficit in every industry sector in this country, and helping people to understand what is being asked of them is the most important thing that we can do.

12:00

The Convener: Elena, I think that we are moving on to your question next.

Elena Whitham (Carrick, Cumnock and Doon Valley) (SNP): I am not sure, convener. I think that Tim Eagle is next.

Tim Eagle: You can skip me if you want to, convener. It is fine.

The Convener: No, no. I would never skip you, Tim.

Tim Eagle: I want to pick up on what has been said about woodland, because it is an interesting point. I helped my neighbour after storm Arwen, when a few shelter belts came down on the farm. We could have been in there the next day to clear the trees and replant immediately, because they were good trees, but bureaucracy prevented us from doing that. We need Forestry and Land Scotland to have faster bureaucratic processes so that, in the event a major storm or something like that, we can get in quickly. We had to get a licence to remove the trees, and it is an arduous process. That was the issue. It was not that we did not want to do it; we could not do it, because FLS would come in and tell us off.

A lot of my questions have been answered, but what new research and innovation is coming out in relation to climate resilience? What is the most exciting stuff that we could deliver at pace? What more could the Scottish Government do to enable greater climate resilience in agriculture?

Dr Robinson: Those are huge questions.

Tim Eagle: Perhaps you can narrow them down and give us some nice practical examples.

Dr Robinson: Yes. A lot of traditional farming practice probably does a lot of that resilience stuff for us accidentally, particularly in relation to adaptation. A lot of it is about having the right farming in the right places, as you probably know.

Your point about bureaucracy is a very real one—I fully appreciate that—and complexity is the other issue that is attached to that. I guess that I would remind everybody that we are, by your definition, in a climate emergency.

Another area that maybe needs to be considered is how we can allow systems to move more quickly. That is certainly an issue within the concept of ARIOB and the conversations about shifts in subsidy payments. What we currently have is not transformational in the slightest, and it is not even going to happen for two or three years, so there is an awfully long way to go.

On resilience, a lot of it is about building appropriate infrastructure and about flood management, which is an area that I have ended up in. There needs to be less hard standing, more areas should be allowed and encouraged to flood, and there should not be building on flood plains—we should not be doing daft things such as that.

There are so many different aspects. One of the flooding events that I was brought to nearly took my friend's business out, and the only way that he could have solved his problem locally was to put more drainage in, which would have broken a Scottish Environment Protection Agency ruling against emissions ending up in the river. There are a whole load of reasons why that went wrong. We talk about the whole-farm approach specifically for agriculture, and that is absolutely right. However, it needs to take account of the adaptation stuff and not just the mitigation stuff. There is a broader societal issue there.

Tim Eagle: The agri-environment climate scheme or AECS—Ariane Burgess does not like it when I use too many acronyms—had £50 million in the pot, but I think that it is now down to £25 million, so it has taken a hit. Work on hedges, ponds, increasing wetlands and a lot of other stuff in that scheme was beneficial to the wider farm, including small-scale woodland planting. Did that scheme deliver some of what you are talking about?

Dr Robinson: As far as I know, it did, but not at enough scale. The question is how we can scale it up.

David McKay: As far as I am aware, some of the options in the agri-environment climate scheme, particularly on hedges, are generally oversubscribed. I made the point at the beginning of the session that that work feels like an easy win.

As part of the work that we have done with the Woodland Trust, we have gone round all the different farming organisations and have got support for what we propose. We went round every committee of the NFUS and we now have their backing for what we suggest. That means that no one will push back on reinstating hedges around field boundaries, so we should just get on and do that. The Government can communicate clearly that it wants that to happen, that it will put a pot of money aside to cover it and that it wants everybody to get on board with it because it delivers what we are talking about on many different levels, whether that is on adaptation, mitigation or resilience.

Some of the issue is to do with how we communicate that. Mike Robinson alluded to some of the resistance to agroforestry. We work closely with Scottish Forestry on that, and I sit on the trees on farms sub-group. It does not use the term "agroforestry"; it uses the words "trees on farms" because it discovered that "agroforestry" met with great resistance from farmers, who thought that it meant that Scottish Forestry was going to cover their fields with trees. Those sound like small things, but they are essential to getting a positive message across.

We have talked about some of the benefits of trees, but they are not just about resilience. In many cases, tree planting can improve productivity. We can think about a dairy herd as an example. If we can provide it with shade and shelter not just during storms but during the hotter months in the summer, which is increasingly important, milk yields will improve and the animals will be healthier. There are also productivity benefits from integrating trees in free-range poultry systems. That needs to be better understood and communicated.

We need to go back to why we are asking people to do something. It is because it will deliver many benefits.

Professor Reay: On the latest information about climate risk and resilience that we can make use of in Scotland, I am biased, but I give a shout-out to our colleges, universities and expertise and the improvements that have been made on projecting risks. Remote sensing using drones and satellites is coming on in leaps and bounds. We have programmes such as the dynamic coast project that was undertaken a few years ago. It considered coastal erosion, which is important for many farms and crofts. There are also organisations such as ClimateXChange that distil and synthesise that research brilliantly.

The key thing with all those examples is the translation to the farmer or crofter—the people who need that information. We are in a good place in better understanding the changing risks, but that needs to feed into what the users can do about it and the support to allow them to do that.

David McKay: The value of peer-to-peer learning has been mentioned a couple of times. For a number of years, we have run projects with many different organisations and facilitated discussions between farmers. Farmers want to learn from other farmers, and that is by far the best way that we have found to disseminate information about good and best practice.

As Mike Robinson said, however, only a tiny proportion of the tier 4 budget goes towards that kind of thing. That needs to be massively scaled up. We need to recognise the value of facilitating such interaction between farmers and the formation of farmer clusters in specific regions or catchment areas where they can collaborate and work together. There is an enormous return on

that investment, but at the moment we are not investing nearly enough.

The Convener: Would those schemes be limited by the IT system? You probably heard in the previous evidence session and last week that some innovative schemes will not be able to progress because the IT system is unable to deliver them. Do you see that as a risk?

David McKay: What was envisaged under tier 2 and many of the approaches that I mentioned within it should definitely happen. There is obviously a limitation, which is a big problem. However, lots of those things need to be incentivised. The farmers who already do them should be rewarded for that, and those who do not could be incentivised to do them.

I do not see why some of the things that we have just discussed, particularly on trees—I mentioned the options paper that we launched last year—cannot be integrated into the current agri-environment climate scheme. We have talked about providing grants for tree planting. We already provide grants for hedgerow creation and riparian planting, so we can just get on and do some of that stuff regardless of the IT problem, although that needs to be resolved.

Dr Robinson: The situation is obviously ridiculous. I would give tiers 2, 3 and 4 to someone who has a working computer. There is a real problem there. Delivery is hampered by the current IT system, as I understand it, but surely that is resolvable.

The Convener: Okay. Thank you.

Elena Whitham: Good afternoon. I want to spend a wee bit of time speaking about regenerative farming. We have danced around that this morning, although a lot of your answers have alluded to it. One of the very first speeches that I made when I came to this place was on the subject. It is new to a lot of people, but I learned about it way back in the early 1990s from taking environmental science courses in Canada. We were starting to think about dust bowls, compacted soils and the very real threats at that time.

How do we make the concept of regenerative farming more accessible to our farmers in Scotland and enable them to understand it? Knowledge exchange is important. David McKay talked about that, and I have been out on a farm in my area with the Soil Association to see it in practice. As I come from Ayrshire, you will not be surprised to know that my grandfather was a dairy farmer and I have friends who are dairy farmers. A lot of really interesting things are happening down there, such as the First Milk co-operative, which has a regenerative farming programme and is rewarding farmers with financial benefit for producing soils that are healthy by, for example, ensuring that there is clover and that the swards are healthy. There are also individual farms such as Mossgiel Organic Farm, which is working towards net zero and is able to gain public procurement contracts because it is recognised that the farm offers a valuable, nutritious product.

How do we make the move to regenerative farming accessible and well understood for those who are at the soil face, so to speak? I do not think that we do that at present. I am also concerned about the tier 4 issue. Is there enough resource around that? How do we address that?

David, will you start, as you have touched on that aspect already?

David McKay: You are absolutely right to highlight a lot of great practice that is currently going on. Many farmers are driving positive change around what might be termed "regenerative farming". The difficulty that I have with that term is that there is a very loose definition—it is essentially a set of principles rather than a set of things that can be measured through standards, for example. It is quite difficult to assess whether farmers are doing that or not, and I think that there would be pushback if we suggested assessment, because the whole point is that it is about principles and adapting to the specific context in which a farm sits, rather than following a prescriptive list of practices.

For the Soil Association, it is more about what constitutes best practice and, putting labels aside, saying to farmers, "What is best for your farm and what works best?" Some people might decide that they want to be organic and go down the certification route because there is a market there. Others might think that there is something in regenerative agriculture that they want to pursue—for example, bringing grazing livestock back to an arable rotation, which we need to see more of. Not everything is going to work for everyone, and it will be different for each farm, so it is more about the broader exchange and sharing of best practice.

Elena Whitham: Dr Vera Eory mentioned soil passports. That would be a good way of thinking about how we baseline and understand what soil health in an agricultural business looks like. I absolutely get that there is a set of principles for regenerative agriculture and that it will be, and look, different in each place. Nonetheless, how do we actually empower farmers? David McKay talked about farmers being able to look at their phone and see all the data on soil health on their farm and what is working well. Might a soil passport fit in with that kind of thinking?

David McKay: It might well do. As I said earlier, the value of the data that is collected through the Soil Association Exchange is exactly as you have just described. It is to empower the farmer to be

aware—and, first, to verify that what they are already doing is working. In the case of the farm that I took the minister to last week, there are very positive results on soil health and soil organic carbon, which is probably unsurprising as it is a livestock farm. That, in itself, recognises that the farmer is doing the right thing in many areas. That part of it is important.

12:15

It is then a case of the farmer saying, "Where can I go to improve that? What might the recommendations be?" We provide advice and recommendations, and it is then at the farmer's discretion to decide what he or she wants to do. It is important to keep that decision-making power with the particular farmer rather than imposing something on them. It is also important to provide the tools to let them go and do what is right for their holding.

Elena Whitham: Is it the case that, if the move towards sustainable and regenerative agriculture is done correctly, it will not necessarily impact on businesses' long-term profitability if they are supported along the way to get themselves to that position? Even if we consider reducing herd sizes and reducing consumption, if that is done on a whole-farm basis and a societal basis that drives the kind of cultural change that we know that we have needed for the past 30 or 40 years, it should not affect profitability or our food security in Scotland.

The committee has been concerned about how we ensure that we get the right tree in the right place and that we think about trees on farms as something that is beneficial, as opposed to the argument that comes back to saying, "We can't eat a tree." That is a part of the whole thing that we need to consider.

David McKay: That point about profitability is important, and I have mentioned it a couple of times in this meeting. Environmental organisations have not been clear enough about that—I say that as someone who is part of Scottish Environment LINK. We have not communicated the point well enough that, although it is about sustainable farming, it is also about profitable and sustainable farming, because that is the only way that we will make progress and farmers will be able to make a living.

The good news is that a lot of the regenerative practices that you talk about, particularly when it comes to reducing inputs, deliver a saving alongside delivering a more resilient farm business. Again, it goes back to the ways in which we talk about this—the communication is really important.

Dr Eory: There is a difference between short-term and long-term profitability. That divide is probably one of the many reasons why we are stuck. In the short term, we might need investment. Agroforestry is a major investment. It is seen as risky, as are so many other things, but our report—which informed the seventh carbon budget—found that, on average, if we keep up with these changes on the farms, the net present value of the change eventually balances out. For many practices, it is actually negative because of the efficiency savings. All our previous reports found the same thing.

What we could not factor into our calculations was the long-term benefits from higher resilience for soil health or mechanical resistance to flooding, storms and heat resistance. We have not factored those in. We need to think about that, because long-term profitability is highly dependent on resilience.

I add that regenerative farming is beneficial for the principles and practices that are associated with it. I say "associated" because that is a loose word. Regenerative farming can benefit soil health and local biodiversity on farms, although there is no evidence that it improves our emission profile for greenhouse gases, so that is something to keep in mind. It is good for so many other things, but there is no clear evidence that it reduces our emissions.

Elena Whitham: That is something that we really need to bottom out, because a lot of people who are doing regenerative farming will say that they believe that they are sequestering a lot more carbon than their farms are emitting. We are on a journey to try to catch up with that kind of carbon auditing. It will be helpful once we get to the position where we understand that clearly and collectively.

Dr Eory: Something that we have not yet discussed on carbon sequestration and storing carbon in the soil and trees, even though it is extremely important—it has been missing from the societal and scientific debate until now-ish—is that the carbon is temporary. We cannot escape the fact that, if someone buys the land and develops it or if they drain the land, cut down trees or no longer manage it using no-tillage or min-tillage—which could be in 50 or 100 years' time or next year—that carbon will be back in the air.

Basically, sequestration can help us to reduce climate change's peak effects, but it is not a clear long-term solution, because it cannot be guaranteed. However, there are policy instruments which could link, for example, carbon stock to negative or positive payments. I am not saying who would be paying whom—the farmer, landowner or taxpayer—to keep the carbon stocks, but payments could be linked to the stocks

rather than the carbon flows. There are various options to ensure that whatever is sequestered stays that way. In that sense, regenerative practices and some other practices can be somewhat beneficial for the climate as well, but we need governance structures that ensure the longevity of the stocks.

Dr Robinson: To pick up on one small part of that detail, you have talked about food security, which is, in theory, a concern, although I am not sure that it really is in this context. Seventy per cent of arable land in Scotland is used for growing barley for whisky, and 15 per cent is for livestock feed. We are not food secure, and food security is a different thing to consider on top of all the things that we are talking about. The nature of farming that we probably need to move more towards—regenerative farming—is perhaps more likely to lead to there being more local supply and less of a market diktat.

I will describe the issue with an example. I am currently working on a history of Perth, and in the 1860s or something, there was a massive famine. All the local farmers were selling their grain to London, because that was where they got the highest price and, ironically, the council had to intervene and buy grain from London in order to ship it back to Perth to feed people.

We are not food secure—that is not how we operate or how agriculture operates. Agriculture is there to serve a market. I sometimes worry that we overplay the food security card as a reason not to change anything.

Elena Whitham: Those contributions have been really helpful in setting a marker for us to think about the issues. We do not think about food security in such terms, so that is pretty helpful.

The Convener: I do not want to open the Pandora's box of global pricing of agricultural products, so we will miss that out.

Dr Eory: To back what Dr Robinson said, we really need to think about food security from the consumer perspective, which is what matters. In that sense, poverty is a lot worse for food security than a change in import-export volumes. What really matters is how people can access food, and it does not matter whether it comes from Scotland, England or France.

Emma Harper: Following your point about profitability and rewarding farmers for sequestering carbon dioxide, Dr Eory, I am thinking about biodiversity issues as well.

For instance, in a recent round-table meeting on forestry, I talked about supporting ground-nesting birds and managing land for the sake of biodiversity. In the Clyde valley, 23 farmers are now involved with the Clyde valley waders project. They are working with SAC Consulting and there is a lot of peer-to-peer learning on things such as cover cropping for curlew and planting oats for black grouse. Even though the oats do not contribute to the farm's profitability, they are part of the support for improving biodiversity. It is all about the complexity of putting the right tree in the right place, because trees can sometimes harbour predators that predate on ground-nesting birds. How do we reward farmers for actions such as implementing changes in their farm practice to support biodiversity?

Dr Eory: I am not an expert on biodiversity, although, of course, it links a lot with the greenhouse gas issue, so I know a bit about it. In general, on support, we need to think long term and at a societal level. First, we have subsidies that we distribute for certain things and not others. We can definitely think about how to re-engineer the subsidy system. That has been going on slowly, but it can be ratcheted up.

The other thing that we have to think about is who pays for what and whether, in the long term, the current subsidies will be sufficient to pay for everything that we want the land to provide. We might come to the conclusion that the system is okay, in which case we just keep on using that taxpayer money to fund afforestation and work on peatlands and nesting birds. However, I suspect that, especially on afforestation and peatland restoration, the current subsidy alone will not be enough. In that case, what do we do?

That is where a false hope crept in and keeps going up as a bubble. We—society, the Government, political parties or whoever—think that private finance is coming to the rescue and that white knights will pay for all our biodiversity initiatives and carbon sequestration, but they will not. Although a few investors buy in the voluntary carbon markets, most go for much lower risks and industrial solutions. Investors are not really touching voluntary carbon markets. I can go into details, but the bottom line is that agricultural land use is tiny. It will not do much, because the carbon sequestration is temporary.

Eventually, we will have to find the money to pay for what we want to do. We have to decide where that money will come from. For that, some sort of carbon pricing can help, because, if we tax those who emit too much, that can be redistributed for those who reduce their emissions and/or sequester carbon. We need to divert our thinking from just dishing out subsidies to getting some money from the high emitters, whether that be consumers or producers, and giving money to those who help in reducing emissions.

The Convener: We will move on to our last topic. We have broadly covered it as part of the

witnesses' contributions, but Ariane Burgess might have a tidying-up question.

Ariane Burgess: The last topic is knowledge transfer and capacity building. Mike Robinson said that education is the biggest skills deficit in every sector. David McKay talked about peer-to-peer learning and the tiny amount of money for that in tier 4, which needs to be increased. Dave Reay also talked about that.

The 2020 update to the climate change plan talks about all the different things that the Government is focusing on, such as communication methods, using technology and media to best effect, how to get the information over and how to build capacity in farmers. We have talked about peer-to-peer knowledge transfer and David McKay talked about farmer-led clusters. What mechanisms should be used to facilitate knowledge transfer between research institutions, policy makers and the farming community to meet the climate and adaptation goals? I am asking not necessarily about farmer-to-farmer knowledge transfer but about how we get what Vera Eory has talked about all morning to farmers through policy makers.

12:30

David McKay: For more than 10 years, the Soil Association has been involved in a project called innovative farmers. The idea behind it is to bring together a group of farmers who are trying to solve a specific problem. It might be pests, disease or climate related, for instance. Whatever it is, the farmers are matched with academics and researchers who can provide a level of scientific rigour to what they are doing and can then conduct on-farm field labs to assess and work towards a solution to the particular problem. We have found that model to be very productive and successful for a number of years now, and I think that it could be replicated. A lot of that has happened in England, although we have also had many successful field labs in Scotland. As I say, that can be replicated and, with support, it could be scaled up significantly across the country.

Another thing came to mind as you were speaking. I have been made aware, through Jo Hunt, of the report that he has been working on—and which the committee has been involved in—on skills and the pipeline that is required, working with the different education institutions in Scotland. We have endorsed that, and we fully support what he has proposed. That would also be a good way of directing resources in this space.

Dr Eory: I will add two other points. First, clear long-term goals can help a lot with having a unified understanding and message in the advisory system, as well as helping farmers. If the goalposts are changing, there is no learning—it is just a mess. Through its nitrogen regulations, the Netherlands has ratcheted up its requirements on fertilisation, both organic and synthetic, over the long term—over 20 years. Slightly stronger requirements were added every five years, but everyone knew where that was going. Therefore, contractors were already there. The whole innovation system started to boom and grow because there were contractors doing the injection and contractors doing the slurry acidification.

That required the advisers to learn about it, because the farmers started demanding people with the knowledge. You need to have goals and clear objectives across the whole system, so that everyone goes in the same direction. The farmers start demanding, and the advisers want to learn—and they will know what they need to learn.

Another aspect of what is going on—which is kind of the opposite—is unclarity or messiness, which can be caused inadvertently. In 2019, the NFU came up with an industry-wide goal to be net zero by 2040. The consequence of that pledge is that farmers now think that they have to be net zero. Advisers advise the farmers that they have to be net zero on the farm or, if not, that agriculture needs to be net zero, or agriculture and land use needs to be net zero. However, that is simply not true, because, in the 2050 goals, the net zero goal is not a sectoral one but an economy-wide one. Unfortunately, the NFU did the industry a huge disservice by sending that message, which it probably thought was along the right lines although it went in a completely different direction.

Until we have a clear objective of what we want our food system to look like in 2050 and beyond, we cannot give crystal-clear direction to the food industry and farmers. Until we can do that, the learning will consist of an innovation pocket here and there, with some organisations taking that on, but it will not all flow in the same direction.

Professor Reay: A few of us have mentioned advisers. The Farm Advisory Service would be key here, and it needs capacity building to be the conduit for what many farmers and crofters are doing.

The other thing that I have always thought has great potential for capacity building, skills delivery and knowledge exchange, as well as all the other stuff that we have talked about, is regional land-use partnerships. I do not want to go down the frustration line again, but they are not where we all thought that they would be when they were first touted and when we had the pilots in the Borders and the north-east. However, they have potential in a structure to give that more devolved skills provision, based on the differences in how we farm around Scotland and what already exists in

the form of knowledge exchange networks and so on. The RLUPs still have great potential, but maybe, in 10 years, we will again ask what happened to RLUPs and think that they could have delivered so much. That is another one to flag.

Dr Robinson: I mentioned that I sat on the 2020 group, which was the First Minister's business leaders forum. For a couple of years, I thought that businesses were reluctant to do very much. However, when I spoke to more of them, I realised that they had the same problem: the Government did not want to tell them what to do and businesses were waiting to be asked.

That is why we wrote a climate solutions course—we realised that somebody needed to fill the void. The purpose of the course was to tell people what we were doing and why we were doing it. The solutions were largely derived from the old RPP—the report on proposals and policies—and RPP2, which have now become the climate change delivery plan.

The point is that we all understand that, if we are to have transformation, we need a positive narrative and we need to be clear about why we are doing what we are doing and what we are asking of people. I make the appeal that, for any statement, act or changes in subsidies, energy and effort needs to be put into going out, sharing that and explaining it. Often, we do not do that.

Ariane Burgess: I am glad that Dave Reay mentioned the RLUPs, because I have a note that I took earlier in the conversation that says "Working at scale?" I have a good and constructive RLUP in the north-west and one thing that comes up when I talk to it is the need for what I call soft infrastructure, by which I mean something that is Government-funded that involves people who have the skills to convene the large-scale landscape groups. What do you think about that idea for speeding up the process? I hear your frustration on the RLUPs, but do we need to have that infrastructure of people who are not managing the land but who have the skills to project manage and bring everyone together?

Professor Reay: Speaking as a climate geek, I would say that one of the big issues that we have as a community is that translation. I was talking about the climate risk stuff that is coming out, which is great. We have much better models and projections of climate risk in Scotland, at much higher resolution, but that is kind of worthless if it does not translate to what we do about it. That missing middle is an issue, particularly when we think about national aims and policies and data translating down to the farm scale. That is where I think that RLUPs have great potential.

The example that you give of the skill capacity for translation and joining the different scales is vital not just in the agriculture sector but across Scotland and in all sectors.

The Convener: Thank you for your time this morning. Again, we have run over a little bit, but that indicates how interested we are in the topic. Thank you for joining us. We will, no doubt, be back in touch at some point, when we have the climate change plan in front of us.

That concludes the public part of the meeting. We will now move into private session.

12:39

Meeting continued in private until 13:00.

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