



Land Use in England Committee

Corrected oral evidence: Land use in England

Monday 25 April 2022

3.30 pm

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Members present: Lord Cameron of Dillington (The Chair); Lord Borwick; Lord Curry of Kirkharle; Lord Goddard of Stockport; Lord Grantchester; Lord Harlech; The Earl of Leicester; Baroness Mallalieu; Baroness Redfern; Baroness Young of Old Scone.

Evidence Session No. 9

Heard in Public

Questions 97 - 111

Witnesses

I: Ben Kite, Chair-elect, Strategic Policy Panel, Chartered Institute of Ecology and Environmental Management; Benet Northcote, Chair, Nature Positive Innovation Commission; Sarah Mukherjee MBE, Chief Executive Officer, Institute of Environmental Management and Assessment (IEMA); Professor Katherine Willis CBE, Professor of Biodiversity, Department of Zoology, University of Oxford.

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Examination of witnesses

Ben Kite, Benet Northcote, Sarah Mukherjee and Professor Katherine Willis.

Q97 **The Chair:** Good afternoon and welcome, everyone, to our ninth evidence session. We are continuing our investigation into the environmental implications of the problems and pressures of land use. Today we welcome Ben Kite, who is chair-elect of the strategic policy panel at the Chartered Institute of Ecology and Environmental Management; Sarah Mukherjee MBE, chief executive officer of the Institute of Environmental Management and Assessment; Benet Northcote, chair of the Nature Positive Innovation Commission; and last, but certainly not least, Professor Katherine Willis, professor of biodiversity at the University of Oxford. Welcome to you all.

I have to read the standard pre-evidence session announcements. You have in front of you a list of interests that have been declared by members of the committee. The meeting is being broadcast live via the parliamentary website. A transcript of the meeting will be taken and published on the committee website, but you will have the opportunity to make corrections to that transcript where necessary.

I will kick off and ask the first question, which is about the skills throughout the planning process and the land management process. Do we have sufficient capacity, skills and resources in place at national, regional and local levels to deliver the Government's targets for tackling climate change, nature recovery and biodiversity? What changes might be needed to ensure that the agenda can be supported?

Ben Kite: My view is that the skills for nature recovery and biodiversity are not there. It was reported only last year, albeit based on 2013 data, that only one in three local authorities has access to an in-house professional ecologist. Others make group arrangements for accessing that sort of advice, but the Environment Act places new responsibilities on local authorities for local nature recovery strategies and biodiversity net gain, and they are critical delivery partners in making that happen for the Government. They are very underresourced at present, certainly on the biodiversity front, and action is needed fairly swiftly on that, given that a lot of these things will be kicking in in 2023.

The Chair: Yes, okay. Local authorities are a key vacuum there; that is absolutely correct. But there is also DLUHC higher up and farmers further down and so on. I suspect that that shortage applies all through the chain.

Professor Katherine Willis: I would follow on from that and argue that in some ways we do have enough skills. We certainly have enough departments and enough stakeholders involved in this, but I think they are in the wrong places and they lack co-ordination. I was just looking at the nature recovery networks, for example. The objectives they are setting are good and strong, but they are to be delivered through the local nature recovery strategies—I am even stumbling on those words. It is overseen by a management group of 10 government organisations,

such as Defra, the Natural Capital Committee, the Forestry Commission, Forestry England, and 19 sectoral organisations, including the RSPB and even the NFU. Once they have supported the 50-odd nature recovery strategies, they are then delivered by local nature network partnerships within the local or county councils.

I have chaired one of these local nature recovery partnerships, and you have about 40 different stakeholders all having an opinion and a board of 10 people. By the time you have got through 80 or 100 people or 100 organisations all having an opinion, you somehow have to come out with a coherent plan for how you will bring about nature recovery. To me, that is the problem. By trying to include everyone and make sure that every stakeholder is involved in it, I think you lose sight of the overarching objective and how you will deliver it.

In some ways, the solution is doing it top down rather than bottom up. I think we need to view nature as an infrastructure. You would not have every stakeholder viewing where you put a road or where you put your electricity pylons, so much more directional and strategic thought needs to go into that first step.

Sarah Mukherjee: It is quite interesting how we are all interpreting skills. Coming from the organisation that I come from, we are very much involved in professional qualifications for environment and sustainability professionals. It is not just the skills that we have at the moment; as Ben alluded to, we need a lot more. It is the skills that we will need in 10 or 20 years' time. We have long argued for a consistent green jobs and skills strategy, which would embed climate change and environmental protection throughout all sectors of the economy.

I think the Department for Education's sustainability and climate change strategy is a good start, but when we put together environmental policies, strategies and laws, there seems to be little explicit consideration at the moment of the skills needed for effective implementation. Apprenticeships, for example, are an excellent way of attracting members of marginalised communities into environment and sustainability—I hope we will go on to talk about the lack of diversity in the sector; it is a very white, middle-class sector—but it is piecemeal. Sometimes it is very difficult to access, and it is difficult for some schools. We work quite closely with schools in disadvantaged communities, and the advice they are given as to how they become a sustainability professional is sometimes very piecemeal and sometimes quite asymmetric.

I am sure that everybody comes to you and says that we probably need a bit more consistency and a little less silo thinking. I am afraid that I am yet another person saying that here. None the less, it does not mean that it is less true for skills.

Benet Northcote: We have not looked specifically at the issue of skills requirement at a technical level, because we are focused on how the innovation policy agenda applies to rural communities and land use.

However, it is very clear that unless you can have the lens of a vibrant rural economy over the top of this, you will not be able to keep attracting the amount of talent into this space that we will need.

It is helpful and clear to see it very much as the skills being drawn into the sector by making it an interesting and vibrant place for people to work, and that they can work without too much bureaucracy overlaid on top of it. That is crucial to delivering the outcomes that we will want as part of this.

The Chair: Thank you very much.

Q98 **Lord Curry of Kirkharle:** Good afternoon. We know that the pressures on land use are considerable and increasing. There has been a lot of talk about a multifunctional approach to dealing with land use and in order to deliver a whole range of different outcomes. Do you agree with that? What role can a multifunctional approach play in delivering better outcomes for nature?

Professor Katherine Willis: I sat on the Government's Natural Capital Committee for five years, and I believe that we have to have a multifunctional approach because we need to be layering on. If, for example, we are planting trees to reduce flood risk, we ought to be looking at what trees to also enhance biodiversity. If we are looking to create green space for recreation, what should we add into that green space in order to enhance biodiversity and to increase carbon offsetting and our carbon drawdown?

Very much within that natural capital framing, it is that layering approach that is taken from farming right the way through to recreational land that will give us maximum benefit from a single piece of land. If we go for only one provision on the land, that is when we will start to have very negative and perverse effects on nature. We only have to look at some of the afforestation things going on right now to know that they might be very good at carbon sequestration, but they are disastrous for biodiversity. It is absolutely that layering, multifunctional approach that we need.

Benet Northcote: I agree very strongly on the need for a multifunctional approach across the management of this. I will add to the list, if I may, the wider societal and economic benefits of the activity that is undertaken. It is easy to get into a very technical game of trees and birds and plants, all of which are very important, but we need to step back and ask whether, when we talk about benefit, it is about jobs or general value added to the economy. What else is delivered in that space?

Professor Katherine Willis: Another important point to make here is that if we want to get private involvement in this, it has to have a price with it. A lot of what we should be looking at right now is to do with trees, the carbon in soils and peatlands. How do we enhance those landscapes in order to enhance the biodiversity on them? That is where the market is right now. When there is a market in biodiversity, we can

flip it round, but we are not at that place now, and it is critical that we are really honest about that. This is where bodies like the Forestry Commission and Forest Research comes in. That to me is the key point: who will deliver in order to enhance and add on to the basal unit being the tree?

The Chair: Is there any place for land sparing in this Cambridge University philosophy?

Professor Katherine Willis: Oxford. I think there is. There is space for all these different models where we are looking at conservation and land sparing and sharing, and we have to accept that there will not be one model that fits all here. Yes, there is in some places, but I have a personal opinion on that; I have yet to see it working very well anywhere.

Ben Kite: I agree with a lot of what has been said thus far. I was interested to see that the question was couched in terms of how we manage the trade-offs between different environmental benefits. I think the starting point, coming to the layering of benefits, is to look for the synergies first. More often than not these things can be complementary if they are managed in the right way. This is related to the previous question about skills. Nature does not stop at the boundary of a planning authority of a particular area, so there is a need for expanding thinking across boundaries. Since the abolition of regional assemblies, a number of local authorities have started to become unitary authorities and then stitched themselves together into groups that look more and more like counties. That does not necessarily need to be a problem for biodiversity, because a lot of the nature recovery areas need to stretch across multiple districts if they are to have maximum benefit.

When it comes to how we manage and co-ordinate these trade-offs or synergies, whichever way you look at, expanding the existing duty to co-operate is potentially one way to go about that. At present it is focused on the strategic objective of the local plan within a planning authority. We need to start looking at how multiple local plans can support nature recovery across much larger areas and how different public bodies need to be drawn into that that are not currently subject to the duty to co-operate.

Q99 **Baroness Redfern:** What process is needed to realise this in practice? How can trade-offs be effectively managed? Do you think we should have clear targets, milestones? How are we going to manage it to the best we can?

Professor Katherine Willis: First, we need to be much more proactive in developing tools and technologies that enable the key stakeholders, the landowners, to map their biodiversity baselines or their natural capital baselines, and then to work out where they can get the maximum opportunity from their land for biodiversity. We can do hotspot mapping for biodiversity. We can base it on species richness and everything else, but it is getting to the point where we can map which parts of a drainage

basin are important for trees in order to reduce road risk, which parts of this drainage basin are important for recreation, which parts are important for pollination services? If you are going to enhance or increase your biodiversity or your different land types, where will you get maximum benefit from? The models and the tools are out there, but they are not yet joined together in a coherent way to enable the stakeholders to do this. That is a really important next step.

Sarah Mukherjee: To build on the question of data, in a previous life I worked in the water industry and you would find lots of different organisations in a catchment. You have the otter guys, the water companies, the farmers, all with their own sets of data, all working to slightly different regulatory regimes, not often sharing. Often data gets taken into a regulator and that is the last you ever see of it. If you are part of civil society wanting to do the right thing or working on something, you never see whether the interventions you have made have made a difference. It should not be beyond the wit of people to break down these regulatory barriers, so that we all start from a single point of truth.

Benet Northcote: Later on we will talk about questions of research and R&D money and things like that, but this is clearly an area where a lot of the basic data collection needs to be scaled up. I am involved with various bits of projects as part of a campaign called River Action on the River Wye. A lot of that is about using citizen science and things at the moment to capture the data about what is happening in the Wye Valley right now. You try to deal with trade-offs by having the right data and information and then informed debate about trade-offs. That is true for all trade-offs that exist at all levels. Part of the R&D scaling up has to be about providing those datasets.

Baroness Redfern: I will come back to the previous question on skills. Sarah, you mentioned apprenticeships and so on. Do you think that agricultural colleges should play a more important role in enabling young entrepreneurs or farmers coming into the area?

Sarah Mukherjee: We have said probably every year that this will be the most difficult year for complexity in the farming community, and that complexity is just getting greater. I slightly hesitate, because I was a governor of Harper Adams University for a while, so I know that definitely the pressure is there from within agricultural universities to make a step change in what and how things are being taught, such as robotics and AI. There are a whole load of skill sets that are not being taught at the moment in the context of agriculture. You will need every one of those paths in order to find a way of becoming a successful farmer of the future. I run a small business, and we probably spend about 20% of our time talking about strategy. You do not have the boundaries to do that if you are a family farm.

Baroness Redfern: It is about co-ordinating the universities—

Sarah Mukherjee: Exactly, so you need to be supportive of those skills.

The Chair: I believe that Harper Adams has just started an environmental adviser course, which I think will transform the situation. You are quite right that apart from the FWAG officers, who are invaluable, there are not enough of them.

Sarah Mukherjee: If I had a penny for every time someone said, “Bring back the ADAS man”—

The Chair: Going back to the question about data, which we were talking about a moment ago, do you think it is the local authority’s job to collect the data?

Ben Kite: I think the problem with biodiversity data is that it is not one person’s job. There tends to be a local biodiversity record centre that will manage the data for a county or for a group of local authorities, but there are also all sorts of other apps, tools, organisations that hold data. A lot of data is generated through the planning process, such as consultants going out and collecting survey information for land use change, and planning applications. It all ends up in different places. Part of the problem is that there is not one person whose job it is to aggregate that data and make it available so that we can make more informed land use change decisions in the future.

The Earl of Leicester: As an observation, in north Norfolk, where I am, we landowners and land managers—the Wildlife Trust, the National Trust, us running our own reserve, the RSPB—have all contributed on a per hectare basis to a project run by UEA to get that baseline data, because no one else has it. The lepidopterists set up a wonderful bit of info and others had info, but trying to collate it in one academic area has been invaluable. It certainly has not been a function of government.

Professor Katherine Willis: One of the pieces of work that we did on the Natural Capital Committee was to look at a lot of the different datasets for underpinning natural capital and understanding maps and modelling. There are some fantastic datasets out there at the country level with really good data, but it is not joined together.

The other problem we found is that it is very patchy when it is surveyed. You will have the headland data, but the last time we looked at British headlands was about 2006, I think; it might have been updated since then. Other datasets are more recent. To get an up-to-date picture of where we are, we need to co-ordinate and pull those datasets together into a portal that everyone can access and that is freely available. That is the other problem; many of these datasets are beyond paywalls, effectively, and you cannot get access to them as a stakeholder.

Q100 **Lord Borwick:** How can we ensure that there is a genuine democratic mandate for long-term decisions about the diversity of land use? Beyond that, should there be a genuine democratic mandate? Should that decision be taken by a democratic process, or should it be taken by the landowner, or the parish, or the borough, or the county, or central government or regional government?

Benet Northcote: This is where we get into the interesting questions of land use, policy frameworks and planning frameworks. I think the answer to how you ensure that there is a democratic mandate is having a clear policy that is set by democratically elected politicians who set the mandate and say, "This is it", and then you fight elections on the back of those mandates.

Lord Borwick: At which level?

Benet Northcote: Starting at the national level and then working down. That is why the answer is that you need a clear policy framework. If you have a clear policy framework, which you establish and you say, "This is the framework to which I am operating", that can be interpreted through various layers of government and all the various schemes and incentives that are set up at national, regional or local level to operate within that. That is how you can hold accountability. At the different levels, if those policies change and one Government wants to focus here and another there, they can change the policy framework.

The Chair: You are allowed to disagree.

Professor Katherine Willis: I do agree, but I think this has all got bogged down in a sort of mire. We do not seem to have the exciting vision at the top, which came from the 25-year environment plan, to leave the environment in a better state than at present. I was a director of science at Kew for five years, and when I was there they had a vision to bank 25% of the world's most rare species—the millennium seed bank. Everyone got that and everyone got behind it.

It is almost like we are asking people to be democratic, but we are asking each local society to come up with a framework and a strategy, and then to vote on it. I know of no other system where we are doing that and where we are not starting with, "Why don't we have forestry from Land's End to John o' Groats?", "Why don't we create a corridor that goes from one end to the other?" and then say to people, "Is this a vision that you would like to vote for?" If so, the next stage down is how you embed that in your counties. Right now, we do not have that top bit, we have all the bottom bit, and whenever I talk to people about nature recovery networks I think everyone is just exhausted by it.

Lord Borwick: Do you think that there is not a genuine democratic mandate now for this? It has never been tested.

Professor Katherine Willis: To be quite honest, no. I feel that this mandate is being decided by far too many stakeholders in each local county council, and they might be completely different. The Berkshire recovery network, for example, is totally different to the Oxford one and totally different to the Wiltshire one. Nature does not respect those boundaries anyway, and how on earth are you going to join up the nature recovery network or a corridor if everyone has a different plan for where the corridor goes? There is nothing for people to vote on. It does not feel very democratic right now.

Lord Borwick: What you are saying is that each of those areas has a different mandate at the present stage, presumably because the people in each area want something different, but, despite that, you would want to have something that is the same over all areas even though there is no democratic mandate for it in any one of those particular three groups.

Professor Katherine Willis: If I could compare this to politics, normally when you vote for a party, even in the local council elections that we are all looking at right now, you know what their mandate is and then you vote for that mandate.

Lord Borwick: Absolutely, yes.

Professor Katherine Willis: You just do not get that with nature. The mandate is set at a higher level than your local stakeholders, and that is the point: it is being set too low down in that system. People should have the right to vote for this, but it cannot all be set at such a local level that it does not benefit nature. Nature is getting lost in this process.

Ben Kite: I agree that there needs to be a higher-level strategic leadership for local nature recovery. At the moment, the way things are laid out, I think there is a democratic mandate, because local nature recovery strategies are the responsibility of local authorities. They will write them, and local councillors can lose their seats if that causes an issue for local people. But, as has been said, if you take the chalk downland in the south of England, for example, and the need to restore species-rich chalk downland, it extends all the way across southern England. So you need multiple local authorities, and if their plans are not co-ordinated that vision across the whole of southern England can never be delivered. You end up with pocket arguments taking place in local areas, but whereas what you need is a strategic vision that local authorities build towards and co-ordinate their efforts towards achieving.

Sarah Mukherjee: To be perfectly honest, local nature recovery strategies have the potential to start to support some of the democratic outcomes that you are talking about, but because they are quite narrow, again what we are lacking, even at a local level, is some sort of environmental improvement plan or this being joined up across not just one set of interests.

Even if you look at what is happening at a local level, there is a democratic deficit. We talk endlessly. A lot of local authorities and councils are talking about local planning issues and it is very close to people's hearts. It is often the thing that will get people out to vote, but it is seen through a single prism and not through the many prisms of nature recovery, biodiversity, affordable housing, land use and food security that it needs to be. It is very complex, but that should not be a reason not to try to make it work.

Benet Northcote: Exactly. I am sorry, Chair, but we are all probably in shades of violent agreement on this. It is about a layer of goals: what are your ultimate goals, what is your strategy, and then what are your

tactics? One person's goal is another person's tactics, and you work these things through. It is that bit, that hierarchy, that is missing. We found in our work that the targets were there on a 30-year basis, and you can debate whether they are appropriate or not—we are not passing comment on the quality of the targets—but you immediately drop down to a whole slew of lots of little activity that is happening all the way down here. We do not have time to test which ones of those will be successful, because some of these will take 10 or 15 years to work through to see whether they will really work.

You have to have, "Okay, what's my strategy below my goals? Here are my goals and this is my strategy". If my goal is to get to Parliament from home, my strategy is to take public transport, and then I walk to the train station, get the train and then get on the Tube. Those are my tactics. If I get to Victoria and discover that the Tube is out, I decide to walk because I have changed my tactics. I have not changed my goal or my strategy.

Lord Borwick: But the question is about the long-term decisions about the diversity of land use. Is that not fundamentally best decided by somebody who knows the land rather than somebody elected in Whitehall on a mandate that is on a whole range of different things, including foreign affairs and economics and stuff like that?

Benet Northcote: Absolutely. A policy framework would have the flexibility for that to happen at that level, because that is what you are talking about if you are looking at it from the national level. You are talking about what the local tactics are at that stage. So why not, for sure?

Professor Katherine Willis: The other point I would like to make is that if you take, let us say, the RSPB and Plantlife, they would probably have very different strategic aims. Which one takes precedence in a particular event? At the fine scale, that is where real problems start to come in, which is why we need a strategic view about where these important areas could be for biodiversity and other aspects of natural capital. Then you embed these other things within it. That is the layering down that I think we are all saying is needed.

Ben Kite: I think you are right. Those local delivery partners, local wildlife trusts, local nature partnerships know best how to deliver particular outcomes in their patch. The missing tier is how it is connected to everything else.

Benet Northcote: The tier across, as you have already said, is areas, authorities, regions and countries—back to my favourite Wye Valley again.

Lord Borwick: You said that they know best. Do they know better than the landowner?

Ben Kite: Quite often they are landowners.

Lord Borwick: Where they are landowners that is absolutely fine, but where they are not landowners, would you say that they know better than the person who is the landowner for that area?

Ben Kite: I would say that they would probably know better how to deliver biodiversity, but whether delivering biodiversity is the right thing in that particular piece of land is another question.

Coming back to the second part of the question about getting buy-in, at present I think that is there because it is all done by agreement if a landowner wants to put their land into ELMS or biodiversity net gain, and if they do not wish to, they do not. You cannot compel a landowner to do something with their land that they are not willing to do, but I think there is a local-level body of experts and organisations that know best how to achieve the biodiversity uplifts. The extent to which that is then compatible with the other objectives will come out in the wash.

Professor Katherine Willis: I absolutely understand where you are coming from. Having worked with landowners, you will say, "This particular area is great for planting trees", and they will say, "Yes, that particular area is also incredibly important, because it's high-yielding for a crop". You give people the opportunity mapping and say, "These are potentials". That particular landowner also wanted to have trees. He wanted to start to go into carbon offset, and the approach in the end was to find the areas around that particular field where you could plant trees, but at least the vision was there at the first point that, if you want to plant trees and to connect this forest with this forest, this would be an area to do it. Then the negotiations start with the landowner, but at least there is a higher-level strategic vision in there to be able to deliver the biodiversity and for the other land uses. It is a discussion, but it needs that higher framing before the discussion can even start.

Sarah Mukherjee: I am sure that we have all sat on groups where you bring people together who have very different views on something that seems fairly obvious at times. You come to a conclusion by having the right people around the table at the right time.

Back to the point about what is happening at the moment, there are lots of narrow conversations happening but very few with all the people who are relevant. We talked about that before we came into the committee room. I think we all struggled to think of the forum that brings all those interested in a particular area of land together to talk about something in a meaningful way that would bring forward an improvement plan that did not force anybody to do anything but that came out with the outcomes that, to be honest, we are all looking for. We are all looking for the same thing, are we not? We are looking for better nature, better soil, better water, better air quality.

Benet Northcote: To answer your question directly about who knows better than the landowner, I do not wish this to sound trite in any way, but it depends on who the landowner is. If you ask me who knows the land best, if a landowner wants to concrete it over and cut down all the

trees, they probably do not know what is best for the biodiversity outcomes for the land. I wonder whether behind your concern, if it is a concern, is telling landowners what they need to do with their land—some sort of central bureaucratic control. The question then is at what point that landowner is in receipt of public money. At the point at which they are in receipt of public money, you can legitimately ask about their goals for the public to be spending that money.

Lord Borwick: I entirely agree. That could be a condition of the public money that is given to them, but if the landowner does not want that public money and turns it down, under the same argument about your democratic mandate, would you want to compel him to do it even though he does not want to take the money?

Benet Northcote: Then, as ever, you are into all these issues about the tragedy of the commons and what benefits the landowner is getting from a society whose long-term stability they are not contributing to. If they are getting any benefits from society, and if you are asking whether we would prioritise property ownership rights above every other right as a society, my personal answer would be no. Your property ownership rights do not trump that.

Lord Borwick: I certainly agree with you about not prioritising it over every other right. The question is whether a new right is given to prioritise over the landowner's rights.

Benet Northcote: I think that climate stability, the survival of a stable environment for society in which to flourish, is a pretty compelling reason for why one might need to look at how policy is implemented across all aspects of our economy, yes.

Q101 **The Chair:** Benet, you very kindly sent us a skeleton outline of your report, which is coming out next month. You have the concept of a landscape transformation committee in it. I am not quite sure how you go from the framework which that transformation committee would be developing. How many interim jumps are there, or does it go from there straight down to the farm level and the very local level, parish or even district? Is it translated directly down to the bottom?

Benet Northcote: The specific answer is that I do not know, because the work of the committee would be to establish that. I thought the Scottish Government's framework gets this quite nicely, for those who have had a chance to see it in their latest publication. I have worked on corporate strategies, as many people around this table have, and the point about a strategy is that the pressure is always to get a plan on a page: "Here is the plan on a page". Unilever does this jolly well. It is a massive business. It has hundreds of brands operating in countries all over the world, with hundreds of thousands of employees, and they get their plan on a page. You can look at it and you see that is the Unilever plan. The Scottish Government created this matrix and grid where you can have your core goals along the top, then you can have your growth layers, and then you can envisage all the various different schemes.

I suspect, to answer your question directly, that there are the overall goals under the Environment Act that are being set at the highest level. There is then a policy framework. There is then the Government demonstrating their various initiatives, whether that is SFI or local data recovery or whatever the piece of regulation or legislation is. How that is being applied at the local level should happen at that stage. That is how I would see the framework.

Professor Katherine Willis: A number of the water companies are already doing this. I have looked at Wessex Water in particular, and, coming at it from a scientific evidence base, it is working out where in the basin, the catchment, are the important areas for people to plant winter wheat, for example. It then holds an auction with the farmers to find out which farmers would like to plant winter wheat. It is then bringing in the change to create clean water. There are models there that are working, and in a sense it is scaling that up to say that we should be looking much more broadly at that approach.

Lord Curry of Kirkharle: A number of water companies are working with their farmers on the land management plans and so on. It seems to me, and you mentioned something earlier, that there is a proliferation of bodies, rafts of bodies, with an interest in a geographical area, in a water catchment area: the NFU, the CLA, local authorities, the Forestry Commission, Natural England, the Environment Agency. It goes on and on. It seems to me that what is lacking is an overarching plan for those geographical areas that all those bodies buy into. Do you have a model? Is this being modelled and tried anywhere?

Professor Katherine Willis: Yes, this has been modelled and tried. There are various tools now where you can map for a whole region your natural capital and not only your baseline but your potential for the areas. It is possible. The data and the approach are there, and the Natural Capital Committee has done a lot of work on this over the last five years.

Lord Curry of Kirkharle: Is there a pilot anywhere?

Professor Katherine Willis: There are. I can certainly share pilots with the committee if you would be interested. Surrey in particular has done a very good pilot.

Lord Curry of Kirkharle: Thank you. That would be helpful.

Q102 **Baroness Young of Old Scone:** The more we sit, the more miserable I get. I think Professor Willis pointed out how complicated the multistakeholder thing is and the fact that too much land and too many decisions are made by private landowners without much framework. The planning system ought to be the crossover point between all the biodiversity stuff and the economic development stuff.

I was just thinking about your "Let us build this big forest". I can bet you that somebody in BEIS or DLUHC is busy thinking up a bit of transport infrastructure to drive right through the middle of the damn thing. When

we spoke to DLUHC and Defra there was a lot of discussion about the crossover being local nature recovery strategies, but you have pretty comprehensively trashed that as a proposition. What should we be doing for this crossover between all these mechanisms that are currently proliferating on biodiversity, carbon, the economic and built development stuff that the planning system currently tends to deal with rather than rural issues?

Professor Katherine Willis: There is the radical approach and there is the tinkering at the edges. I hope I did not entirely trash the nature recovery network systems, because there is a good foundation there, but I just cannot see how they will be delivered right now.

Interestingly, and I have not seen the report, I think we need a single body that comes out with a blueprint for the whole the UK—this is where we see important areas for different aspects of biodiversity and the services that it can provide—that gets fed down through to the local planning authorities and gets worked through in the local nature plans. From my own experience of being in the collegiate system and looking at what is happening with some of the building projects going on, again it goes right down to the planning officer. Often the planning officers, when faced with the plans and the net biodiversity gain, do not have the skills to determine what good looks like, so of course these things get signed off and then split up more and more. I believe that there should be probably one government department or a new approach to having an overarching view for what the UK should look like to achieve the objectives set out in the nature recovery plan, and we work from there from top down.

I do not want to be too depressing, but I think this whole thing has become so depressing, and it should not be, because we are all trying to get to the same end point. The Forestry Commission did this before. After the Second World War, it was challenged with increasing our woodland cover, and it increased it from below 5% to 10%. Things like Thetford Forest were not around. If you look at the Dudley Stamp maps from 1940 and look at the UK now, we have a lot more woodland now, but it took a broad approach led by a government department.

Baroness Young of Old Scone: It pretty significantly trashed biodiversity for 40 years.

Professor Katherine Willis: I would say that for the last 20 years it has not. I agree that it did before. I think it changed its ways about 20 years ago.

Baroness Young of Old Scone: It is changing back at the moment.

Professor Katherine Willis: Well, we must look at that.

Baroness Young of Old Scone: Do we need to task local planning authorities differently? If you had this overarching body with an overarching policy or vision, or whatever we call it, or a strategy on a page, how would we change the tasking of local planning authorities?

Professor Katherine Willis: Every local planning authority has what I think is called a city plan. It is a local plan. I know that Oxford has one. It is where they will put their housing, their new infrastructure, all these other things. What they do not have is where they will put their biodiversity. I say that a biodiversity plan should be mandated in those local plans, but their biodiversity plan cannot be bottom up. This goes to having a broader strategic level on biodiversity and its benefits that then gets put into those plans. The biodiversity there and the biodiversity in the biodiversity plan have as much clout in the planning process as other aspects of infrastructure. If I look at Oxford—obviously I know it better—I know very clearly where areas have been designated for housing. We should have the same areas designated for biodiversity, and that is not happening right now.

Sarah Mukherjee: I think we have called it something slightly different, an integrated environmental plan, which would essentially be the same thing. To your point about how you marry up the national strategic requirements with local interests, having spent a lot of time as a journalist covering civil society involved in local biodiversity improvements, I think that can only help people to feel that they are not only supporting their local environment but that there is a strategic national objective. I would have not thought it a difficult sell to most people involved in this space.

Benet Northcote: On the question on the planning system, one of the recommendations we will be making when this report is finally published—he said rather meaningfully, but anyway—is that the land transition committee, as we are calling it, or commission or whatever, should be a part of or work incredibly closely with the National Infrastructure Commission to fully understand that nature and our countryside are part of our national infrastructure just as much as roads, power stations and runways are. Otherwise there is a danger that you end up setting these things in opposition to each other, whereas in fact it should be part of the task of the National Infrastructure Commission to say how it will ensure that we build our necessary roads and runways—if we need to build any runways, which I do not think we do—alongside ensuring that we are also using as much nature as possible for our climate mitigation and adaptation requirements.

Sarah Mukherjee: Back to skills, of course. All of this requires a highly skilled and highly trained workforce to deliver very complex stuff, which, as Ben and Benet were saying earlier, we do not have at the moment. There is no consideration of the skills required to implement something as ambitious as this at the moment.

Q103 **Lord Goddard of Stockport:** This is not the first time we have heard evidence about the need for biodiversity officers in planning. The facts of the matter are that with budgets and strengths being cut, everybody wants everything. To ensure that all this comes together, does it not need to be statutory that the planning department, even at a local level, has to employ a biodiversity officer and that the funding has to be found

to do that? You cannot rely on the will of the people, because, as you said, there are 100 people with 100 different arguments, and some people have very loud voices and there are naysayers about biodiversity. We have heard it all before, but the biodiversity aspect is key to the entire plan.

Would you recommend that we as a committee recommend that there be a statutory power to ensure that every local authority over whatever size has to have that officer? I speak to planning committees and planning officers, and they want that, but they know that you pay a price for that and that two junior planners might have to go to get one in, because you are just layering a team in. There is no new money available for that, which is part of the bigger problem of trying to help everybody out when the pot is shrinking and continues to shrink.

Ben Kite: I think it would be good to have a skilled ecologist mandated in each local planning authority, but there are ways to make it easier for local authorities to do that. For example, with biodiversity net gain a tariff will be paid by developers effectively to purchase biodiversity units to offset any decrease in biodiversity caused by the development. There is no reason why a lot of the upfront costs involved in setting up a local nature recovery strategy and quantifying what needs to be done in that area, what it will cost to deliver and manage the habitats, and the cost to a local authority of employing an ecologist should not also be part of that and effectively be turned into a tariff.

I think many developers would welcome that, because it would mean that they do not get stuck in a logjam when they put their planning applications in, unable to get consent because they cannot get their biodiversity net gain. In fact, at that point they are allowed to speak to a very skilled professional who has mapped out a course and effectively done all their work for them. All they have to do is pay a contribution. It greatly expedites the path to planning consent and probably improves the value of what is done, because rather than it being piecemeal with a little bit of this development and a little bit of that development, it is part of a big strategic plan that stretches across local authorities. I think that would help with the funding problem for local authorities if it was thought about in that way.

Professor Katherine Willis: I agree and would wholeheartedly support the suggestion. One of the first things that goes in any budget is biodiversity. It is always seen as a luxury, a nice to have, an add-on, and not something that is fundamental to all aspects of what we want. The more support that can be given to local councils and local government to have skilled people in those teams, the better. That would be excellent.

Q104 **Baroness Mallalieu:** I think you have all probably answered the question or given an indication, but I will ask each one of you in turn to spell out why you think it is important that there should be a land use framework and how it could work? We have had other evidence that it should be bottom up. Some of you are telling us that it should be top down. You are telling us there is a need for statutory direction and that it

will cost money. Can each of you tell me, first, whether you support a strategy, even if there is no bigger budget, and, secondly, why you support it primarily?

Sarah Mukherjee: Yes, we do need an integrated approach to planning environmental improvements and an integrated way of considering land use. As I said, it speaks a lot to our earlier conversations. I do not want to be the one playing policy bingo and doing the joined-up and silo thinking, but it is exactly that, is it not? It is very difficult to find adequate fora at an adequate level to meet national strategic objectives and local environmental objectives at the same time. There is obviously a bit missing, and I know everybody rolls their eyes when you say, "Let's have another strategic committee", but I think from the conversation we have had today that is very needed.

Professor Katherine Willis: Absolutely we need a strategy, and we need it because, as a biodiversity scientist, I know that biodiversity does not stay within boundaries of county councils. It absolutely needs to move across landscapes, and to do that you have to enable proper joined-up thinking across at a much more regional if not countrywide level. I also think we need a strategy because we need to bring some energy and vision back into this whole debate. We are trying to achieve a transformational, exciting thing, and it has got absolutely bogged down in the detail of infighting within local city councils, county councils and so on.

We need to move it back to the level of the millennium seedbank. For me, it would be extraordinary if we could achieve that and turn around the decline in biodiversity. I am really ashamed to be in a country where we have some of the lowest biodiversity levels in Europe, and nothing is working right now. We need to take it up a notch, and I think this is the way to do it.

Ben Kite: My view supports what has been said. I think the main justification for having a strategic framework for biodiversity is to get everyone pointing in the direction of the evidence and to help align some of the disparate consultation groups at the lower level. My experience of what tends to happen with the strategic environmental assessment process that is done when land use plans are written is that decisions on which sites are allocated are made politically, and the SEA process is almost used as a rubber-stamping process for saying why what has been chosen politically is the right thing to do. It should be a decision-informing process that is done more or less up front before any decisions are made about land use allocation, and then it is for local authorities to explain how what they do fits in with what the strategic environmental assessment has come up with. If they want to do something different, they need to be able to explain why.

I think the problem is that to cut through those sort of politics there needs to be a flag and a direction of travel that puts biodiversity on a par with other considerations and ensures that decisions are led by the evidence—that existing tools are put to better use, basically.

Benet Northcote: I do not have much to add to that at all, apart from violent agreement with everybody. The point about spatial vision is really important in answer to your "why", because spatial vision is required across landscapes, and that is very hard to do within the existing planning system right now. Whichever framework is drawn up it has to have a relationship with the devolved nations as well. We also need to look to the border areas and to think about why we need it, because we need something that can have an interlocutor with the Welsh Government and the Scottish Government in some of those areas. Red squirrels in Scotland do not know where the border is, rather annoyingly; Lord Curry and I have worked on this in the past.

Lord Curry of Kirkharle: The grey ones do.

Benet Northcote: The grey squirrels know where they are all the time. There is a key reason why we need it.

Q105 **The Earl of Leicester:** Benet, what might a spatial framework look like and what controls might it impose on communities for land use?

Benet Northcote: Forgive me for coming back to the Wye Valley, but farming is an important part of the economy in that area, and poultry farming is a very important part of that area and requires an awful lot of jobs. The poultry manure at the moment is undoubtedly killing the river, and some of the places where it has killed it are in different bits to where some of the poultry farms are in the area. It is that requirement. There will be different landowners in different parts of it, and some of this comes down to them being able to see the water in the river, how well that is being policed, who is policing which farm where and all those kinds of things. I see the spatial vision as just saying, "Okay, let's us understand".

The Earl of Leicester: It would be quite difficult to go back retrospectively and say to that poultry farmer, "You have to move your shed a mile away from the river", or they have to take some other steps.

Benet Northcote: Yes, in that specific case you could quite reasonably say, "I'll come and visit your farm once a year. I'll treat you like Ofsted and turn up", and the policy recommendation and the framework might be that you begin to treat enforcement of environmental regulations the way we police educational standards in schools. Schools are terrified that an Ofsted inspector will turn up, whereas a farmer, frankly, is not worried that an Environment Agency inspector will turn up and look at their farm.

Ben Kite: There is already a lot of thinking in that direction, with things like air pollution and Natural England's site nitrogen action plans. If a designated site has already been negatively affected by air pollution, whether that is from fertiliser or the transport sector, the first thing you need to know is who is contributing the most pollution to that site, because otherwise you can waste a lot of regulatory effort dealing with small contributors and disproportionately bring down regulations on those individuals. That sort of spatial thinking, catchment-level thinking,

landscape-level thinking, enables you to say, "These two or three contributors are the ones that, if we solve that, we've solved the whole problem across the whole catchment". It enables you to have less regulation rather than more, because you are focused on where the problem is.

Sarah Mukherjee: To build on that point, with an environmental impact assessment national unit with national guidelines, there would be a lot more clarity for developers and anybody involved, bearing in mind how few planning applications are subject to environmental impact assessment at the moment. Working at that national level would be far more efficient and give far clearer guidance, which could be made with the best evidence available.

Professor Katherine Willis: The point I was going to make here is that quite a lot of biodiversity is also spatially constrained. What often gets forgotten when we look at the planning laws is that if you cut down trees—I come back to trees, but I could give many other examples—in one part of a catchment area it probably will not have much effect on flood risk. If you cut them down in another, you could have a significant impact in downstream flood risk in Oxford, for example. Therefore, it is also about understanding which parts of nature you cannot move, because the services they provide are spatially constrained. That gets lost particularly in habitat banking and biodiversity offsetting, and it absolutely needs to come in very quickly or we will do an awful lot more damage before we do any good.

Ben Kite: I second that. That is certainly true with biodiversity as well. If you look at lowland heath restoration, for example, a habitat that is globally rarer than rainforest, you cannot just put it anywhere. It has to go on soils that are sandy, gravelly and freely draining, so there is a limited area in the Thames Basin and places like Dorset where you can restore or create heathland in the first place. If you do not know that when you are writing the strategic plan, all the ecosystem goods and services get put in the wrong place and the wrong objectives end up being pursued in the wrong place.

Professor Katherine Willis: That takes it back to an even higher-level view.

Baroness Young of Old Scone: Following up on that last point, previous evidence that we had, which I tended to disagree with, was that it was a pity that more biodiversity net gain-type solutions were not happening offsite rather than onsite, because you do not get the landscape scale aggregation of biodiversity gain. It sounds like you are more on my side than the previous witnesses.

Professor Katherine Willis: I am totally on your side. The offsite should be the last option not the first, because so much biodiversity is constrained. If you look at what the biodiversity is providing, even for recreation, there is no point having a recreation site that is 10 miles away from where the people need the recreation. Primarily, you must always

try to do biodiversity offsetting onsite, and only as a last resort should you go elsewhere.

The Chair: Can I put the counterargument to that? Where you have a housing development and you are trying to have biodiversity within your housing development, you will have cats and dogs and children charging willy-nilly through your biodiversity habitats, destroying the biodiversity, whereas if you have it offsite in a more remote place you will get more biodiversity. Discuss.

Professor Katherine Willis: No, I would not agree. We are talking about urban biodiversity. You will always have cats and everything else in urban biodiversity areas. However, it comes back exactly to the point about why you need the biodiversity in the urban area in the first place—for health, mental well-being, recreation, soil erosion protection, pollution control. The list is huge compared to putting it somewhere 30 miles away where you lose all those services.

The Chair: I accept that. It was just the biodiversity bit that I did not quite agree with. All the other attributes I totally accept, yes.

The Earl of Leicester: I totally agree with you, Chair, because biodiversity and humans, or a great weight of humans, do not mix. That is one of the problems you identified when you said that we have one of the worst records for biodiversity. We have 67 million or 68 million people in a tiny island.

Professor Katherine Willis: There are a lot of other places with equal numbers of people that do have high levels of biodiversity, but they are much more creative in how they protect it and how they create corridors through landscapes in order to allow the biodiversity. Urban landscapes with corridors are perfectly possible. We just do not do it.

Ben Kite: There are locations where the particular type of biodiversity that you are dealing with is so sensitive to human activity that it might need to be somewhere else or access to it might need to be limited. However, I do not think that we will get to a stage where we are encouraging better future stewardship of the natural environment if we are constantly cutting people off from it. We have to create that opportunity for people to come into close contact with nature so that they learn about it, they care about it and they start learning new ways of looking after it and integrating it with society generally.

Professor Katherine Willis: There is an evidence base. If you look at the biodiversity hotspots for some things, like some birds and some insects, they are much higher in cities than they are outside.

Sarah Mukherjee: And gardens.

Q106 **Lord Curry of Kirkharle:** I was going to wait for the next question, but since we have embarked on this, Ben, in the papers that you have published, which we have in our pack, you suggested that our knowledge of offsetting is not good enough. This also applies to biodiversity net gain.

I have to say that you have confirmed my prejudice about offsetting, because I have always been highly suspicious and cynical about offsetting. Is our knowledge of biodiversity net gain good enough to be able to evaluate what we are losing and evaluate what we are gaining?

Benet Northcote: I am sitting next to Kathy, so I am hesitant to answer any questions about knowledge of biodiversity. My feeling, and we touched on this earlier when we talked about the joined-upness of the data, is that we understand specific elements of it, or a specific organisation will understand a specific element of it, but the level of actual joined-upness and understanding of how the areas are interacting, or different organisations with slightly different perspectives being able to share access to the data, is the bit that is missing.

The point about R&D more generally—we may come on to this in the next question—is partly about data, but it is also about a lot of other things such as farming practices and the agroecological.

Lord Curry of Kirkharle: Ben, you highlighted this in the papers we have. What are your thoughts on this?

Ben Kite: I have not submitted any papers.

Lord Curry of Kirkharle: I am sorry, I thought you had. We have papers at the back of the pack, which are from you.

The Chair: They came off the internet, apparently.

Lord Curry of Kirkharle: They did, Ben's website.

Ben Kite: Part of the problem with operating any metric is that you are trying to cram the impossibly complex varieties of natures into a set number of categories that human beings have created and then to state what condition those are in. This is a very fledgling science. There is space for constant iteration and improvement. Natural England has taken the test versions of the metric and improved it as we have moved on, but the proof will be in the pudding in that all these biodiversity net gain sites will need to be monitored to see whether they are delivering an uplift in biodiversity, and if not, why not. That information needs to be fed back into the start of the process and the metric to make sure that any future offsets or trades get it right.

I am not sure exactly which article you have seen, but part of my concern has been expressed by other members of the panel, and it is that monitoring is quite poor at the moment. It is not often asked for by local authorities. Sometimes it is felt to be a step too far and putting burdens on developers. When it does happen, the data is not always usefully employed and fed back into decision-making and knowledge so that ecologists know in the future, "Did we do that in the past? Did it work or not? Shall we do it again?" Then we do not keep repeating the same mistakes.

Even where monitoring is done, for example with certain types of protected species licences, the licences return, go into the regulators and sometimes something is done with them, but most of the time it is not. If you are member of the public or a professional like me trying to get at that data to make the next generation of prescriptions for development sites, it is hard to know what has worked and what has not. There are some fantastic initiatives such as conservation evidence, where there is an effort to share those things, but transparency and greater knowledge sharing is definitely high on the agenda of what is needed.

Professor Katherine Willis: There is a fundamental problem with the biodiversity net gain approach, in that it uses habitat units, not species, as its fundamental measurement. X number of habitat units might be offset, but you have very little idea what that is doing to your species numbers. In the biodiversity net gain there is currently no requirement to look at connectivity across the landscape. You might have your units, but if the things cannot move across the landscape, that is not a good place to be in.

Ben Kite: I would second that. If you take a particular area of woodland of the same type, for example, it might have been destroyed in a location where it was performing a fundamentally important role in linking two other woodlands. If you double the size of it and put it in the middle of an arable desert, it will not perform that functional role. There are safeguards to a degree under the current proposals, because we are supposed to be doing biodiversity net gain after we have already done all the stuff we were supposed to be doing anyway. Following what is called the mitigation hierarchy, which is trying to avoid harm, mitigating harm and then dealing with normal protected species legislation, you do the biodiversity net gain at the end. It is additional to, not instead of. None the less, there is a weakness there.

Connectivity was measured in the early versions of the metric, but was taken out because it was being applied too inconsistently and was too difficult to get right, but perhaps we ought to revisit in the future whether it is possible to do something there.

The Chair: Ben, a moment ago you talked about monitoring, and I have a great worry. Planning authorities are notorious. You put down planning conditions for a development and it will get monitored quite carefully in the first two or three years, but after that no one looks at it at all. I wondered how you felt. Clearly in this area you hope that you will monitor for 30, 40, 50-plus years; otherwise, the whole plan will go astray. How is that going to happen?

Ben Kite: Indeed. The biodiversity gains site register that is envisaged and how that is administered will probably be key, because sites that go on to that register will need to make commitments for long-term monitoring. The unknown is where that data goes and whether holding it disparately in multiple local authorities is the best way to do it. Probably there ought to be a pool for that monitoring data somewhere. Fundamentally, if a site is being secured for 30 years through some kind

of conservation covenant or legal tool, it needs some form of monitoring for that full period, which looks at whether the original predictions made in the metric come to pass, whether it turns into the habitat it was supposed to turn into, and whether the condition level that it was supposed to achieve was in fact achieved.

There are other supplementary forms of monitoring that can usefully add texture and detail to that. Certain groups of species, such as farmland birds or invertebrates, tell you generally whether biodiversity is going up or down. At the moment, that is a step too far, because we do not have the whole habitat side of things right and the monitoring for that. I have been experimenting on several projects. Once we have done the metric and we have the habitat bit in hand, it is about trying to develop indicators using groups of species that are known to help you tell whether biodiversity is going up or down, and recording those for the life of the 30 years or the 40 years or whatever the commitment was. It will take a while to get that bit right, I think.

Professor Katherine Willis: In the same way that companies now have to put their energy dashboard up and make it publicly available, there should be the equivalent of a biodiversity dashboard. Making this stuff visible would help a lot. Right now it is all hidden in reports, but if you had to do a dashboard, as you do on your website for many companies to do with your CO₂e, that would make people focus on this issue very quickly.

Ben Kite: Presumably that would be part of the biodiversity gains site register. In order to have your site registered, you have to make those commitments.

Professor Katherine Willis: Yes.

Q107 **Lord Goddard of Stockport:** Lord Curry has strayed into that a little bit. You are broadly supportive of a framework. What are the main research priorities that we need to make sure that we get the best outcomes for nature? In all this process, nature seems to be the bit that is at the end of the line. What are the real things that we need to drill down on?

Sarah Mukherjee: For me, it goes back to the point of ensuring that data is far more accessible, available and shared. Whether you are paying through your water bills, electricity bills or council tax, citizens are paying for this data to be gathered. We have heard from other members of the committee how, when you have the will to bring this information together, you have a far better and more sophisticated understanding not only of land but of how to make biodiversity improvements in a sensible way. It should not be difficult to increase that transparency. From the point of view of the democratic conversation that we had earlier, it becomes much more live, vibrant and meaningful for people if they can see that the decisions they are making through the ballot box have an obvious, positive outcome, through the data that is readily available to them.

Benet Northcote: There is also a question about what research and development we fund in the country right now. I think UKRI does brilliantly, but generally—this is a massive generalisation—there is a tendency for research and development to be for technological solutions that are largely about increasing productivity. As much research, if not more, needs to go into two areas: learning from agroecological principles and how we do farming, and what we learn about ways of doing things.

For a while, I was at the John Lewis Partnership, and we visited some of our cotton farmers in India as part of a project with a charity called Cotton Connect. It was about how to make fertiliser naturally, as opposed to buying it in bags, and the composting that they needed to do, which is great in India because you put it in a pile, water it and it mulches down in no time at all. We were talking to all these farmers and all the elders in the corner were all nodding sagely. I said, “What do you think?” They said, “I don’t know why you are teaching us this. This is what we learned as boys. This is just what we were taught”. Of course, an entire 30-year period or longer of intensive farming has disempowered people from that. A lot of the R&D needs to go back into that agroecological area.

We also need investment in R&D. We have talked about skills, but R&D will also be required in the business model innovation, especially in farming and land management and in all the different areas that are required there, so that you are not just seeing R&D in this space as technical, as in, “Let’s grow an ever cleverer crop”, but how a land manager or a community continues to grow food and make money on increasingly biodiverse land, and have a thriving rural economy on that basis, and what research is needed into that.

Lord Goddard of Stockport: It has just come to me now that when you get your water bill it is broken down into how many showers you have had and how many times you flush the toilet, so you get to understand and people see it. You get the same, especially now, with the electric; they tell you what is going on. Should not local authorities have to produce a report on their biodiversity, their delivery of these challenges, even if it is biannually? This may be one way of monitoring it. It is as we said at the beginning: that we set a plan out with 10 points, say, “How have we done in our authority for these 10 points?” Then you can be judged at the ballot box by the people without people like policemen coming to look at the environment, because the evidence will be there.

I come from an urban environment, from Stockport, but lots of urban people care about the countryside, even though they do not have it on their doorstep. That is what would encourage people like those I used to represent to get more and more involved when they see it. Now, for example, you know how much recycling and waste you are producing. You want to be top of the recycling in Greater Manchester, for example, and if you are not, you want to know why and you ask your councillors why. It is about getting the people on board to buy into it. That is the trick. Giving that information is a two-way thing, is it not? You need a dashboard that says, “We’re failing here, but we’re doing better there”.

Professor Katherine Willis: With recycling, you know what your local recycling targets are, but also how they fit within the broader recycling targets of the government strategy, for example. Some very good targets have been set: for example, restore 75% of protected sites, restore 500,000 hectares of additional land for wildlife. Those are there. They are in the nature recovery network plans that have come through from the Government.

The research that probably needs to be done first and foremost is where the areas are where this can happen and how we are going to deliver that. Who will deliver it and in what way? Then, as a local city council, you can say, "We're responsible for this part. How are we doing?" It is about setting those targets or taking the targets that are already firmly here and starting to turn them into reality in a way that we do for most other targets.

Q108 **The Earl of Leicester:** I have been saddled with this question, which has been answered by many of you. I believe that you have seen the questions already. Kathy talked about a landscape transformation commission and about a single overarching top-down body. How can we improve the processes for improving planning, management and so on, and what organisation or organisations, existing or perhaps not yet even started, could do this job?

Ben Kite: One suggestion is giving an organisation responsibility for helping to advise local authorities on how to work biodiversity into their local plans and how to assess planning applications for biodiversity achievement. The Planning Advisory Service, for example, has already started to do this. It already has guidance on its pages for local authorities on how to use metrics. Given that we do not have enough local authority ecologists at the moment and that they will take time to train and develop, the workforce has to be significantly expanded in quite a small space of time. In the interim, there is room for a body that is focused on providing better biodiversity advice to local authorities, particularly as these new responsibilities will land on their doorstep very soon.

Benet Northcote: I was going to jump in on some of the core principles behind this, as I am the one who is most actively advocating for the creation of a thing. We debated this long and hard, and the analogy you kept coming back to—I am sure lots of people have done this in other evidence sessions—is the Climate Change Committee. You get to a body that is agnostic about departments, is not part of the government infrastructure, and is not confusing its role. Somebody said to me that we should have a ministry for land use. Goodness, no, that is not what we need. We need somebody who can inform the debate between all the others, not another ministry that will just mix it with BEIS in a different way. That sense of being crosscutting and having a role in providing data, evidence and all this sort of thing is where it needs to be, but in a statutory manner.

Professor Katherine Willis: I totally agree. I will not add anything. I think it needs exactly that.

Q109 **Lord Harlech:** You have spoken about nature infrastructure and lots of new ideas about the framework and how to push this forward. We have heard in previous evidence sessions that the biodiversity management in a lot of our existing natural areas, be they national parks, AONBs, green-belt sites, is quite poor. It is all well and good wanting new places to be assigned for nature, but how do we get the management better in the existing sites that are designated for nature?

Ben Kite: This is potentially an area where the ideas in the planning White Paper could be finessed. At the moment, they envisage three zones where you have protection, regeneration and growth. If we are not very careful, that will take us in the wrong direction, because all sorts of things might get put into the protection category, like green belt, which you mentioned. Green belt was originally a planning tool to prevent urban sprawl, to stop cities from growing into each other. A lot of land in the green belt is biodiversity poor; it is not contributing what it could contribute and it is not used by people for access and supporting mental and physical well-being and all the rest of it.

If we go down the route of a zone system, the way the rules are written for those zones and the way nuance is added to them will be really important. Otherwise, we will end up with nature-poor areas where human beings are stacked and stored, with all the nature at the other end in the protected sites category, or perhaps even languishing in the protected sites category because areas like green belt are thrown in there as well and they do not have a biodiversity mission. You are absolutely right that national parks and green belts could be doing a lot more, but if we go down that zonal route, the rules need to be very carefully nuanced.

Professor Katherine Willis: We also have to look very carefully at why we want the biodiversity in that area. Is it a protected area because we want to protect a spotted orchid, or is it an area that is important for, let us say, recreation green belt? You then have a very clear set of objectives. If it is green belt and it is very poor agricultural land, we should be planting trees on that land for carbon offset. We should be planting scrubland for butterflies. You take the basic asset, you build on that asset, and you view nature as an asset that is not to be destroyed, rather something to be enhanced. It is a different way of viewing biodiversity.

Sarah Mukherjee: I should declare an interest here, because I sat with Lord Cameron on the Glover review of protected landscapes. Particularly with national parks there is room for all three. We are all paying, as citizens, for national parks. The issue that we highlighted in the Glover review is more fundamental and is about whether the current structure of national parks can deliver that. That is probably a question that we have addressed—. [*Interruption.*]

The Chair: That should be the last bit of ringing, until the next vote, of

course.

The Chair: Have we answered that question, do we think? Benet, you look like you are about to speak.

Benet Northcote: This is not directly relevant, but we touched on the importance of urban biodiversity and we should not walk past that. I have been following an account on Twitter that is about rubbish gardens, the amount of space in new housing developments, and traditional things. We are not planting enough trees, and we will need to plant a lot of trees in urban centres anyway to cool them. There is a lot of biodiversity gain to be had where many humans are as well.

Sarah Mukherjee: If we are to ensure that we have genuinely diverse communities in the future getting engaged in this area, there have to be areas around peri-urban and urban spaces and encouraging more people into national parks.

Q110 **The Chair:** Can I ask a question of Benet, especially? In your recommendation 5 in the papers you sent us, you say, "Regulations need to foster market redesign towards a shared direction of transformation". It sparked off to me a question about where the market versus regulation comes into all this. The marketplace obviously includes ELMS, biodiversity net gain, carbon credits and so on. It could become a big market. How much should that be the tool that is used as opposed to regulation?

Benet Northcote: We are unashamed on the Nature Positive Innovation Commission. Most of the recommendations are on the concept of how you bring innovation policy to the rural economy. We think about innovation policy in terms of youngsters with laptops in Hoxton, and we think about innovation policy in terms of very clever scientists creating graphene and applying that in the industrial context. We do not tend to think about innovation in terms of our rural economy and specifically our land use. This, again, is about joined-up thinking across government, which again leads to why you might want a land transition commission or committee to help to support this, because this should be as of much interest to BEIS in terms of the economic growth as it is to Defra in terms of managing it in a silo.

We do not think about our rural economy as a fundamental part of our whole economy, but when you think about it, the food sector in its entirety employs a huge number of people. Our largest manufacturing sector in the UK is food manufacturing. We are seeing innovation policy on that agenda. Obviously you need regulation, but how do you get those market incentives right and have that design to make people want to do this?

The Chair: Thank you very much.

The Earl of Leicester: Not wanting to be too prejudicial, but it is slightly patronising. There is a lot of innovation in rural businesses.

Benet Northcote: Apologies if it came over that I was suggesting that the rural businesses and the rural communities were not trying to be innovative. Farmers I have met and had the honour to work with are the most innovative, hardworking and thoughtful people. The policy framework in SW1, I am afraid, does not think about innovation policy and how that is working. Forgive me. I did not mean to suggest in any way that farmers and rural businesses were not innovative, but they are not being encouraged or helped, and the innovations that are happening are not being learned from and shared. The knowledge transfer is very poor. That is where the problems are.

Professor Katherine Willis: In soils, the innovation is coming the other way right now, I would say, from learning about the management of soils for carbon.

Q111 **The Chair:** Thank you all very much. We want to extract all the information possible from all four of you for our report. Is there anything that you feel has not been touched on or said that you want to get across to us? Now is your chance.

Sarah Mukherjee: IEMA published some guidance, which is germane to the general conversation, on soil and soil management, which I am very happy to send after this session.

The Chair: Yes, please. If you could do that, that would be helpful. Thank you all very much. It has been a very good session. Judging by the fact that I let it drift on far too long, it must have been good. Thank you all very much for coming in to see us.