ResULTS project: case study G, interview 54

Face to face interview with person from environmental organisation, conducted 12th December 2018

Interviewer: I

Respondent: R

I: So let’s start with the questions. The first question is, tell me a bit about yourself, about your involvement in upland area and beef and sheep sector and obviously your organisation.

R: Yes. So myself individually, my role at the [organisation] is, I coordinate our supportive research activity. So that includes our interest across…so the [organisation name] is [section deleted to maintain anonymity]. We do manage a lot of sites ourselves, so over a thousand sites across the nation. So that’s including Northern Ireland, Scotland, Wales and England.

And they are very diverse. So some of them are very typical what you’d think of as we are a woodland organisation, woodland sites. Some of them are not, they have different land use included. An example that might be relevant here, is our fairly recent ownership of a site called [name of site] which is on the edge of [city B]. And it’s an upland area with a lot of peat but we also have tenant farmers on it, including some who are farming sheep. So there is grazing on that site. It’s never going to be a wooded site, it’s going to have a site that includes the range from peat cover right through kind of maybe more scattered trees integrated into some of the areas that are being grazed, through to some areas that are wooded. So we have a range of sites that we manage.

The other aspect of the organisation’s work that we are involved in is…well, two other aspects. Advice to landowners and support for landowners. And that includes a large audience for us are farmers. And that means that we are involved in a number of ways with that kind of group and that kind of audience. So that might be through supporting farmers interested in planting on their sites. So we have…you know, there are schemes through which they can apply for trees or hedgerow trees with us, for example.

It might be about giving advice to our outreach managers. So we have people that work in an outreach capacity where it is thinking about how do you integrate trees into a farm situation in a way that is useful to the farmer but is also meeting our objectives for, broadly, the idea of a more resilient landscape across the UK. So that would cover multiple land types but including trees as an aspect of the landscape that have really important roles. And that includes, obviously, the upland areas [voices overlap] working with.

I: [Inaudible] or, kind of, to the farmers or the other land managers, is it free?

R: Yes. So what is…

I: [Inaudible] from everyone or they have to [voices overlap] eligibility criteria?

R: People…yeah, so I think there are some eligibility criteria which I’m not immediately familiar with. And actually, I might be able to direct you to somebody that could answer specific questions about how we…like, when we get queries. So usually what happens is that we will take an enquiry from a landowner who’s interested in working with us or has a question about opportunities. And that will be then kind of looked at by one of our advisors and determined whether we can help, you know, whether they meet…if they’re looking to apply for a scheme and they want support to do that, then we might be able to provide support to do that.

I: [Inaudible]?

R: Yeah, so we might be able to facilitate their applying for particular types of kind of tree planting-based support. So it’s kind of that facilitation role and being a point where we have staff who work to provide guidance on how they may approach that thing.

So we have that aspect but we also…the other area that I think is probably relevant organisationally and also where I help support through my role in thinking about evidence and research is trying to influence policy. And our government affairs colleagues who may be out talking to policymakers or thinking or responding to consultations, for example, on the Agriculture Bill.

So that’s where we, as an organisation, are trying to use information that may already be out there or through research maybe get involved in new bits of work that will help support a case that we wish to make with evidence, so it will help us direct the decisions where we recommend making.

And I’ll just pass this onto you. So this is the link I sent to your earlier. This was a document that was…

I: I think I have seen it.

R: Yeah [voices overlap] the paper copy but it’s…

I: It’s much better [inaudible].

R: Yeah. So feel free to…I’ve got two copies if you want another one for a colleague.

I: Yes please.

R: Yeah, that’s absolutely fine. And there are…through…on the publications area of our website, that is where you will find some of our responses to…like consultation responses, for example, that are relevant to this project and thinking about, as an organisation, like where, you know, our objective is broadly are UK rich in woods and trees for people and wildlife. So that obviously crosses over with these interests of multiple types of land use, multiple farming being a huge, huge audience because of the UK’s proportion of land that is under agriculture in some form or another.

So it’s making those links and that’s where you’ll find some of our other…some of our more historic publications as well. So, you know, maybe over the last 10 years or so, you’ll be able to see if there’s changes that…in our position or whether, you know, we’re relating to different kinds of evidence or work that’s happened when we’re giving advice or when we’re responding. So that might be useful as well just to have a kind of key word search in that. So yeah.

I: Yeah. Don’t worry, I will look at that and also I will search a bit on your website.

R: Yeah.

I: So the next question is, are there special features particular to upland areas that should be maintained in your view? That’s in general, whatever you would like to see in 20, 30, 50 years can be there.

R: Yes. Well, I think probably from our view kind of organisationally, it’s a greater…feature that may be maintained or improved is understanding that trees can be a component of upland systems. Not everywhere where it’s, you know, blanket bog. But that where perhaps we have lost the role that trees might play in those systems and whether that’s to do with water management particularly, that’s an area, so their capacity to absorb water and manage kind of…like, have a whole catchment approach to water management influencing downstream, but it being an important feature of, yeah, capacity to absorb water definitely.

I’m thinking more generally, more broadly. I think probably one of our…a concern as well that would be probably part of our interest is ensuring that there is enough space within the land use in the uplands, that there is the potential for some natural regeneration of habitat. So that where there may be grazing but there is a capacity of some upland areas to respond for tree regeneration to happen.

And that might lead to maybe a more kind of upland scrub type landscape where, you know…so it’s that integration of kind of understanding there’s pre-existing agricultural land use that with…through a careful strategy, can coexist with maybe a greater restoration of other [voices overlap].

I: Before you mentioned something about catchment areas.

R: Yeah.

I: Do you feel that this is a scale we should be looking more at, rather than more local scheme, catchment areas might be more meaningful? [voices overlap] There are many surprises [inaudible].

R: I know, yes.

I: Anyway, so [inaudible] policy?

R: Yes.

I: And I’m not talking only from the government side, but all the type of [inaudible] policy makers. Do you feel that they should look at the catchment area, or any other scale?

R: Yes, I think it is a relevant scale. And I’m saying that partly from our experience working in Cumbria. So in the Lake District in Cumbria, there is clearly a very, very strong farming community, upland areas and sheep farming, and a lot of very strong cultural response to that landscape. But it’s also an area that has experienced very severe flooding in recent years. And I think for…well, to have an impact locally, thinking on the catchment scale might be a way of addressing resilience within…even for an individual farmer, kind of addressing the resilience of, you know, their particular farm is actually thinking…is understanding kind of within that catchment scale there are ways of working with an understanding of what’s going on amongst your neighbours in addition to yourself that will influence, you know, you as an individual as well.

And Cumbria is probably quite a challenging area to work in for us. So obviously, one of the things we’re interested in is basically just the integration of more trees into the landscape. And that affects the landowners and, you know, their interest might partly be in understanding for my sheep in this upland hill farm, trees might provide shelter under extreme conditions, if we’re seeing, you know, variation and extreme conditions. Or it might be understanding that there’s a role for trees to play in water management at the farm scale but also thinking about the bigger area. So yeah, I think it is a relevant scale, given the potentially increasing prevalence of kind of water management issues.

I: The other thing I would like to mention, I didn’t mention it before, we have four case studies. Three of those are in Scotland; Orkney, Skye and Scottish Borders, upland areas, all of them. And there is one in Yorkshire, particularly [inaudible] from the side which is close to [inaudible] not the whole part [inaudible]. So if you have any knowledge or any examples from those areas, it may be even more useful for me. But I understand this, it’s not necessarily [inaudible] everything with those areas, it can be more general things about upland areas.

R: Yes. Actually, it might be that I may be able to direct you to a colleague to try and have a follow-up short conversation that has worked in those areas. That is also…I should mention, that’s also a way that the [organisation] works is that we do have staff who are posted in the countries and regions, so they have more of a geographical overview of a particular area. And my job is, it’s kind of UK-wide, as is my colleague who is our farming advisor. It’s kind of she works from that central point and has a broader knowledge of things that have been going on widely. But it might be that actually if I could…

I: We may have a follow-up discussion with the people who work in those two areas. But obviously [inaudible] going to be much shorter to gather [voices overlap].

R: Just a targeted question maybe for them if that’s appropriate, yeah.

I: Okay. So what does resilience mean for you? I’m trying to understand how people, they capture that meaning.

R: Yes. So I am aware that resilience has some very specific meanings in academic literature, depending on what you are measuring. So basically, you know, kind of whether it’s resistant to shocks or whether it can recover from change quickly. And, you know, it’s thinking about what types of kind of [inaudible] are being experienced.

For the [organisation] more generally, when we talk about resilience, we probably talk about it in a much broader way and I think in a way that’s more commonly understood maybe by outside of academia, which is that kind of thinking about the ability of the environment to cope with change in a way that doesn’t fundamentally damage the environment in the long term, so it will continue to be able to cope with the change and recover from it. So we…

I: It reminds me a bit of sustainable way?

R: Yeah. And I think it’s quite an elusive term for some people isn’t it, it’s very…it’s like, okay, you’re resilient but what do you [voices overlap]. Yeah, and it is, it’s very much like I think sustainability was that term for a long time and there’s been a real move to using it…using resilience kind of policy and thinking, you know, as a way…but I would say for us, we’re interested in the concept of resilient landscapes, so landscapes able to cope with change, whether that’s environmental or whether that is through a direct impact, for example, from human activity or a policy change leading to, you know, different incentives for a particular type of land use.

And for us, an important aspect of resilience is partly about health threats to trees in our system. And particularly with the kind of high-profile pathogens like ash dieback happening…

I: Can you write down that?

R: Of course, yeah. So ash dieback is one of the kind of wide…

I: [Pathogens], yeah.

R: Yeah, widespread. But there are a lot of emerging pests and pathogens that are of concerns. Because one of the things that is of interest to us is understanding how an increased incidence of tree health threats might change the community of trees that are in our environment.

I: Do you link it with the impacts of the increased incidence, but also do you link it with what caused that or [voices overlap]?

R: Yeah, so biosecurity is…plant biosecurity is an issue that is quite high on our agenda now. I’m thinking about particularly given the uncertainty of what trade might look like in the UK for wood products, wood and timber products in the coming years and also in [voices overlap ]. Oh gosh, yes. Well, you know, I mean, it’s like…

I: [Inaudible].

R: I know, nobody…it’s very…it’s really hard to anticipate what might happen. And that’s also importing kind of, you know, nurseries and working within the system where they’re importing plants that might…plants and trees that might carry things that could transfer to different hosts and, you know, different host plants.

So one of our…one of the important aspects for us as an organisation thinking about resilience is the ability of the landscape to retain tree cover in the face of pests and pathogens that are coming in. And obviously, because trees in lots of different forms, whether they’re in woodland, whether they’re outside woodland, they’re forming shelter belts, whether they are in urban areas, provide a lot of ecosystem services in different ways. So yeah, resilience, that broad concept of resilience could have a lot of impact if you’re thinking like us from the focus of what role do trees have to play in resilient landscapes.

I: I have two questions related with what you said.

R: Yes.

I: The first question is, you mentioned biodiversity as a driver for increasing disease or threats kind of emergence, the pathogen patterns let’s say.

R: Yeah.

I: Are there any other quite key drivers you are looking at?

R: With respect to kind of tree health?

I: Yeah, tree health and changes in pathogen patterns.

R: I mean, climate change is an often…it’s clearly another quite significant factor.

I: Do you have evidence [inaudible]?

R: There is evidence. So climate change broadly, I mean, obviously that covers a multitude of potential impacts, but could impact in two kind of ways I suppose. So maybe direct impacts of climate creating an environment that is more suitable for a particular pest and pathogen. And another way that it could act is through changing the stresses for trees in this case, but actually it could be for lots of other types of wildlife for stresses so they’re more susceptible to pests and pathogens. So where they’re, like, experiencing repeated incidents of drought conditions and potentially waterlogging conditions, kind of reducing the…yeah, so increasing the stress level and the ability of an organism to fight off something.

So it could be acting in those direct ways where it’s creating an environment where there may be more movement because the climate is more suitable for a particular pest or pathogen. And it could also be acting in that way of just increasing the susceptibility to something that we might have been able to deal with in the past…

I: Do you have any…obviously not to discuss now but do you have any papers or, you know, any published data findings, recent findings, that exactly explain these two types of direct/indirect impacts? And obviously, yes, mostly they are going to be about pathogens related with the health of the trees but if you have pathogens that also you have come across pathogens that might affect other plants or families any way, or animals [inaudible]?

R: I think there probably have been some reviews around that. And as it happens, the tree health advisor for the [organisation name] is also based in Edinburgh and he also has a, like, national remit. And I can ask him if he has a good example of a summary that [voices overlap].

I: It would be nice because obviously [inaudible] so many different areas, and it would be nice if I have a compact type of review, a couple of reviews, rather than trying by myself [inaudible].

R: He is more familiar with that literature because, you know, it’s part of his role is to keep on top of what’s happening, where there is evidence coming out. So I will…I’ve made a note, I’ll ask him.

I: The other thing that came to my mind when…you mentioned when you’re thinking of resilience in terms of the landscape resilience. And you explained a bit if, for example, new pathogens emerge, these trees, they’re going to cope, or what are there…you know, there’s going to be a mix of trees in future time, something like that.

R: Yes.

I: But I wonder, do you touch also anything resilience related with say communities or the people, or you see only the landscape?

R: Yeah. Well, so I think when we would think about resilient landscapes as an organisation, we would anticipate people being part of that. Because organisationally, our objective is, it’s thinking about the UK people and wildlife. So it’s not…we aren’t…so it’s a really important strand of what we do as an organisation where…and one of…so another…oh okay. Another area that I should mention is that we have a series of kind of geographical focus areas that are called treescapes and they have been…

I: Treescapes?

R: Treescapes, yeah. So they…

I: [Inaudible]?

R: Scapes, yeah. So…

I: Treescapes?

R: Treescapes, yeah. So like landscape but with tree.

I: Ah, okay. So is it kind of a word you’ve created [inaudible]?

R: I think it’s one that we have used. I mean, essentially, the concept of a focus area for, you know, we’re going to maybe put more activity into this area because we’ve identified that this has particular issues facing it. So for us, what this programme has done over the last couple of years, and it’s slightly…it’s just going through a bit of a period of change actually about how this is going to look in future as, you know, a way of working in particular geographical locations, is identifying a series of areas, one of which has been the [Area 1] in Scotland, so it may be relevant, and one of which is the [area 2] Scotland as well.

I: [area 2] probably that’s the other type of…

R: Yeah. So it’s been identifying areas where we can…you can say something quite broadly about, okay, here are a set of issues that are going on in this area, it might be [area 1]. For example, one of the areas…one of the things that did come up was water management and again, an area that’s had flooding in different catchments. And [area 2], for example, something that is particularly unusual about trees [in area 2] are Atlantic rainforests, so those kind of very, very woodland types that you see there and supporting a really different range of species. But that’s less relevant I think in this particular project potentially.

I: I wonder if you have a summary of the issues per case, so for [area 1] and [area 2]. What about [area 3], do you have any focused area there? It’s fine if you don’t, that’s fine.

R: I’m not…

I: Definitely you don’t have one in [area 4] [voices overlap].

R: No, we don’t. So the northern forest, I’m not sure if it extends to where…so the northern forest is also this big kind of…essentially, it’s a bit like a giant treescape, so it’s this…

I: The [area 3].

R: Yes, so it basically follows…it follows kind of the corridor of the [motorway name] and I’m just trying to remember exactly how far it extends into the [area 4].

I: That’s fine.

R: But we have a document that is in our publications on our website that has quite a lot of information about the northern forest.

I: [Inaudible]?

R: Yes.

I: Especially this document, also the other document if there is any which pretty much summarise what are the issues that treescapes are facing [areas 1 and 2]?

R: Yes.

I: So I asked you about the resilience and this is the kind of definition found in the literature so far, about the resilience of…sorry, the resilience is the capacity of the business or a system as whole, for yourself also might be landscape as a system.

R: Yes.

I: Either to absorb/buffer against internal/external disturbances, or learn and adapt through incremental changes for farmers, it might be increasing/decreasing the stocking range, for example, or the amount of fertiliser they use, incremental changes, or even transform through radical change. So radical changes can be farmers that do sheep and beef cattle but they give up sheep and do only with cattle. They may convert to organic.

R: Yes.

I: So a quite big type of…or they start renewables say, [inaudible] renewables, they start agri tourism. So they change quite a lot the business model of what they are doing. So this type of definition as a capacity, in particular [inaudible], does make any sense to you, would like to change in any possible way?

R: It does make sense. Yeah, it does make sense. Probably some of the concepts that also, from the kind of ecology side of things that I have heard talked about extensively, other concepts of resistance and recovery, so kind of it’s the buffering and yeah, so…

I: The thing with the resilience is that it’s a kind of concept that emerged from ecology literature, usually it was attributed to those [inaudible]. But since then, it has so much evolved and has been also related with social type of science things. And this is one of the latest kind of versions. So if you only think about the resilience in terms of how it has been defined in ecology then it’s a huge gap. This is the way that it has evolved.

R: Yeah.

I: So now they accept change, they accept that probably a new system is going to emerge especially through the information. So if you would like the [inaudible] is it [inaudible] pronounce this [inaudible]. Forget about that. Yeah, just forget.

R: I’m sorry, I’m not sure.

I: No, forget about that, I just pronounce the words [inaudible]. But what it means the same for us, it’s the same people or even more people, they’re staying in the area and they pretty much have a kind of involvement in some way with food production and agriculture. But a lot of different things of how they do and different ways can emerge. So that type of resilience, the people they are staying in the area while they may change so many different ways [inaudible].

R: Yeah. It’s kind of the socioeconomic actions that you take, not just…because what’s interesting about reading this is that this, it captures very much why it might be going on environmentally but the transformation aspect is…to me, it reads more like that’s something that’s addressed through the actions of people, whether they’re social changes or economic changes they’re making or decisions in their business. Whereas, you know, a radical shock that leads to a transformation might…environmentally, could be something really damaging. So it’s that kind of, you know, it’s…

I: It’s like the social thing about the information, it maybe change the thinking and get involved with more resilience in a more sustainable way of production.

R: Yes.

I: Or may move towards more holistic type like, as you described before, that trees is something [voices overlap] a more kind of integrated system of alternative uses [inaudible]. This is also a type of transformation because right now, it happens very little and we need to move onto a system that pretty much thinks more in a holistic way [inaudible].

R: Yeah. So just one last point about this. While this makes sense, I think if you weren’t somebody that was used to thinking about kind of social and economic resilience and environmental resilience, then it could be…I feel like there’s another layer that you need to kind of talk about. So absorb and buffering against internal and external disturbances might be being able to cope with climate or it might be being able to cope with policy. But there are two layers and I think for somebody that isn’t used to it, yeah…

I: You will see in one of the cards later on.

R: Yeah. It’s going to…

I: Yeah, I know, it’s so difficult to discuss all at once. Anyway, because we were talking…all these programmes, pretty much talks about the food systems.

R: Yes.

I: And because it’s a term that is quite complex, that’s why we have [inaudible]. So here, you have the blue arrows, which is the supply chain of, you know, meat. So [inaudible] providers like the farmers in upland areas, lowland areas, primary processing, slaughterhouses, for example, secondary processing and then wholesalers, retailers, consumers. Might be local small retailers or can be supermarkets.

And then you have all the orange circles which is all these type of businesses or organisations that help the supply chain to add value. And then you have banks, you have training colleges, extension services, different [inaudible], local councils. You have, for example, [inaudible] borders like [inaudible] and inspecting agencies like [inaudible], insurance companies, [inaudible] or whatever. Then consultancy services. Here include also the vets, the accountant, the land agent, all the type of consultants that the farmers go and ask help for. And industry associations from lobby, so you have NFU, you have NSA, you have Association of Manufacturers of Food Processing.

And then…so in that big yellow arrow, you have the livestock value chain. Then you have the green boxes which is stakeholder affected from what the value chain is doing but also to some extent, they also affect the choices. So you have government or kind of funding bodies like the ones that [inaudible councils]. You have [inaudible] markets which is pharmaceutical kind of market, [inaudible] market conventional or renewables. You have all the environmental and social interest NGOs, or charities and trusts, like yours. And also, you have the local upland community and tourists and the general public. And this is kind of stakeholders that pretty much affect how the value chains frames things or how the conditions pretty much they operate within.

And then if you will, this is the kind of human side that we consider part of the system, the animals, the bacteria, the plants, all the biological organisms. So that’s the idea about what is food system. Obviously, this is an upland food system related with meat production, but that’s the idea. Does it make sense the diagram, is something missing? Any type of feedback.

R: Yes, it does make sense. But I think when you…because you made it clear when you described it but it’s not clear looking just at the image, that these stakeholders, they may be affected by this but also that they are playing a role at certain points within it. And I think maybe that’s just like visually, even just a wording change would be…you know, it would help understand that yes, this is the livestock value chain here but actually there’s also something that might be a direct impact on the farmer, for example from [voices overlap]. Yes, that kind of thing. Yeah, so I think that’s the…I mean, that…

I: That’s exactly the idea. The only thing I was trying to say, that they step a bit further, there is this kind of [inaudible] about the supply chain but these are more framing…

R: Maybe it’s just that word then that’s the thing that would be harder to interpret if you were only…if you weren’t…if you were only looking at the image, rather than…so maybe it’s just, you know, that was the thing, yeah, that struck me is that, yes, you need to understand that, yes, they might be operating in a slight…they’re set slightly back from this directly but they are also [voices overlap] yeah, feeding into aspects of that chain. Yeah.

I: So now my next question is related again from the literature, is about…is this one. So you have this, which is pretty much the [inaudible], let’s say the agents of change, then either humans or animals. Then if you concentrate on the human side, this is from the literature, kind of functions, roles or goals, whatever you would like to say, but pretty much it means the same thing. So what sort of functions do you think are important to maintain?

So to explain. Those kind of functions are more related to the business owner’s private interest, those are related to the multiply effect. So in the local community because [inaudible] money to buy resources and also to buy services, so they leave money to the community. This is related with all the public goods and services. So please read the whole list. First, identify if there is any important function which is missing. And then the next thing I would like to ask you is how you rank the five most important critical functions, let’s say about the farming community. And then you can select five from any of those. But because some of them, they may closely relate, then you can say two and 14 just for example, they are very, very close related, so together for me is the first most important.

R: Yeah, okay.

I: It’s quite a complex [voices overlap]. Do you mind if when you are doing that, I go to the toilet?

R: That’s fine, yeah. Still thinking for a second. It’s difficult. Because, I mean, as you say, a lot of them are linked to one another.

I: And I think it reflects a lot what you’re trying to say here about the agroforest and definition they’re giving. Because the way you can answer this question is farmers but as land managers pretty much, rather than production of food only and forget everything else.

R: Yeah.

I: Yeah, so trying to do like that…

R: To think about it…

I: The way you can do it, you can say, well, farmers right now, they think pretty much more about those five things but they should move to that direction and then priorities change. That would be also an easy way to deal with that because it shows the current issue.

R: Yeah. Okay. Well, I can tell you where I think there’s kind of a parallel. So thinking about your kind of five categories, is that what you’re suggesting, trying to create say five-ish?

I: Yeah, five [voices overlap].

R: Some of those might be combined, yeah.

I: I don’t know but it definitely can be combined in any [voices overlap].

R: Yeah. So kind of with relation to this first section which, yes, is closer to the kind of business owners themselves and…

I: So use numbers like nine, ten, whatever.

R: Yeah. In relation to this first section, the kind of food security relating to resilience is, you know, of the system seems a very crucial one. And then the community related ones, kind of social cohesion of the community.

I: Number six?

R: Number six, sorry. Yeah, so seven…number six and seems very linked to respect of the community number five. But actually, also thinking about the public goods and services, they’re very similar to kind of thinking about cultural value 21.

I: Twenty-one, yeah.

R: Yeah, cultural value. And also linked to 19 accessing recreation value. So in some ways, I think it’s partly about the language you’d use to describe something because they are the things that are related to business owners interests at the moment, like cohesion of the community and respect in the community. You can think about that related to the kind of public goods and services about cultural values and access as well. I feel like they are very strongly.

And then kind of from the point of view of broader landscape management and, you know, livestock farmers relating to that. So probably, you know, crucial for us is thinking about lateral landscape preservation and habitat number 20, soil enhancement, soil being a crucial [voices overlap] it's the same. Sorry, that’s number 20 as well. And that, you know, from our point of view is very linked to 14 biodiversity enhancement. And the services that are very clearly linked to kind of public health and things like clean water and air, broadly, the climate change related ones. So that’s 16 clean water and air, flood prevention 12, and 13 moderation of other climate change effects, they’re not only linked to kind of thinking about the long-term impacts on wildlife and natural systems but also human health and human kind of things.

I: And what you suggest is what is happening now and what should be happening [voices overlap] happening now?

R: What, in terms of actually it’s being sufficiently achieved, is that what you mean by happening or…?

I: Not achieved but it’s a priority, I mean if you talk to the doctors, do you feel they will give typical answers like the one you mentioned, they will give typical answers of something else? Trying to understand where we are in the future you draw for me, or is it the current future?

R: So some of the language about public goods and services I don’t think is happening now, in that sometimes that is not the way that an individual who is running a business and, you know, a farmer think about their role as a land manager. I think that is something that has…we encounter as an organisation when we’re talking to, you know, stakeholders in a particular area or we might be providing advice. It’s often not the language that’s used, it’s thinking about these kind of wider services that might be going on.

Where that’s changing is maybe around flood prevention because it’s just increased in incidence and profile so much in multiple parts of the UK, including some of your case study areas in the last few years. So I think where maybe that is changing is the language is already changing around flood related work.

Biodiversity and natural landscape preservation is still probably quite contentious for some farming kind of…

I: Fourteen and 20?

R: Yeah, so kind of 14 and 20, they might still be something that is more contentious language because the idea of what a natural landscape and a cultural landscape is, is very…they’re very linked in the UK because all of our landscapes are modified. So our upland landscapes, they represent a situation where we have had huge amounts of influence over a very long period of time to create these upland landscapes that people think of as natural but are actually representing a lot of historic change.

I: So there is a kind of…if I understand correctly, you mean there is a kind of hidden thread that if for any change, farming goes away in those areas, the landscape will look completely different?

R: It could do but…

I: Because all these years has been [voices overlap]?

R: Yeah, it’s a cultural value that’s ascribed to current upland farming landscapes, whereas…and sometimes that value might not represent a particularly long timescale. So thinking about probably more relevant actually in lowland landscapes but thinking about the presence of hedgerow trees and hedgerows in our landscape as something that has declined a lot over the last century but was once a really integral part. And that cultural memory of this as a part of our landscape disappears quite quickly, I think that’s what we find as an organisation. So you maybe get pushback about, but we can’t integrate more trees into our farming system because that’s not the way it’s done, it’s not the way it’s been. You don’t really have to go back very far historically to see that there were changes and there’s constant change in those farming landscapes in how…you know, that represent changes in approach that might have been stimulated by mechanical development or policy change or, you know, all of those factors. So I think…

I: The comment you made about the time, so it means pretty much that when the generation that remembers those, how you call them, hedge…?

R: Hedgerows, for example.

I: Hedgerows, okay. So [inaudible]. When they are a generation that remembers that [inaudible], then pretty much that will be not a part of their culture value of the landscape [voices overlap]?

R: It can be lost, yes.

I: Doesn’t see that doesn’t relate it with this is a crucial part of the landscape?

R: Yeah, so it’s that…I would say that idea of a fixed landscape is common both in environmental…from environmental organisations and in other communities, like, for example, farmers. So like, oh, this is the way it is and this is the way we need to keep it. That happens when you think about some approaches to nature conservation where it’s this is our little reserve and we have to keep it and, you know, put walls up around it and keep it exactly like that. Whereas there’s a greater movement now to thinking in a landscape scale and understanding that when you’re thinking about biodiversity and nature conservation, a crucial part of it is thinking about how do species move through a landscape and how do you create a whole landscape that might be able to support different [inaudible], reserves are still important.

Sorry, so that…what I’m trying to say is that that is an example of it has been a way of thinking is that you need to keep things as they are, exactly the same status in nature conservation. And I think the same kind of thinking can happen with our cultural landscape. So this is the way it is, this is the way it has to stay, this is the way it’s always been. Whereas our knowledge and memory of what it’s always been like is not necessarily accurate, it may be that information is lost over time. And that might be to do with generations or it might be…

So the reason I kind of suggested that the biodiversity in natural landscape ideas or historic and cultural landscapes and historic and cultural value, is maybe not necessarily happening yet when you’re talking about things that are currently going on, is that it can be very hard for people to understand what preservation is or preservation doesn’t mean keeping something static, but creating a system like it’s all linked to, you know, this idea of a resilient system, a system that is able to support dynamic wildlife and other aspects of biodiversity. But in a way that doesn’t just mean you pickle it and keep it in that, you know…

I: So on one hand, you have the fixed landscape let’s say, what is old school, if you wish. I’m just speculating now, okay, I’m trying to understand a bit more.

R: Yes.

I: And then you have a kind of fluid landscape that pretty much allows the species to move around but address similar type of needs in kind of a different way. So you need, for example, to address the need for [inaudible] preservation but the species are not…that landscape in that geographical area are not located in the same area that it was for a hundred years, but it might be a bit further because they meet better the need for flood preservation.

R: Yes.

I: So let’s call it kind of fluid landscape or dynamic fluid landscape, compared to the very fixed, this is the geographical area, this species is going to be in that area only.

R: Yeah. Or trees only belong in this context versus, oh, hold on, trees could be integrated into farming practice in a way that has benefits for the farmer but also allows some of those other functions like flood alleviation to happen. And, you know, for an organisation like ourselves where our overarching aim and objective is to see a more tree landscape and to understand that they have multiple roles, and that can be useful for people and wildlife.

So, you know, it’s how do you frame that, how do you encourage that to happen. And it’s understanding, yeah, where and how you can integrate trees into current activity or how activity might change to respond to particular environmental threats, you know, trees might be able to help buffer some of those extremes of temperature that we might see, that kind of thing, because we know that they have…physically, there is evidence out there to say, oh, they’ll have these micro climate effects.

I: So use the trees as measures to mitigate the shocks of whatever.

R: Yeah. So they could play one of…you know, a role in that. Obviously, they’re not an answer for everything but it’s understanding that they could be a component of it, you know.

I: We’ll have the chance to discuss a lot of things next time.

R: Sure, yes, sorry.

I: Before we leave [inaudible] is anything missing, there is a function you have in your mind and you couldn’t find it anywhere?

R: Nothing that immediately strikes me.

I: Okay, something will come later on [voices overlap].

R: Yes.

I: The other thing I would like to ask you. Do you see anything which can be seen as kind of pre-conditioned for the rest or…I’m asking… Okay, give me any answer on that and I will explain, I don’t want [voices overlap].

R: Okay, yeah. So something that needs to exist in order to make these functions happen?

I: Exactly. It can be, I don’t know, function number [inaudible] is pretty much you need first this one in order to deliver the other function. Or function [voices overlap] for achieving function [voices overlap].

R: I’m going to say number 20. No, sorry, I’m just pointing. I’m going to say number 20 because, although I’m not sure preservation’s the right word…

I: [Inaudible]?

R: Preservation just because it sounds like…

I: Keeping fixed.

R: Keeping fixed, yeah.

I: You would prefer something…

R: I don’t know, maintenance sounds too…I’m not sure, yeah. But basically, without soil, you’re absolutely screwed if you’re doing any kind of agriculture, whether it’s livestock or arable. And so, you know, there are really important…like, that is an essential functioning component of both our interests in terms of trees and natural environment like, you know, from the point of view of conservation and trees and biodiversity but from the point of view also of food production, livestock farming, you know, erosion.

I: Do you feel they’ve evaluated, right now, enough of that?

R: Possibly not but maybe it’s increasing on the agenda. And I think it’s easier for arable farmers maybe to understand the soil aspect, potentially. I’m not sure, it’s not an area I know [voices overlap]. Yeah. So it’s that kind of not underestimating, you know, there’s some very crucial components and you might be seeing threats to soil and ability to support livestock through more physical effects like erosion from extreme weather events causing, you know, erosion, there’s not enough…and that’s a…like, we are aware from our point of view that trees can play a role in stability and that kind of thing. So anyway, I would say that is a precondition having a natural environment that can support a continued…

I: Precondition for what?

R: A continued farming community and a natural environment. So when you said is there anything that…

I: So soil is a precondition for…

R: Everything. I mean, I probably would just say…

I: You’re the first person who mentioned that. Because usually…do you have anything else to add?

R: No, I’m going to stick with that because I feel like it’s very related.

I: Okay. I ask this one because a couple of people from the interviews, it came up that number 12, 13, 14, 15, 16 are the means in order to achieve 20. And it’s quite interesting…

R: Oh yeah.

I: …when you said not exactly the opposite because you’ve got only the soil element as a precondition for the natural and the economic type of…which is very...

R: Yeah. But I think it’s just that kind of…all of these things to an extent happen because there is already…because we have a natural environment that exists, that includes in some places not just soil but, you know, a natural environment that exists and can support flood prevention. They are…yeah, to me, it’s the underlying thing because before we had this human modified landscape, those processes were happening anyway.

I: And happen anyway now.

R: They happen anyway. So, you know, it’s about…yeah, I don’t know really, that’s interesting.

I: [Inaudible].

R: Yeah, I’ll put it that way. Anyway, I’ll stick with that.

I: That’s why these agents are part of agents of change because you put them in one direction and they go the other way. Okay. And the other comment I got was like one, it’s pretty much precondition for anything else because if they don’t have a kind of profitable type of business, then they don’t [voices overlap]…

R: They don’t do any of those things, yeah.

I: …or food production or whatever.

R: Yeah.

I: Okay. We’ll move onto the next one, which is this one. So this part, I was trying to get together all the disturbances, long term pressures, shocks, drivers of change, whatever you would like to call them. But if you go through it, it’s pretty much the same thing. So again, please read the whole list, make…answer first if there’s anything crucial which is missing. And then, as you can guess, we can say the five most important. But again, you can group them as much as you wish.

R: Right, okay.

I: I’m really, really happy. The reason I am happy [inaudible] has been invited to give oral evidence to the Scottish parliament, the committee which is above the [inaudible] whatever. And then I was preparing last week a kind of document what type of evidence and what type of…not exactly recommendations but what the findings are. They are very, very close, although they don’t mention agroforestry as a term.

R: That’s interesting, yeah. So that particular document was kind of…it’s like more related to policy in England but I thought, you know, it’s that interesting context for you because your case studies and your work [inaudible] so that’s quite…

I: I love policies, I love them 1:10:55. Anyway.

R: So many. Was one of the first questions about…

I: If there is anything important which is missing.

R: Okay.

I: There are a couple, just to let you know, they have already…but as I say, this is just informative cards to help the discussion flow, it’s not an exhaustive list of things but for people to start a common starting point and then expand as much as they wish.

R: Well, in this section, the economic and kind of political driver section, it’s a really weird one to say maybe but language. So it is related to Brexit but also, so the language used to describe what farmers and land managers do. Because it’s all of that type of language based around ecosystem services and natural capital and all of those things. So that continuing to be a way that policy is framing multiple functions of land management.

I: And you think it’s [voices overlap]? Can it be improved in any way [inaudible]?

R: Yeah, it could be people still find it very difficult to understand a lot of that language, I think actual people working on the ground. You know, whether they’re farmers or whether they’re like conservation practitioners like ourselves. But it is a driver, it’s a disturbance to…like, if we are seeing a policy…like, it’s related to all of these potential policy shifts but if there is a policy that becomes something that frames what farmers are doing in a way that more clearly links it to services they’re providing, that will then change subsidies potentially, what you are paid for might slightly start to change. So you might see a different driver to the balance that you’re doing on your farm in terms of am I grazing all of my site or am I going to have some of my farms that actually I’m giving over to a slightly different land use, it doesn’t have the same level of grazing or the same form of grazing.

So anyway, I just feel like it’s very linked to all of those things but it’s a political driver with how are policies being framed. Is it to do with the services that are being provided by farmers and land managers or is it to do with the food production aspect? And it may be moving to balance. So that was one of the things that I felt kind of…

I: Brilliant. Because that’s a part of the discussion I would like to have with you about subsidise. But don’t get involved in that too much because we’re going to discuss that later on.

R: Sure, that’s fine, yeah.

I: Any other kind of drivers of change or disturbance that you think is missing from there?

R: My brain isn’t finding anything immediately.

I: Don’t worry, if you come across something.

R: Yeah.

I: The other people, they…

R: I’m interested to know, yes.

I: Yes, other people, they have mentioned land reform taxation.

R: Oh, yes, in Scotland is strong, yeah.

I: Taxation, as I said. Continuous changes and increasing regulatory type of…continuous changes in the regulations and increasing numbers of regulations that either the farmers or the people in the supply chain, they have to cope with. That pretty much creates an issue. Anything else? Anyway, those were some of the things.

R: I think that land reform is a little bit linked to the social drivers as well.

I: Land reform [inaudible] originally placed it under [voices overlap]?

R: Yeah, but what I’m saying is that I think it’s very linked to social drivers because the movement, for example, to do with re-wilding is largely coming from…well, there is a growing interest among a certain part of society of, ah, yes, re-wilding, it’s very much to do with kind of not only thinking about nature but also thinking about wild spaces and the kind of land that we have. So I think it’s linked with…land reform is linked with that. But then you’ve got also a societal pressure that’s probably coming in that may be an active voice in the land reform debate potentially.

I: I didn’t catch the argument exactly, I didn’t catch it because [inaudible] to understand, is that voices about turning back to the wildlife for that particular side, is it related to how the land has been devoted between the landowners? Is that the connection you’re making? I lost the connection.

R: Yeah. So in terms of kind of land reform, thinking about ownership of land and use of that land. And that probably links quite strongly with historical situations in Scotland. Yeah, so just that the societal views may be…they may feed into the land reform debate basically, kind of like, you know, land reform, the right for communities to own land, what they then do with it and the ownership of land by NGOs, you know, and charities, not just…

I: Now I understand, yes. It’s much more clear in my mind now.

R: It’s just that connection, yeah.

I: The other thing you mentioned about the [inaudible], just to come back before we forget about that. So you mean ecosystem services, natural capital. Any other term that…? It’s quite vague the way it has been understood by practitioners or by the industry.

R: I’m not sure because there’s quite a lot of terms around the ideas of natural capital uniting and all of these things that are being used that are not [voices overlap].

I: Instead of ecosystem services that time or instead of natural capital, what do you think will be more meaningful terms to use?

R: I don’t know. The reason I don’t know is that I find it hard to see which is more accessible to a greater portion of society. So for me, and this is probably entirely informed by my own educational background and personal interests, ecosystem services make more sense as a term because it’s not linked to this idea of capital to be used up. Whereas people maybe with a different perspective, that idea of natural capital is probably much…it clicks much more into how they think. So I find it really hard to anticipate what is the most useful way of talking about these things. Some of my colleagues might have very different perspectives on that and they might have a very strong idea of where…

I: Natural capital to me comes like [inaudible] the resource which is there, like the land, the available [inaudible], the species. Let’s say, the species, the land…not the land, the soil. Not the land, land is very difficult to say. Or the quality of the water or things like…or some kind of morphology of the soil, whether it’s a mountain or whether there is a valley, things like that. So that’s more natural capital. While ecosystem services…that’s my reading. Where ecosystem services, it has more active and functional meaning, use of the resource, of the capital to deliver the value to the public. That’s the way I [voices overlap] different opinions which indicates that [voices overlap].

R: Yeah, exactly, that it’s problematic. And yeah, it does make sense kind of to break it down in that way. But yeah, I’m not sure…

I: It happens in this way, yeah.

R: Yeah, I’m not sure how much of that gets through to the different audiences that might be having to deal with that kind of language. Yeah, and the other thing I would just reiterate is that it might be from the [organisation name] point of view, it might be that some of my colleagues who work within the policy and government affairs kind of arena, they might have very particular perspectives of, oh, actually this is a term that people are…that’s going to become more important or, you know, that kind of thing. Because I’m just not as exposed to that. But yeah, I think…

I: So from all of those, what are the five most important? Again, you can go there as you wish.

R: I would say the unpredictable drivers are these two.

I: Numbers please.

R: Numbers six and seven, these very sudden ones. They are very important but not necessarily because of the direct impact they have but because of the role they play in raising the profile of risk to a landscape or to a system. So I would say both of those are very important because they are…yeah, they do have very immediate impacts and actually the disease impacts can…you might only find that that as a driver is coming…like, you’re understanding the impact of that driver over quite a long time period. So although the initial outbreak might be quite sudden, it might be a very long period of time that you actually understand the impacts.

So I’m going to say they are both up there in that top five but partly because not just the direct impact that’s felt but the role they play in raising the profile of resilience kind of questions. And then, so yeah, that’s linked to the kind of changing disease and pest spread is linked.

I: This is a bit more slow change and pattern, while…so gradually, you see increasing temperature, increasing rainfall whatever. Then you see quite a new spread of patterns but this is very slow, gradual, typically it’s not easily identifiable, while this one, it happens [inaudible] happen.

R: Yeah. Shall we group Brexit, all of the ones into one?

I: Okay. Is any of the [voices overlap] because some people, they said it’s more important the number, you know, [inaudible].

R: I’m going to say subsidies because as a significant driver of the way land use has been maintained in the UK under…

I: Okay. So I have a couple of questions related to subsidies. The first question is, we have experienced in the past [inaudible] subsidies, land-based subsidies, infrastructural grant or whatever. Then we have environmental schemes or [inaudible] type of schemes. And then we have…for livestock, we have the calf subsidy which it’s kind of [inaudible] based a different bit, it’s not like the one it was in the past. So about those different subsidies, do you have any kind of comment, what are the side-effects of each one?

R: I probably don’t know enough about the different types of subsidy to give you very much information.

I: [Inaudible] what type of side-effects you have seen from your viewpoint?

R: Okay. So from our viewpoint, one of the biggest issues is that even when farmers have been interested in integrating trees into their system, they are limited by the conditions of the subsidy that they get. So the number of trees per area, like per, you know, hectare on their land that they are allowed to have to meet the conditions of the subsidy without it changing the land use and therefore being ineligible for whatever it is. I’m sorry, I don’t know the actual…the specific details.

I: I understand.

R: But that is a barrier to…has been…we have found that to be a barrier to…for, you know, particularly some of the novel…some of the farmers who have been kind of spearheading slightly different approaches and have been actively interested in I want to think about a new…a different way of having…you know, of managing my herd. I’m thinking of a lowland example really but, you know, so they might have a field that they’ve got trial planting in but it won’t be across their whole farm because it would mean they would be ineligible for the thing that is keeping their business viable.

I: [Inaudible] the subsidies that are land-based subsidies or kind of environmental schemes that creates that barrier, or both?

R: I think, well, some of the environmental schemes are probably…we have found less of a barrier because some of them may be more related to like field margin related kind of opportunities which aren’t…they haven’t been kind of aligned with more of our interest in the very broad ideas of agroforestry or integrating trees into farms.

So I don’t know enough and I would suggest that certainly my colleague that has built up a lot of relationships with different farmers in different parts of the UK over the years may be better placed to kind of say what we found are barriers based on this kind of farming system, if it’s a conventional farm and they’ve got this kind of livestock [voices overlap].

I: If you have any kind of document or type of…otherwise we can have an interview with that type of question.

R: Yeah. So broadly, subsidies is a driver and we found have been a barrier because of the limitations that are placed on farmers to meet the criteria for their subsidy to creating…to trialling, to testing, to thinking about different ways of having a farm system that integrates trees. So, you know, that’s very focused on our experience of work. But also in the future, that might be a driver of change significantly if there are changes to subsidies available post-Brexit.

I: Okay, which leads to the next question of mine. Obviously, it’s unclear what we are going with Brexit and how it’s going to affect subsidies, but already there is some kind of indication that probably we are moving towards payments for public ecosystem [voices overlap].

R: Yes.

I: How do you think this kind of movement, how you assess that, is it a good movement, is it a problematic movement, it has practical difficulties? I don’t know, what is your reaction to that?

R: We see it as an opportunity basically.

I: This has reminded me, sorry, I haven’t done a…you’re the first interview [Inaudible]. The next question which is, which of all of those, most of them they look like a threat, so if there is anything missing, was the question. Do you see anything [inaudible]? That’s why my eyes was, like, oh, no, I forgot to ask.

R: It’s okay, we can come back to that in a second. But we do see it as an opportunity because it’s one of the potentially positive ways of influencing policy to…so that farmers are not penalised for wanting to have a slightly different approach to the management of their farm. And for us, obviously our perspective is how to integrate trees. So, you know, fundamentally, that’s what we are about and try and encourage and support and find ways that this is a positive thing.

So for us, the opportunity to have some kind of payment for ecosystem services approach in place means that we can, you know, seek to provide evidence that trees support different kinds of ecosystem services and that, therefore, they are a valid part of including a subsidy that is based around the services that are being provided by that land manager, rather than farmer. Like, you know, under that kind of a model, one would anticipate some of the language might change about, yes, there’s food production but there’s also land management that has different outputs, so there’s the food output…

I: How practical do you think…as we are right now, how practical is it to go towards that direction? Are there any areas that we need to clarify or improve the tools we have or the definitions we have about things, or the measurements?

R: Yeah, I think from our perspective, there is evidence around a range of different services that trees may be able to provide but it hasn’t necessarily been made available in a form that is useful at summarising what this means for UK farmers, UK based examples. And I’m thinking partly about some of the work on the role that different types of trees play in natural flooding management, for example. So bringing that evidence together in a way that is directly related to, you know, areas of the UK under different conditions of the land that we have here, not just examples from across lots of different places.

And I think that’s probably true of other things that are being…you know, that may be affected by slightly different management on farms in terms of just making sure that there is appropriate evidence available to support how a payment scheme could be set up, you know, if it’s to reflect something that’s happening then.

I am not familiar enough to elaborate much more on that I think. Whereas I think if I…potentially, if you did want to have a short follow-up that was very specific about kind of subsidies and our experience working directly with farmers, then the colleague I’m thinking of might be able to just fill in those gaps for you. [voices overlap] Yeah, I think that one might be quite…just for some of the gaps there.

I: Because the other thing is that [inaudible] or ecosystem services and the way they have been [inaudible] in England, it seems, nothing is clear, to be a bit different from what is the approach from the Scottish Government. In England, it seems to be food production is [inaudible] it’s quite more clear there. While in Scotland, still they consider, to some extent, food production as a [inaudible]. And I wonder which approach do you think is going to deliver the most?

R: That’s a really good question. I’m not sure. Possibly from the perspective of an organisation seeking to see more changes in the landscape, maybe having food production as a separate component that is integral to that business but it isn’t the service that you’re providing, like, maybe that’s more effective but I don’t know.

I: [Inaudible]?

R: Yeah. I really don’t know. I mean, I’m just wondering kind of…it depends on your agenda.

I: Okay. Any here…you mentioned subsidies can be seen as an opportunity. Is there anything else that you see here as an opportunity? Obviously for the farmers.

R: I mean, I think kind of lumping in the slow variables as quite a…you know, from our perspective, is kind of particularly thinking about the underlying ecological kind of ability of a landscape that’s managed, whether it’s for farming or for something else, is really crucial. And they are long distance factors of disturbance that are very important.

But moving away from that. I wonder if around…number 17 around all of those issues about…17 and 18 being kind of maybe close together, about how is land being worked in the UK and whether that is a threat that is ongoing or not. Sorry, that’s the demographic pressures, urbanisation, succession, pool of upland skills, knowledge. Like, that is a driver and that is a long…it’s kind of, over time obviously that’s continuing to change.

I: But how you think these can be an opportunity because the question is [voices overlap].

R: Oh, yeah, sorry, an opportunity, as other opportunities, sorry.

I: So probably you are saying 17 and 18 are quite important?

R: Yeah.

I: But to the question, is there any opportunity.

R: Is there opportunity. Yeah, okay, sorry. Yes, let’s have a look. Yeah, well, again, this is entirely based on, you know, different organisations and different agendas, different stakeholders having different focuses. But utilising societal concerns about certain issues to inform. So utilising an increased awareness of how ecosystems can be damaged through certain practices might mean that you could make positive changes in land management that also had a whole knock-on series of effects.

So for us, obviously a tree-focused organisation, that means can we use that interest and increasing profile about how food is produced to actually support systems that are delivering multiple things but retaining the food production side. [voices overlap] Yeah, so it’s actually, you know, societal concern can be powerful if it’s…yeah, if you find a way to use it as an opportunity. So I would say that’s still linked for us.

I: The thing with your perspective, I mean, the [inaudible] perspective, I think it’s quite neutral. I assume if there is a lot of, for example, a livestock reduction, it has quite negative profile in the society, like with emissions or any type of negative effects. So that’s why a lot of people, they tend to become vegetarians because they think too much like livestock production destroys the planet. So in that case, probably it might be more difficult to turn it to an opportunity [inaudible].

R: Well, I agree…

I: [Inaudible] is it, I’m not very aware of the trees situation but is it generally there is neutral…I mean, the public don’t [inaudible] the trees destroyed [voices overlap].

R: People care about trees and, you know, people notice trees when they start disappearing sometimes. And that’s when concern arises like, oh, this is part of our landscape. So there are…so in general, I would say there is quite a lot of support, like, for trees and people don’t see them as destroying [inaudible]. Where that changes is, depending on some kinds of audience, and sometimes that is a farming audience, for example, because it’s not part of a way of farming that people have been used to, as an example. And also, really strong cultural associations with certain types of landscape. And again, that’s like the Cumbria example. It might be true in the Yorkshire Dales as well actually, is that people are used to seeing a very particular kind of landscape with its lovely little fields and, you know, things.

I: [Inaudible]?

R: Yeah. But if you are suggesting changing a balance in a landscape, then people can also see that as a threat. But I think you’re right, it can be…it’s not as…it maybe is not as contentious thing as, for example, meat production and vegetarianism and that kind of thing.

I: So to turn the discussion to a different thing you mentioned before. As an organisation, you try to collect evidence yourself to prove that trees, the claims you have that help support…actually they help deliver some kind of ecosystem services.

R: Or collate evidence rather than collect, I would say.

I: Okay. So how easy…because I assume that’s quite general, not only about trees but all this type of new ecosystem approach that we push to the farmers, it has to be evidence-based. So how easy is to collect actual evidence?

R: Not that easy sometimes because…and that’s not necessarily because there isn’t a lot of research out there that has done very specific aspects of, oh, we’ve looked at this one small thing and it might have this aspect on this. But because the type of evidence that…and I’m sure you’re very familiar with this, that can actually be influential and that has the most impact is not necessarily the evidence that’s out there.

So what I’m thinking of is people…so in the UK, for example, people respond to very locally gathered evidence better than evidence from other parts of the world because they’re like, oh, well, it’s not the same conditions, it’s not…you know, so it’s all of the…it’s that idea of how does this relate to our patch, to our bit of land, to the UK as a whole or whatever scale it is.

I: Do we have that evidence?

R: Not always. And that’s why I think sometimes it isn’t easy to get necessarily a rounded summary of everything that’s out there because…I’m going to use the flooding example again. And that is [place 5]. The evidence for the role of trees influencing kind of water movement in that area has been extrapolated and used repeatedly as kind of, oh, here, you know, there’s some good evidence for the role that trees can play.

But that doesn’t work in some parts of the country, so in the sense that [place 6], my colleague that works as an outreach manager there has said, you know, it’s really hard to go to a [place 6] landowner and say, oh, well, this evidence does suggest this positive impact might happen if you plant trees in a particular way in your land. And it can be dismissed quite easily, but that’s in [place 5], it’s different.

So I think there’s an aspect of sometimes it’s hard to get a summary of evidence that will influence particular types of audience. Policymakers, maybe that’s slightly different because there’s a better understanding of, you know, how applicable you might find examples from different places can be related to conditions that we have. But it depends on the audience, so yeah.

I: So I assume pretty much the same is going to happen not only for trees but [inaudible]…?

R: I would imagine so. There will be some pushback when people…when there is a concern that it doesn’t truly reflect the situation that we have. And I think…well, I think that is [voices overlap]. Sorry, just before…I think that is a mentality that particularly is seen in the UK and you can see with a lot of the Brexit related negotiations is how…you know, we are unique and, therefore, how can you say that that relates to our experience. And broadly, that kind of mentality you can see happen when you’re talking about completely different issues that are about, okay, we’ve been trying to gather some evidence, we’ve got an example of research that’s been conducted here, here and here, you know, we’ve summarised that and made a recommendation based on it. And yes, sometimes it’s just a challenge to do with more about the engagement with a particular audience. So yes.

I: A very interesting point actually the one you mentioned. And I was thinking how you can translate it in…actually how you can [voices overlap] it’s funny.

R: Yes.

I: But I was…just a moment because I had a question in my mind before. The other issue about the payments for ecosystem services is like based on what, on the outcomes or on the activity. Because right now, with environmental schemes, a lot of people they pretty much complain about a lot of issues about the environmental schemes, how they have been designed and delivered. But one of those is it’s more like a ticking box exercise rather than you actually have evidence that you provide [voices overlap].

R: Yes.

I: And it’s really hard for some of the farmers, they do it because they are paid but they don’t believe it because they don’t see any…

R: An outcome, yeah.

I: An outcome in their field or…I mean, increased biodiversity or, I don’t know, whatever outcome. And I’m wondering which type of approach we need to adopt when we are going down the payments for ecosystem services. Because actually, the same is going to happen with the trees as well, it’s not only farming, the agroforestry kind of thinking is the same thing, you achieve the same goals through utilising two different things, trees and the crops or the animals, the evidence…

R: So I think there are some things that might be able to be measurable with respect to livestock and trees. So things like lamb mortality, if you’re thinking about shelter, live weight gains. So one of the things that we have been involved in, for example, is a project, it’s currently on hold because unfortunately, the PhD student withdrew through personal reasons. But a PhD based in the University of Bangor which is looking…has been using model sheep that have electronic [voices overlap]. So it’s in there. And that is about understanding how…

I: So how practically are they doing this, model sheep, what do you mean model sheep, it’s not a robot?

R: No, it’s a fibreglass sheep with a sheep fleece on it and an internal kind of electronic array that basically replicates the energy loss a sheep would experience. So the sheep are left out in different conditions where there’s shelter, where they’re exposed, where data is collected about the energy loss the sheep experiences. And so they are adult ewes and the plan is to expand that to having some models that reflect lambs.

So the aim behind that project is to analyse the energy loss that may be experienced or mitigated by shelter. And obviously, the impacts that would have on a farmer is about what inputs do you have to provide to your sheep and the costs associated with those to improve their survival, improve…and ultimately, kind of impact on their production.

So with trees and livestock, there might certainly be some things that you can monitor with cattle as well. There’s an increasing interest in…well, I think there’s less evidence about this at the moment that’s kind of usable to create very specific advice. But tree fodder, for example, supplementing feed or providing, you know, the opportunity for cattle to browse, whether that’s dairy herd and whether that changes any requirements for nutritional supplements or potentially kind of medicinal benefits of some trees.

So I think as the body of research increases around the different roles that trees could play in different farming systems, so obviously they are kind of livestock related examples but there’s also work that’s happening in arable systems as well to look at what role trees can have, is that you maybe able to set up a payment scheme that says you take an action, that is paying for maybe, you know, the implementation of a tree-based intervention. But then you monitor specific…things that farmers will be doing anyway like, you know, so that you have at least some data that you refer back to pre-intervention and post-intervention, and say okay, there’s an initial success over X number of years, five years, you know, whatever.

But yeah, I don’t know. It’s hard because I’m not sure, yeah, how you would go about designing that system like that payment scheme. There is clearly quite an active area of work where it is conceivable that, you know, you can see how you might start to use that information to create a list of these are the things a farmer has to monitor so that you have an idea of what the output might be.

For the food production side of things, other services, again, I’m not sure how that would work.

I: You mentioned…you didn’t mention but it was here in the leaflet. It like a training advisor, so develop funded training [inaudible] between forestry, agricultural advice and expertise. So this can be seen right now the type of advisors we have or the type of separation we experience later on in the great policymaking departments the different policies that now historically they are separated. These are the type of barriers for our uptake of agroforestry. What are the main type of barriers you think? Obviously, those two you mentioned but are there any other things? You mentioned before that the terminology, it’s quite vague, it doesn’t have [inaudible].

I don’t know, also the question I had, it was like the species you…when the farmer comes to you and the species you usually advise them to put of the trees are kind of commercial, have a commercial value, so they produce fibre or are they kind of just general species, not necessarily a link?

R: So it depends what the farmer’s after. So some farmers may be interested in having other wood related, like tree related products if they are planting. So some may expect to have a degree of, you know, a long term plan, okay, well, if we do this kind of planting, we might be able to get non…you might get non-timber products, you might get some firewood, you might get…if it’s a productive tree in terms of fruit, for example, it could fulfil two functions like shelter and providing like an additional product that was sellable.

But for us more generally, because we are really a native broadleaf based kind of organisation in the sense that we advocate for trees to be…native trees, for native trees in the UK. The forestry sector is, as you know, a whole separate sector and very active. But there is the potential for trees to be used for multiple things.

However, I would say for us as an organisation, that’s not really been where our expertise has lay with advising based on, well, if you do this, you’ll have a productive woodland as well. But that’s also partly reflected…also partly because in farm situations, what we might be supporting is the planting of non-woodland trees. So there might be a shelter belt that’s not a woodland, it might be a hedge, like a hedgerow, it might be…so they are less likely to have that second function of, oh, well, I need, you know, a particular kind of productivity.

I: [Inaudible] I don’t know. When you say woodland trees, are they ones that produce…

R: Same species but just in a woodland. So if you plant a new woodland, you’ll be creating a bigger continuous area of tree cover. Whereas if you are planting trees outside of woodland, you might be doing hedgerow [voices overlap ].

I: Now I understand.

R: So it’s not species related.

I: I thought it was species related and in was thinking, is it, but I didn’t know [voices overlap].

R: No, that’s fine. I mean, you might make different choices about the kind of species you want to plant in a hedge or in a shelter belt where you maybe think, oh, this might be a role for some browsing that’s going on as well. But those same species, those same native species would be found broadly in either situation.

I: I ask the issue about saleable type of product from the trees just because I wonder if the existing market structures about the products of those trees affect a bit…right now, affect as a barrier or as a positive driver.

R: Probably a slight barrier but…

I: In terms of what?

R: In the sense that just for a farmer to make that decision, they’d have to be confident that there was a market there for a small scale…possibly a small-scale additional product that they were producing.

I: They cannot be [inaudible]?

R: Yeah, possibly. But I’m not…I don’t feel familiar enough to know if that is really a genuine barrier or if it’s something that…also because often you do find, you know, there are small markets for, oh, this is a locally produced something, this is a locally produced kind of this, that maybe it’s not kind of for a mass market audience but small scale production of things that might be distributed through local retailers or farm shop type…you know, community type shop structures. Maybe, you know, there is a small market for that, it’s that kind of slightly higher end, well, this has value because it’s produced on this farm, you can trace it, you know exactly where it’s from. But it’s not something that’s then going into a further, wider supermarket type supply chain. So I don’t feel I know enough about that really.

I: So also barriers, do you have anything else…barriers to more uptake of agroforestry?

R: I mean, we’ve covered the subsidies one in our earlier discussion about…

I: About the advisory type of…the type of advisors that exist right now. I wonder if there are a lot of conflicting message for the land managers. Because I suspect if they go to the typical extension services about farming, they get completely different messages. If they go to you, different messages. Another kind of consultant. And that might be kind of a barrier to some extent.

R: Yeah, because it’s difficult to make a decision when you have competing models being proposed to you and, you know, to decide to…particularly if it feels like it’s a higher risk decision. So yeah, I think that is…a challenge to supporting decision-making of whether there’s a way of kind of consolidating all of that knowledge in a better way or having like a hub, a way of filtering, you know, all of these slightly different perspectives that are being thrown at an individual business owner, farmer, who is trying to make a decision. So it probably is, as you say, contributing to the barrier of uptake because it feels like it’s a greater risk possibly.

I: A quite related question to that was, there are a lot of conflicting messages but how many of those messages are based on evidence rather than general claims. Because I wonder who has the ability, is it kind of, I don’t know, registry…not registry exactly, like a reference database that you can understand this piece of land, it’s better if you put trees and that crop or that kind of livestock. How…

R: It’s very difficult. And I say, I would actually add evidence too about the barrier to uptake. Because there is lots of piecemeal work but accessing that is difficult, as you say, there is not a one stop shop. And at the [organisation], we don’t have the capacity to produce that, that isn’t…we are not a research organisation and we do not hold databases of that type that could support that kind of access.

I: Which are those sources?

R: Yeah, so there’s a gap.

I; I’m asking for the sources themselves. So far, I haven’t come across…like, there is a kind of, I don’t know, national database, this is the type of this land because of the soil of the [inaudible]. I mean, your source, do you have access to any [voices overlap]? Go for example, Cumbria, in that kind of region and you make suggestions to farmers. I’m not talking only about you but as an example.

R: Plural, English is annoying, yes. I understand.

I: When you make those suggestions and you would like to base on evidence, where you get the evidence, like a reference.

R: Yeah, it is a real barrier I think because there isn’t…so there are some avenues that you might go down if you’re trying to seek some types of information, like some of the agencies [voices overlap] or like the Centre for Ecology and Hydrology holding certain information about land types that you might be able to cross reference. But whether they have any information that’s, you know, tools that are being produced to help people make decisions.

So an example of that I can think of is very new and is SEPA supporting, like, paying for some work to be developed at the Centre for Ecology and Hydrology here outside Edinburgh, to produce a decision-making tool around ammonia deposition and mitigation measures for ammonia deposition. So it is aimed at, you know, land managers, farmers, people that are looking to either manage their own land in or around point sources of ammonia, whether that’s poultry units, for example, or something. And that is only very…that’s very, very recently been developed over the last year.

I: Have you see any other similar tools?

R: I’m not sure if there’s any that are, you know, clearly related to the tree woodland kind of planting thing. But there are, you know, places like Forestry Search and…I haven’t done a trawl to find out if there’s those kind of practical tools. The James Hutton Institute did…they have that crossover, they have that remit where they’re crossing over land use and research and social science and things. Are they producing…you know, the government associated research institutions?

I: So they have a database but they don’t have [voices overlap]?

R: But that would be…they would be the places that I would go to I think if I was like, okay, well, is there…what currently exists, can you do an audit of what’s out there at the moment. But unfortunately, it’s not something I’ve done but it’s something that…yeah.

I: That’s fine, it’s not a test. I’m trying to think practically if someone wants to find solutions…

R: How do you view it.

I: …just hoping that there is some evidence around that. Because there are so many conflicting messages that’s the idea. Okay, so I think it’s already two hours, I have plenty of your time used already. I don’t…I will not go through that part which is about which type of adaptation or mitigation strategies. Because you said for the businesses themselves…

R: Kind of very focused on the production side.

I: Practically what you choose in order to mitigate. I wonder if, as a summary, obviously from the tree perspective, any type of…obviously, you might have a kind of document that summarises how trees can mitigate all the shocks that…either environmental climate change or soil erosion?

R: Yeah, I’m not sure that we have anything that we’ve produced because it’s…

I: Because the mitigation that you’re suggesting is planting trees.

R: Yeah.

I: So I wonder if there is some kind of document that…

R: I’m not sure if we have anything that is, you know, a rounded summary at the moment. It might be something that is on our agenda to produce, you know.

I: Okay. Even if you had different documents that might not summarise the whole thing but [voices overlap] it will be good to have.

R: Yes, I’ll have a check. Actually, it is one of the areas that we have struggled slightly to have enough people involved in working on at the trust. So it might be one of those things that we’ve just been trying to use other pieces of information that other people have done but we haven’t brought it together. I’ll see if I can find out though, yeah.

I: That’s fine. So we’ll skip that card. Very quickly, have a look at that one.

R: Okay.

I: This is from a particular part of research that they were suggesting that either…this is reliance, not resilience, sorry, this one.

R: Okay.

I: Yeah, but it’s pretty much this is an indicator for building a system. So do you recognise any of those, upland, farming systems, pretty much create vulnerability, so make the whole system less resilient? And then I just have one more question and we’re finished.

R: Okay, that’s fine.

I: I know I have exhausted you.

R: That’s alright.

I: This one about entitlement is more like tenancies, contracts or crofting type of arrangement.

R: I think inflexible policy is one we’ve sort of…

I: Number?

R: Five. We’ve sort of spoken about a bit already today. As…well, in the sense of in upland areas, it makes people more vulnerable because they are not necessarily able to respond with the diversity of kind of…in a diversity of ways that they could respond. So if…

I: I understood, yeah. I understood that.

R: So that one. Yes, so that certainly. Ignoring slow variables and only responding to fast triggers, number eight.

I: Which is ignoring [inaudible] or gradual change in temperature, rainfall, or gradual change in [inaudible] disease patterns and only you respond if there is a kind of striking event.

R: Yeah. And I think we are…we have been very guilty of that in some areas and tree health is a good example. So it took a really big outbreak of disease for suddenly everybody for the amount of effort and interest and research and people power to be increased to understand what’s happening in a slower way. So, I mean, I can see that that actually…you know, that kind of a response would be the same whether you’re talking about tree disease or some other threat.

I: The other one, reliance on external [inaudible] resources may be, in your case, an example that you said most of the [inaudible] is based on either outside UK or very specific UK areas, which are distant from the ones we are talking about. And that might create a bit of… But about the tenancies, you have mentioned [inaudible] we have a found a lot. Because of land reform, there is a kind of conflict, there is low…not low, shorter tenancy agreements, which is pretty much destroying the whole confidence for investing in planting, which is by definition more long term than a one-year crop. But I wonder, what other tenancy or any other kind of landowner issues or the crofting community or whatever. From your perspective, the tree perspective, have you seen any…?

R: You are completely right that it has…it is difficult to try and make an intervention on a scale that is longer term. So tree based lifespan scales are longer term by and large.

I: Yeah, which is pretty much the same [voices overlap].

R: It’s the same, exactly. So it’s hard, you can see why that is a barrier to people making those decisions because it is balancing whether the investment is worth it and will have a big enough impact on their resilience in a short…you know, over however long.

Crofting’s interesting. We are part of a croft woodlands project, I don’t know if you’ve come across it?

I: No.

R: In the last few years, we’ve got more involved in trying to support crofters and crofting communities in making those decisions, so providing training opportunities, providing ways in which maybe the risk is lowered for them, to consider making interventions…

I: [voices overlap] responses, any different reactions?

R: Yeah, I think it’s been relatively successful in that we have helped support more crofters take that opportunity. But also…

I: Why do you think that crofters are more likely to uptake?

R: Oh because it’s so hard.

I: [Inaudible] making the questions harder and harder.

R: No, I think because it’s so hard for them. Because crofting is so difficult that and, you know, often requires multiple amounts of income to be working in a crofting community that maybe there is the recognition that something that improves over…or maybe improves, you know, their production on their croft over a long term, or has positive impacts over the long term. Maybe it takes out some of the up and down, you know, so rather than it being…yeah, I’m not sure. I don’t know enough about the project but yeah. It has a Facebook group actually I think, which is one of the ways…so it’s partly also about building a community of people that are aware of what’s going on, you know, on other…other crofters, how are they making changes, what are they doing, what can they learn from one another. And, you know, using those kind of…

I: Channels?

R: Yeah, those channels that haven’t…they not necessarily have been a traditional way of interacting. Especially over big spatial scales, you know, which in more remote areas, remote uplands, you are experiencing those spatial scales. So yeah, anyway.

I: So my final question is, you mentioned about the barriers. And I wonder what changes you would like…[inaudible] the question, but anyway, nonetheless. What type of changes you would like to…when I’m saying changes, in whatever. It can be in attitudes, it can be in policies, it can be in the way that the organisations network together or the businesses network together. Anyway, the way that the market is structured, whatever. What type of changes you would like to see that you think it’s quite critical to make that transition happen?

R: Yeah. I think for us, probably policy is a huge one, is understanding that you can build into a post-Brexit kind of agricultural policy to do with subsidies or, you know, other aspects, the opportunity for farmers to be slightly more diverse in their approach in upland areas, you know, whether…and that they are supported to do that because it delivers more than, you know, just one thing. So policy is huge I would say and that’s certainly an area that I have…you know, the colleagues that work in those teams are very active in trying to put forward our perspective in those areas.

I: And this leaflet, are there any other that has policy recommendations?

R: There are some policy documents in our publications area. So particularly, yeah, there’s a…

I: I will try to find it by myself but if I need something.

R: Actually, the one…you know the link I sent this morning, it’s the link to this but I think it flags up a couple of documents that are linked. One of those is our response to the consultation to the Agriculture Bill from last year, published last year. So that might be a good one to see.

And so policy is a big one. And from my area that I’m involved in and supporting all of my colleagues that may be going out on the ground to talk to farmers, to talk to landowners, to talk to policymakers, is better support of actually a change in the way people can access evidence of the impact of interventions would be good. So with respect to…so that’s not only people like us that would access that information but so that…

I: So practical changes in that?

R: Yeah, practical changes would be somebody funding a portal, a hub, a way of accessing that in a…

I: One stop shop.

R: Yeah, one stop shop. A one stop shop. And the other area practically, again, I’m only going from the research perspective again, is research councils providing more funding or like a core focused around novel kind of responses to interventions, you know, on farms, that kind of thing. Or, you know, more support for…so we are involved in lots of piecemeal bits and pieces of work, like a PhD at Bangor, a little pilot study where there’s a group of people from different research institutions looking at tree fodder. And it’s just happening because people are really trying hard to make it happen.

But the discussions we had in that group quite recently of the tree fodder related pilot work we’ve been involved in, is how can we influence research councils, can we suggest that there is…you know, submit a topic that we think should be part of a future call or making a case for there needs to be more work in this area because we need to make it relevant and that people have enough information to have practical guidance based on evidence. So that’s from the…

I: So you request funding payment for three things. One is to lead on the different organisations the research or the charities that are doing a bit of pieces here and there. You need also funding for collecting evidence. And also you need funding for developing decision-making tools.

R: Yeah, possibly. From that…and that…they are things that I think are changes that would…we are…obviously, we are not a research based…we are not a research institution, so we have all the same problems that any NGO, charity, consultancy, farmer, individual has about accessing academic literature. And of course, there are ways that people get around accessing literature but it takes a long time, you know, if you’re contacting authors directly or if you are not familiar with how to search for literature, it can be really challenging.

So yeah, we rely on working in partnership with people when it comes to evidence gathering type work. Because it’s the only way to be effective if you don’t employ people on the basis of their researchers, which we…you know, it’s not a major component of what people…you know, work we’re doing internally. So we work with others that are doing that. Yeah, so I think those ways of getting information are useful for people like us but also the individuals that might be making decisions.

I: Brilliant. I don’t have any other questions. Anything you haven’t had chance to mention?

R: No. I was going to just say, would you like a copy of this as background? It is…

I: Yes. You have a [inaudible], brilliant.

R: This is very broad. So this is just really the background of at the trust, we are a conservation organisation and we are trying to…you know, it just lays out what our perspective is. So for you, it might be useful just to scan through.

I: Very, very, because it says about native species, holistic type of approaches.

R: I’m not sure if there is relevant or interesting. But we produced a…this is…I only have this hard copy but you’ll see it in our publications. [voices overlap]. Yes, you can. So this is our [voices overlap]. It’s kind of like our journal. It is not an academic journal but what it is, is slightly more technical articles around a theme. So we have guest authors and authors from the [organisation name] that contribute. And we have three themed issues a year. So the issue before this one was the EU exit. So we had a lot of people writing about opportunities around the EU exit. And I think that one would be very useful. Unfortunately, I don’t have a hard copy of that but it is on our website.

I: Don’t worry, I will search for that.

R: Yes. And it’s the EU exit. This one I can’t give to you because it’s my last copy just now.

I: What is that?

R: This is our research prospectus which we’ve just put together as a way of framing our research interests as an organisation. So I’m just…I can send it to you as a PDF but I’m…

I: Please. I have to say that sometimes PDFs is much easier because you can still…

R: Yeah, you can edit on, you know, notes [voices overlap].

I: No, not editing but more than notes, more so the word search [inaudible].

R: Finding, yeah.

I: So you have interest about land use change, maintain woodland health, okay.

R: Yeah, so what I was going to [voices overlap].

I: [inaudible].

R: What we’ve decided to do is try to help people talk…for us to have conversations with researchers and potential research partners is categorise our interests. So broadly, everything that we’re doing is in the context of land use change and, you know, issues that…what we currently have and what changes that might be facing. And then identified, you know, through an internal process, identified several of the major themes. And some of which are very linked to what we’ve been talking about today, particularly trees and farmland because of the huge audience farmers represent, you know, to anybody interested in land use in the UK. But also because of that policy agenda and the use of language in policy around economic and ecosystem services, that is still an area.

So the way this document…I’ll send it to you an email. It’s quite a big file but it’s not crazy big.

I: May I ask you something? Who else except the farmers you consider providers of ecosystem services?

R: Apart from farmers, I guess, I mean, any land use manager, any…

I: Like support management?

R: Yeah, I mean, you know…

I: Or national parks?

R: Yeah, businesses that are running, you know, forestry, their primary aim is timber but also there are other things being delivered by [voices overlap].

I: For those kind of governmental institutions like SEPA, like Forestry Commission, Scottish [inaudible], do you have any suggestion how they can be…provide…no, improvements there in the way they deal with either your organisation or with the industry or…?

R: Not offhand. I’m sure, you know, there are…

I: If you come across any ideas of how things can be improved in that type of interaction. Because your place is not, as I said, in the supply chain but you are very, very linked, yeah.

R: Yes, we get involved at different points depending who [voices overlap].

I: How much [inaudible] they are, how much open they are for having, you know, a change of knowledge or ideas or whatever. Anyway [voices overlap]. So the PDF.

R: I will send you this.

I: We have to stop because already you’re then generous with your…

R: Yeah, that’s alright, yeah, I will…

I: When I interview people fro organisations, it’s much more difficult for me to predict how much time, I don’t know exactly the range of [inaudible]. But overall, how did you find it, it was easy to go through?

R: Yeah, it’s very helpful having the structure that you provide. So you’ve got your series of questions and having documents that you are asking somebody, you know, to read and respond to. It’s helpful because it tries to…you know, it keeps…it’s a good way of trying to keep your interviewee focused on specific areas. It is very [voices overlap].

I: Try as much as possible to [inaudible] you in the process.

R: Yeah.

I: The other problem is that, yes, we want [inaudible] the drivers but primarily, we would like to see the trade-offs or the interactions. So whenever you see a couple of different things and you can group them or you can see this is against the other or this is synergetic with the other, then…in two hours, we have to cover, yes, what but primarily, we would like to know how they are related and what is [inaudible]. So it’s quite hard to…

R: Yeah, and I think that definitely needs, you know, that constant reminding of your interviewees, so what relates to what. That’s helpful, you know, to have that. So yeah.

I; Thank you very much. Did you find it useful?

R: Yeah, it was very interesting and I think…I will…in an email, I’ll send you a couple of things but I will also just put in a couple of suggestions of I have a couple of colleagues that a short follow-up conversation might be useful.

I: Yes. And if you can indicate, for example, like you mentioned [person 1] is good to answer these two questions or one question, whatever, just to prepare me to understand what is his area.

R: Yes, to say this person…

**End of transcript**