

TRANSCRIPT

PENSIONS FOR PURPOSE PODCAST – SERIES 1, EPISODE 2

BIODIVERSITY AND NATURE – WITH CHARLOTTE MOORE, RICHARD GILES AND ROBERT GARDNER

Charlotte Moore: Hello. Welcome to the latest addition to the Pensions for Purpose podcast. I'm Charlotte Moore and I'm your host. Joining us from Pensions with Purpose today is Richard Giles, Community Lead. And we're also delighted to invite our first guest onto the show, Rob Gardner. He is the co-founder of Rebalance Earth and previously co-founded Redington. He's a well-known and well-loved figure in the industry, so needs little extra introduction.

Today, we're going to be talking about the importance of biodiversity and natural capital. And to kick off the discussion, we're going to ask Rob my first question. If you can explain to us, what are the challenges facing us today when it comes to protecting biodiversity and nature? Why is it important to us both here in the UK and around the world?

Rob Gardner: Hi Charlotte. Hi Richard. Great to be on your podcast. I think it's really important. Maybe if I define the difference between biodiversity and nature because they're often used interchangeably and, if I zoom out even bigger, climate and climate change, which I think people know.

But the best way to describe nature is imagine 200 years ago a garden full of healthy soil and worms and birds, and you can hear the sound of the birds and hedgehogs, and slowly over the last 200 years, but we've accelerated that over the last 50 years, we've paved over the garden, we've taken out all of the goodness in the soil, we've taken away trees, we've lost our bees. And so the way to think about nature is that nature is everything if you took out all the wildlife. So it's the mountains, it's the streams, it's the soil.

Biodiversity is really two things. It's the 'how much of something'. So how many bees are there, how many worms are there? And it's also, so that's abundance, and then it's 'richness'. So how many different varieties? What is the genetic variety? And the frightening statistic is, in the last 50 odd years, so since 1970, we have lost 70% of our biodiversity. Now it sounds bad and it is bad because it's really nature both at a biodiversity level and in a broader sense in terms of our glaciers and our rivers are really the ecosystem that supports our entire lives our entire, global economy. And the way I try to explain it to people is we all work as part of teams. Imagine if you lost 70% of your team tomorrow, would you be able to function? So we have basically lost 70% of the Earth's function to support us and that has massive consequences in terms of our ability to respond to climate change, whether that's heatwaves or floods or drought. So yeah, hopefully that makes sense.

Charlotte Moore: Which all sounds very important and scary, but I just wonder what role investors can play. Surely this is about conservation? Richard, can you give us some insights?

Richard Giles: Yeah, well, I think Rob will no doubt wish to comment on that as well. But I think the fundamental is that a lot of the economic activity that we undertake is actually dependent on nature. Whether you think of clean water, clean air, pollinating bees. I think these things are all part of the economic cycle. Many businesses are reliant on nature to be successful and to have a thriving economy. So, yes, it's a connection that's not often made, but when you stop to think about it for a little while, it's quite clear that we are dependent on nature and it's a major concern when that system is in difficulty. Rob, maybe you can give an example, I've heard you.

Rob Gardner: Let me give some facts and figures to support that. So, PwC and the World Economic Forum have said that 55% or \$58 trillion of our global GDP is highly dependent on nature. I personally think all, everything that we do is dependent on nature. And by the way we're nature as well. I think part of the issue is we sort of see nature as something over there and we kind of exclude ourselves from that. So we are part of nature and we want a resilient system.

The ECB last year said that 75% of European bank loans are highly exposed to GDP. Last year, the global wine industry, on average the global wine industry makes \$500 billion worth of revenue. As a result of nature loss and climate change basically revenues were down 7%, so that's \$35 billion. Gone! Because of, because of nature. Specifically here in the UK, if we were to lose all of our pollinating bees and insects, the replacement cost of that would be over £1.8 billion a year.

So, as Richard said, everything really starts and ends with nature. And the crazy thing is we value everything else, we value artificial intelligence, we value data, we pay to monetize people clicking on Instagram. And yet the very thing that we depend on we don't value, which to me is kind of back to front. So this isn't conservation, this is just common sense, really investing in the resilience of a healthy ecosystem to make sure that we can continue to work.

Richard Giles: It's a great example, Rob. I came to your first conference about a year ago and what struck me, I think it was around elephant dung? And the value of elephant dung and how it connects. And actually elephants are being slaughtered for their ivory but what we're not doing is valuing the natural system. And maybe you could just talk a little bit about, you know, there's that simple example but it's really enlightening in terms of what we're missing from that valuation of an elephant effectively.

Rob Gardner: Yeah, that was Ian Redman who is amazing and yeah you should definitely check him out on YouTube, he does some great talks, but the point is exactly that. I mean, we have lost 90% of our forest elephants in the last 100 years and basically every 15 minutes. So during this podcast, two will get killed. So there is a value for nature and specifically for those elephants it's about \$40,000.

So a dead elephant is worth \$40,000. Now what Ian and what we were trying to do is say, "well what are all of the ecosystem services that elephants provide"? They're what's called a keystone species. So they form, they basically show you a resilient ecosystem. Forest elephants are kind of like the gardeners of the rainforest. They walk around the forest, they pull down foliage, they eat it, which actually means it grows back quicker.

So when you have forest elephants, there's actually 7-10% more biomass in the rainforest than when it's not there. That additional 7-10% of biomass is highly valuable. Just starting with carbon, we should be paying those elephants at least \$50,000 a year just to capture carbon. So Microsoft and you know all these companies who are paying to offset their carbon should just be paying elephants to say, "thank you very much for sucking up all this carbon".

But the really cool thing is they're also pollinators like bees, because they eat stuff and they walk around. And what Ian was saying is they do obviously big, big elephant dung. We can all imagine it! But it's full of nutrients and full of seeds and those seeds then get, and so it moves things around. And so they're an incredibly valuable part of our ecosystem and when we lose that, we lose everything. And so what we were trying to show is how can we help local communities make money out of preserving and protecting those elephants and build an economy around that so that they make more money from them being alive than from being dead. But that, but that example can be applied to everything: to whales, to seagrass, to our rivers.

So we just need a complete, it's a paradigm shift, it's systems thinking, as Charlotte always talks about.

Charlotte Moore: Yeah, I think you've convinced us about the importance of these, of these creatures and of biodiversity and how it's obviously an interconnected chain as we know. But talk to us a bit more about how we as investors, as pension schemes, can get involved because it's not immediately obvious how you put a financial value on that or even an investment value on that.

Talk to us a bit more about how you start to value nature and then how you look at how you can invest to protect biodiversity and to improve natural capital.

Rob Gardner: So I think, you know, we're used to pricing and valuing bonds or properties or equities. Bonds is the easiest because you buy a bond, it has a series of coupons. We can add it all up and then it has a, you know, a redemption amount and we can put a value on those bonds. On equities it's a little bit harder because we look at a company and we say, how much money will this company make in the future? What will make those revenues go up? What would make their profits go up?

And that's how we come up with a value for equities. And that's what we do every day in the stock market. And the same is true for property and infrastructure. And so, when I define an asset class, it typically has one or more of the following three characteristics. It needs to have a utility value. Like, if it's a property, can I live in it, can I rent it out? If it has scarcity value, it can be worth more. Clearly, a nice house in the south of France is worth more than a property in the middle of, you know, some small town in the UK. And then, crucially though, cash flow. So at the moment there is no cash flow attached to nature. Well, there is for commodities, for food and minerals etc but we don't pay for carbon sequestration, flood resilience, drought resilience.

So in order to make nature valuable, we need to start getting people to pay for nature. Because the moment nature earns a cash flow, then it becomes an investable asset, just like bonds, just like equities. And we know that the value of all of those ecosystem services we talked about is \$140 trillion, so it's about one and a half times global GDP.

So here in the UK, to make it to make it very specific, we see five business problems related to climate change and nature loss. And they're really about flooding, about drought, about water quality, about biodiversity and they're about carbon. Sadly you're six to seven times more likely in the UK to be flooded, than burgled. And in just the last 25 years, one-in-100 year floods have now become one-in-10 year floods. And that's just going to get worse.

Now something like flooding has material risk to businesses. So take Tesco in 2005, their first store flooded in Carlisle. That was a one-in-170 year event. The Environment Agency came along, spent some money on flood defences and said it will never flood again. You guessed what happened next? Of course, in 2015, Storm Desmond - it flooded. It will never flood again. Of course it flooded! Tesco, Sainsbury's, Aldi, every supermarket have all built their stores on flood plains. They know how much revenue they make per store, per day, per month, right the way down to the aisle. So when there's a flooding event, they know how long their store is going to be closed for and how much revenue they lose.

And then all of a sudden it's like insurance. So actually nature is real-world insurance, it's real resilience in the same way that we spent money on cyber insurance and cyber protection. Companies need to spend money on flood defences. And so the crazy thing in the UK is, because of our industrialisation, because of our sort of post-World War, 'let's just farm everything at the expense of nature', we have completely degraded our soil. We have straightened 90% of our rivers, which means that as climate change happens and we get more rainfall, we've made flooding even worse than it should be. And so nature restoration, river re-wiggling, improving the health of the soil, means that we can massively reduce that flood risk and then we can go to Tesco and say, "would you pay us a small amount to hedge your revenues over the next 10 years?"

Then we go to the Highways Agency, who have roads and motorways that get flooded, again costs them lots of money. Then you go to Network Rail. I mean, you just have to read the Network Rail report. Their biggest loss of revenue is to do with flooding. If you go to Ofgem, in the energy sector, the biggest challenge to energy resilience in the UK is flooding of where the power comes down from the grid before it gets distributed.

So that's just flooding. Drought - Diageo, Britvic, Coca-Cola, Pepsi - all need clean and healthy water. Unfortunately, we haven't built a new reservoir in the UK since 1983, so in over 40 years. So helping clean that water and the sector that Richard knows very well, from the work he does with one of his pension funds, is absolutely foundational.

So having access to water in the summer. So all of these things are just basic business resilience. This isn't about sustainability. This isn't about save the world, this isn't kumbaya. This is just basic CFO, corporate treasurer. "I look at my revenues, I look at my costs, do I move my factory? Do I move my road? Do I pay for insurance?"

Actually, if someone can come along and say "I can improve the resilience of my business", will I pay for it? Absolutely.

Richard Giles: I ran the local football club, which I may have spoken to you before about. We built a football pitch, an all-weather 4G football pitch, which is a three quarters of a million pound asset, right. And we built it on a playing field that's by a river, had never flooded and we had all of the flood assessments. I think it's a one-in-100 flood risk, which is 2015. So we built it. Three quarters of a million, raised money through the community. 2017 it flooded. And when a river comes onto a football pitch, it leaves a sticky mud that is a heck of a job to get off. So, you know, me and a bunch of volunteers were cleaning the pitch, which was horrific. And then it flooded 2017, 2019, twice in 2022, having never flooded before 2015. And it's part of a multi-sports club with probably two and a half million pounds of assets in that, in that one sports club, that is now having difficulty getting insurance.

So there's a real financial, but it's that translation of nature into finance, that's the key, I think, to making this an investable asset.

Rob Gardner: Yes, you need to understand the problem. What people don't realise is the problem is going to get a lot worse over the next 10 or 15 years. So the UK is locked-in in the next 10 years to about 1.7 degrees C.

What people don't know is that when temperature goes up, that's a global average, which means that really, on land, temperatures are going to go up about five degrees C, which means in cities like Manchester or London or Birmingham, temperatures could go up by eight degrees C. In the summer, we're going to see more and more heatwaves like the ones we had in London. The tarmac is going to melt.

We worry about building homes, we worry about heating them. The problem's going to be cooling them. And so that, so people need to understand the problem and how bad the problem's going to get. That's over the next 10, 15 years. So this isn't 2050, this is here and now. Then you need to work backwards and go, well, "how much lost"?

I mean, I know yours is a sports club, but imagine if it was Manchester City football club. You know, that is lost revenues, right? How much lost revenues do we do and then how do we put a price on that? And then we need to come up with a solution. The solution is, has typically been engineered solutions. It's like putting a plaster on or it's like getting a filling, whereas actually the best thing we need to do is clean our teeth and go to see the dental hygienist and hopefully never have a filling.

And the equivalent in nature is, if you go up catchment, we can actually restore our landscape. We can pay farmers to use less pesticides, to use less fertilizer, to improve the carbon in the soil, to improve the amount of water it holds, to re-wiggle our rivers. And all of a sudden we start to get the right water in the right place, at the right time, of the right quality.

And that is incredibly valuable to every single business and home and person in the UK. And we just need to pay for it, the way we pay for everything else. But this is exactly you know, this is systems change. We have a system. The current system is blind to nature, can't see it, can't value it. But when you stop and talk about it and think about it, you go, "Oh my God, it is incredibly valuable!"

And we all spend a fortune giving away our data to the big Magnificent Seven who are worth trillions of pounds and we don't put a pound towards nature. And here's the crazy thing. If we do all of this, the health benefits of having healthy nature in our environment or spending time in nature is probably worth about £400 per person in the UK, so it's worth hundreds of millions of pounds.

So the by-products of all of this is we just have a nicer place to live and we're all healthier, as well as a more resilient economy.

Charlotte Moore: So it sounds to me like what you're talking about is thinking about not looking after nature or not restoring nature. It's basically, it's a huge risk to our fundamental existence, whether it's business or food supply or even how we feel. Because if you have less floods, you have less sewerage. I know we have a big issue at water companies, but that helps minimise the issue. It's a different way of thinking about risk and a different way of thinking insurance risk.

So could you give us an example of, both of you actually, of how pension schemes are thinking about this and what they're actually doing right here, right now - maybe, Rob, you start and, Richard, you can chip in.

Rob Gardner: I think there's two things. There's, one is to understand the risks in your portfolio. So this is engagement and maybe Richard can talk about that. So that's the sort of, what I call defence. And then offence is, "well how can we use our capital impacts?" So on the spectrum of capital, I want to make a financial return.

So this is not philanthropy, this is not conservation. So first and foremost, "I'm going to make money from this, but how do I use the pounds in our pension fund to make a positive difference, to restore nature and create more economic value and make more money and create a more, a more resilient system?" And, you know, there are a number of natural capital managers out there who share the same beliefs and ideas that we do at Rebalance Earth.

And you know, there's Federated Hermes, Gresham House, the wonderful Climate Asset Management who are trying to do what we're talking about. So that would be what I would call the offensive strategy.

Richard Giles: At Pensions for Purpose, we see a lot of this and I think it kind of starts with, it's a shift in the system which is super exciting and super interesting as to how that will develop.

And it starts with an understanding of the risk. So that conversation we just had about how nature loss is impacting the economy, which is impacting the finances of pension schemes, it starts with that understanding and I think trustees, of which I'm a pension trustee, are going through that journey of understanding the connection between what's in their portfolio and nature and climate as well.

So it starts with that but then, as Rob says, there's kind of the defence, which is, "OK, so we've got a risk, how do we offset that risk?" And then there's the attack and scoring the goals and investing in things that are going to positively, have a positive impact on nature. So we're in that process of transition, from understanding everything that a pension scheme invests in has an impact.

It's either positive or it's negative. And it's a different way, it's a different metric to the return and the risk that we're very familiar measuring. But that impacts on nature and then understanding how does that blow back to the economy and our investments because they're all connected. This is the one materiality concept that not only are the investments that we hold impacted by the external world but what we do with our investments impacts the external world.

So these things have a two way flow back. And I think the scheme, pension trustees, are in that journey of understanding "OK, these are connected and then what are the right levers that I can use, as a trustee, that are going to improve that external world, that will create a more positive system that will play back into the investments that I'm holding". And that's a very, I think we're in the middle of that discussion and this fiduciary duty discussion that continues to, you know, we have within the pensions world around "is it right for trustees to be thinking about nature climate when they should be considering risk and return?"

In my view, these things are all connected and it's, part of fiduciary duty is to understand the impact of nature climate on the investments that we're holding as pension schemes. But we're in that process and it's very interesting to see how that discussion is going and the system will change.

I'm kind of interested, Rob, in, you know, how are your conversations? Because this is new, this is new, right? It's a new way of thinking. How are your conversations with investors going in terms of, you know, do they get it? Do they want to get involved? And what's your sense of where things are at?

Rob Gardner: So, I mean, so I'm just 100% focused on UK pension funds. And I think the thing that people forget is the pension funds is the capital in capitalism. People always think capitalism is J.P. Morgan or BlackRock. No, it's the Tesco Pension Fund, it's the Greater Manchester Pension Fund. It's your money, it's my money, it's everyone's money. And in the UK the crazy thing is across defined benefit, LGPS, DC and wealth, the bit that everyone forgets, it's £5 trillion. That is going to go to £9 trillion in the next year.

These are big, big numbers. So just small allocations like 2% to nature could be £100 billion. And that is the size of the problem that we have in the UK. So imagine I went to Rachel Reeves and said, "Well, you've got a 2.3 trillion economy, you're trying to grow it, but in the next 10 years you could lose 10 to 12% of your GDP because of all the risks we're going to talk about, do you want to spend some of that money on reducing that risk in half?" Yeah, we spend money on business resilience all the time, right? We spend money on cyber insurance and cyber defence. In fact, we spend money on NATO because we want to defend stuff.

So why, like it's not hard to go, "Yeah, I've got a 2.3 trillion economy. I want to grow to 3 to 4 trillion in the next 10 years. I've got a downside risk of 10-12% because of all these things, you're telling me I can shore it up?" Absolutely, I'd spend a bit of money and then that drops down to Manchester and then that drops down to United Utilities in Greater Manchester Airport and Network Rail.

When you say that to people, to pension funds, they go "OK, of course I get that". Until you said it, it wasn't even in their mind that was an option or that actually nature restoration is something that improves resilience and we can make, we can make money from. I think the mistake that we've long had is it's been intangible, it's been stuck in net zero and it's been stuck in 2050. Whereas actually making it more tangible, about the here and now, like 2024 to 2030, making it about the bees in the UK or making it about our rivers here in the UK. It's just easier to understand than when I talk to you about forest elephants in Liberia. Just somehow that sort of tangibility, that tangibility doesn't connect.

Absolutely, people will want to do this because I think everyone who works in the pension system is, basically wants to do good, right? The core purpose of pensions is to give people a good retirement. So everyone who works in this industry has a fundamental purpose to help others. So going the next step and going, "Yeah, now I understand climate change and biodiversity loss and nature loss and I can do something about it".

So then the million pound question, the billion pound question, the trillion pound question is "How do I make money from that?" That is there and I think there's a number of pension funds and actually LGPS have probably been at the lead of this. As you know, the LGPS have really adopted the Dutch model of risk, return and impact that you were talking about, Richard.

And I know Pensions for Purpose does a lot of great work here. A number of pension funds, in LGPS, again with your good selves, have thought about their investment beliefs and mapping it to the United Nations Sustainable Development Goals and saying "How can we have impact?" And are beginning to do stuff. So we know a number of LGPS said that they would want to invest in natural capital.

I think Room 151 did a survey last year with Schroders and I think 60%, or LGPS said the number one space they want to invest money is in what's called climate-driven solutions. That's everything from renewables to energy transition to natural capital. I would say DC is in the same space. I think the challenge with DC is, as you know, is illiquids and we need to solve the LTAF issue or how do we make it possible.

I think it's easy for DC to do the defensive stuff we talked about. It's hard for them to do the offensive stuff because a lot of the strategies are private asset strategies. But the amazing thing is, that people don't realize is that, you know, DC is going to go from 250 billion to a trillion to 1.5 trillion in the next 10 years.

So it is growing like that. So if we can get it right for DC, I think we can have a massive impact. And I think this is the sort of virtuous circle, a bit like how infrastructure took off, infrastructure investing and investing in renewables. I think the virtuous circle is if pension funds can deploy money in natural capital, they can make money from it, they'll feel more confident about allocating more money.

And the more capital there is, the more we can do and hopefully we can kind of create this virtuous cycle where we crowd in capital. It creates a financial return for members. But crucially, it has a positive impact as well.

Charlotte Moore: So if the LGPS are thinking about that, are there any sort of concrete examples of actual things they're doing. Is about re-wiggling rivers, which is not something you want to say after a few drinks, I don't think.

But what is the actual on-the-ground actual example and I understand what Richard is saying, that you're still having that discussion, but can you give us concrete examples of actual things you invest in either on the offensive or the defensive side, Rob?

Rob Gardner: Yeah, why don't I just cover the offensive side? So at the moment this is in the nascency. So most of it has really been around afforestation, so planting, planting trees for carbon.

There's a new market that's started in the UK, which is biodiversity net gain. So anyone who's building new property has to show a biodiversity uplift on site. And if you can't, you have to buy units and so there are a number of fund managers who are basically taking degraded land, restoring that land and that creates biodiversity net gain units.

And then you can sell those. And actually the returns on those can be quite attractive. At the moment, no one's really done some of the re-wiggling that we talked about. There have been small projects, pension funds haven't invested in them, but they've been bilateral. So I know Coca Cola has worked with a few farmers to improve water quality.

I know, actually I think United Utilities, the Environment Agency and Co-op did something around flood risk and a little bit of river re-wiggling, but it was like £2 million. So at the moment it's been, there have been all of these sort of small projects. The opportunity is how do we scale it up? But those allocations from pension funds have only really, I mean they haven't even started really.

I mean, I think a handful of LGPS have announced that they want to, certainly the pools have announced that they want to have allocations. I'm not sure they've even appointed all their fund managers yet and put money in the ground. So maybe next year we can come back and talk more about what's actually being done physically on the ground.

Charlotte Moore: OK. I think we should end it there. I think that's been a fascinating and very in-depth discussion. I think we've managed to cover an awful lot in about half an hour or so. So just before I close off the podcast, I just want to introduce one question that we'll be asking of all of our guests going forwards. Rob, could you recommend someone to ask who you think should be a guest on the Pensions for Purpose podcast?

Rob Gardner: Yeah, I mean I think the great thing that Pension for Purpose is all about systems change. So maybe if I can talk about a different system that I'm equally passionate about, which is financial education. You know, we know that we need to educate people. And so I'd highly recommend Sarah Marks. She's the CEO of REDStart, and she put it in place, their strategy to change the game, which is how do we get high quality financial education on the primary school syllabus?

Charlotte Moore: Right. Well, I've just got to say thank you, Rob, for coming on to our podcast. Thanks, Richard, for all of your excellent contributions and questions, and we hope the listeners enjoy that podcast and look forward to future episodes.