June_19_Streaming_English_1030_

I'm having problems with my clicker here. Wait. The word of the day. Rowan, we are learning. Can you run the slide for me, please? Rowan is a friend from the first understanding risk. And he just arrived.

Because he wanted to be here. But we are learning words in Japanese. And at the end of the week, we are all going to go fluent. So can you help me with the word of the day? I'm not clicking it. Thank you.

Well, the word of the day is memorial. There we are. There we are. It's working. Yes, miracle. Memorial. Can you repeat? Memorial. Yeah. Memorial is something that protects you. Something that is always looking after you to make sure that you're safe.

And we are going to talk about nature -based solutions today. And nature is always protecting us. Video, please.

Countries are facing increasingly complex challenges due to climate change, including more frequent disasters, water and food insecurity, and biodiversity loss. Unplanned urban growth, ecosystem degradation, and extreme poverty further reduce the resilience of vulnerable communities to shocks.

To reduce climate risks, governments often rely on traditional engineering projects like levees, seawalls, and conventional drainage, known as grey infrastructure. Increasingly, experts are turning to nature to help.

Nature -based solutions, or NBS, sometimes called green infrastructure, uses strategic interventions to protect, manage and restore ecosystems to help address societal challenges while promoting human well -being.

NBS offers many benefits. For example, restoring coastal wetlands or mangroves can reduce flood risks, enhance ecosystem services like carbon sequestration and water purification, and support biodiversity, helping countries meet climate resilience goals.

Often, combining green and grey infrastructure can be more cost -effective than purely grey interventions. Identifying and assessing the vast benefits and beneficiaries helps communities, policymakers and the private sector make informed decisions to invest more in NBS.

At the World Bank and the Global Facility for Disaster Reduction and Recovery, GFDRR, experts are helping support countries to use NBS to enhance climate resilience. To scale up support for nature -based solutions, GFDRR and its partners host the global program on nature -based solutions for climate resilience, the expert hub for helping countries identify, prepare and implement NBS for climate resilience.

In Mozambique, the city of Birre was transformed with a mix of critical drainage, urban parks and stream renaturation. This restored the Chavivi River's capacity to mitigate floods and created a green space for recreational and cultural activities.

In Sri Lanka, efforts were made to protect Colombo's wetlands, the wetlands which now reduce flood risk while providing recreational and biodiversity benefits. In Chad, the World Bank and GFDRR support the government to integrate green corridors and flood plains to mitigate flood risks, while expanding existing green local initiatives, such as urban agriculture, local food markets, organic composting and tree nurseries.

In Belize, marine protection areas are expanding and coral outplants are being enhanced to prevent coastal erosion and bolster protection against storms. The project also supports sustainable agriculture, training and awareness raising.

Our tools and knowledge products are critical to support the growing investments in nature -based solutions. In the past decade, the World Bank approved financing for over 200 NBS investments across almost 80 countries.

Recently, GFDRR developed the NBS Opportunity Scan, which uses high -resolution geospatial data and a sophisticated analytical approach to map investment opportunities in cities and along coastlines worldwide.

In Indonesia, the Opportunity Scan is being used in the design phase of the National Urban Flood Resilience Project. This project aims to reduce flood risks by building capacity and investing in blue -green and grey flood -resilient infrastructure.

The Opportunity Scan demonstrates green infrastructure investment opportunities that can complement grey infrastructure investments to reduce riverine flood risk. Our team also develops key knowledge products that help decision -makers assess NBS benefits, facilitating their integration into urban and coastal development, water management and climate adaptation strategies.

To learn more, visit naturebasedsolutions .org for examples of projects and implementation guidance. With the support of the World Bank and GFDRR, countries are using nature -based solutions to build safer and more resilient communities.

Good morning, everyone. I'm Kanako Morita, associate professor at Keio University here in Japan. I'll be moderating this exciting session on Sowing Seas of Resilience, Financing Nature -Based Solution for Disaster Risk Reduction.

This session will explore innovative and scalable models for financing nature -based solutions to address disaster risks while providing additional benefits such as carbon sequestration, and water and food security, and economic opportunities.

I'm very delighted to introduce our esteemed panelists. First, Ms. Nusleana Lumati Ismael. She is the head of Region III Subject Directorate of Rivers and Coasts at the Ministry of Public Works and Housing of Government of Indonesia.

Thank you. And Mr. Rowan Douglas. He's the CEO of Climate Risk and Resilience at Hardin Group. It's a global insurance group. And Dr. Kaffee Wieckes. She is a climate infrastructure specialist at the World Bank's Public -Private Infrastructure Advisory Facility.

And we also have Mr. Brendan Youngman who leads the Nature -Based Solution for Climate Resilience Program within the global facility for disaster reduction and recovery, GFDRR, at the World Bank. So, now we'll delve deeper into these themes with our esteemed panelists.

We'll explore the real -world challenges and opportunities of financing Nature -Based Solutions from different perspectives. So, given the limited time we have for our session today, we want to be able to take questions from the audience, from the audience, but we encourage you to come to our panelists after the session and to discuss further and to connect throughout the week.

So, in the interest of time, to ensure we cover all topics, I kindly ask our panelists to keep their answers concise and to the point. And without further ado, let's begin our panel session. Our first question is to Ms.

Ismael from the Government of Indonesia. And also, I believe you have a slide to share. So, Ms. Ismael, the question is, can you elaborate on the implementation of Nature -Based Solutions for climate resilience in Indonesia, and what are the primary financing challenges in Indonesia face?

Thank you for the question. The government of Indonesia, the Ministry of Public Works and Housing, have several initiatives of the implementation of NBS, such as related to integrated water resources management, that I am for reducing flood risk.

One example, in Bandung, a metropolitan city in West Java province, in Indonesia, namely, Andi, retention, basin, and boulders project. As you can see the screen, where we built a retention pond and its amenities, including jogging track and open green space to serve for boulders areas.

So it can give better impact to reduce floods, as well as benefit more people. This project was designed to learn from Japan International Corporation Agency and construction by using the national budget.

So to show how the implementation of NBS has been started by using different financing resources. While we have several initiatives of NBS, we know that it needs to be scaled up and implemented in more cities nationality.

Indonesia has more than 500 cities and regencies from metropolitan to small cities. So the need to implement NBS as part of integrated water management is very high. This means, of course, financially challenging because the national budget amount is limited and the government also has other priorities.

Moreover, in many cases, the NBS approach needs to apply within densely populated along the river where the land acquisition cost would be quite high. Therefore, we need to explore more initiative as well as financing mechanism that can combine more option for the government to implement the NBS, including from the sub national government, donors, private sector, university and community in order to support the implementation of NBS for flat risk management.

The World Bank is supporting the government of Indonesia through a loan financing for the National Urban Flat Resilience Project or NUFREP in seven cities with the high flat risk, including new capital city amount, USD 400 million for five years until 2002.

KATHRYN A look at your forecast tonight at 6... tonight at 6...

Thank you. Thank you Mrs. Mal for sharing the nature -based solution actions in Indonesia. So next, Kafi. So you focus specifically on public and private financing or infrastructure and including nature -based solutions.

How does this work in practice and what are the some challenges you face?

Okay, great, gosh, I have so much to say about this, and I have four minutes to say it, and so I'm going to try to be really, really concise here. I would say that the number one is, you know, it's really holding back private sector financing and nature -based solutions really has to do with the lack of reliable revenue streams, right?

So we know that the private sector will invest if the profit motive is clear. However, a lot of these investments require really long gestation periods, which is often at odds with, you know, the cash flow projections that, you know, the private sector would need to support an investment.

So, you know, that's a big issue. Another one has to do with the fact that there's a very high degree of uncertainty in the outcomes that one can get from these types of investments, and also outside of the very nascent and kind of unreliable carbon market.

But nature -based solutions are generally not typically revenue generating. We know that for sure. I'd also like to talk about this very false dichotomy, I suppose, as to how we view these types of investments.

It's either, we've seen in the market that it's either adaptation or mitigation, and there's not an approach that really takes into consideration both climate elements in one investment that could really go a long way towards maximizing cash flow and profitability.

The second main issue that I see really in this space has to do with, you know, general lacking of capacity. There's a whole different skill set that's required for designing a nature -based solution investment versus traditional hard infrastructure investment.

Further compounding, this is a lack of knowledge, skills, and data at sufficient scale, although we've seen some promising work like the opportunity scanned by the GFDRR, but we still have a lot more work to do there in getting this type of information as needed to not just assess reliable cash flow costs and benefits, but also to see exactly how unforeseen risks emanating from climate change or diseases that could actually wipe out ecosystems and ecosystem services,

how that could actually impact cash flow as well. I want to close with the third challenge that we've seen, I'm mindful of the time. Really, there's a clear lack of bankable pipeline of nature -based investments that could be suitable for private sector participation.

There's a lot of capital that's on the sideline that's really waiting for these types of pipelines to exist so that they could actually invest in them. I'm from the Public Private Infrastructure Advisory Facility, and we recently launched Adaptation Finance and Biodiversity Program, where one of the things that we're doing is really trying to develop some really...

We're trying to look at what are the business models that have worked so far in this space, right? We've seen availability fee PPPs that is really used for adaptation purposes where government would pay the private sector to provide a service like, say, flood sequestration.

There's also insurance -based financing that we've seen in the case of reef insurance in Quintana Roo, Mexico, where there's a parametric insurance scheme that's being used as part of their disaster risk response.

There's also capital markets where the Dutch and Belize sovereign bonds, where there's commercial finance being mobilized specifically for biodiversity outcomes, and finally land value capture, where essentially a government would give the private sector the right to redevelop a potentially high -value piece of land, like, say, coastal land, but that's usually tied to an investment that would help to adapt to a climate or disaster risk,

which would often leverage ecosystems and ecosystem services. And in turn, the government gets an enhanced tax base. But, however, a lot of these promising leads have not really translated into bankable pipelines, because, again, the market is quite nascent, and there's still a lack of widespread capacity to identify appraised design and include the right contractual mechanisms of investments.

There's also a lack of de -risking mechanisms, like, for example, guarantees, and also, finally, I'd like to say that there's a lack of supportive regulatory and policy frameworks that's often getting these investments off the ground, really involve really complex

mechanisms, like, for example, again, in the Quintana Roo case, a special purpose vehicle company had to actually be created just for that investment,

among other things with rationalizing the entire taxation scheme for that area. So, I'll close there. Mindful of the time. Thanks.

Yeah, thank you, Kafi, for sharing various challenges for a financing nature -based solution. So next one, we just heard about the government and public and private perspective. You're at the insurance company, are the nature -based solution insurable?

And how does insurance for a nature -based solution work?

Well, thank you so much, Kanako, and as Joachim said, it's great to be back. I was at the first Understanding Risk Conference way back in 2010, 14 years ago. And it's incredible how the domain has developed since then and the community and how new themes emerge.

And certainly, 14 years ago, we weren't talking about many great things. We weren't talking about nature -based solutions at that meeting in Washington in 2010. Just before, I've got three and a half minutes there.

Before I get onto insurance, I just want to sort of set the theory of change that brings insurance into the domain. And that great video that we saw to get this segment off the ground, and it was amazing.

But I would imagine that most of those projects, and I might be wrong, were funded by the public sector, by international agencies or even the governments themselves, because the public sector, maybe nationally, but operating at a local level, as we saw in the examples, could see that by making those investments, the risks for those cities or those regions would be reduced, the regions would become more secure,

more livable, more investable. Which is all good, and I think it's fantastic that that is becoming more of a mainstream policy option amongst the community. But I also know that to really make this even more structural, we need to sort of retrain the invisible hand.

We talked about that earlier on this morning, another panel, how do we get the private sector to be able to invest in this, and picking up many of the challenges that you helpfully identified. So the way of doing that is, as you'll be well aware, there's a big movement to make companies, as well as public sector, exposure to climate and nature risks disclosable.

And all the understanding, risk, tools, and capabilities that many in this room are at the heart of are increasingly being required to allow companies and others to disclose what dependencies and risks do they have to natural ecosystems and services.

And if those ecosystems or services were not there, or if they were diminished, what impact would that have on those companies? And also, what is the probability of those natural assets being hampered?

And once you do that, you essentially have, and it will become increasingly an accountable requirement, a contingent liability on the balance sheet of companies, investors, and even public entities. And it cuts to the absolute core of one of the challenges you said is, essentially, how do we make this investable?

Well, if you protect those natural assets from being diminished, or at worst, being destroyed, you are improving, reducing, if you like, the contingent liabilities on those balance sheets. So suddenly, these assets, which are not necessarily owned by you, but you have an economic interest in them, have a value.

And that's transformational. So far from being concerned when you hear that companies have to evaluate their risk to natural capital and natural assets, that is the hook to make them part of the economic system.

So now, Kanaka, at last, I can get to your question about where does insurance come to play. Because insurance is a beautiful thing. Believe you me, it is the essence of our sort of cultural and scientific progress.

Insurance is about deciding what it is we value, what it is we want to protect as individuals, but as society, and then pooling resources into a shared pot, which you may have no entitlement, you may not have a call on unless something happens to you.

So now we have a mechanism that says, right, a group of entities, and there's great examples like coral reefs off the coast of Central America. Hotels, businesses, public authorities may have an interest in the preservation and maintenance of that coral reef.

They can create a trust that means that they will each contribute some funding to maintain that reef, but also that trust can buy an insurance policy that if the typhoon occurs or the bleaching event occurs, there are things you can do to make coral reefs recover and restore more quickly, and we've seen examples of how those payouts have allowed that to happen.

So there's absolutely two key things about insurance. It values assets by their impact, not on the income and asset side of the balance sheet, but on the impact on risks and liabilities. And critically, you do not need to own an asset to have an insurable interest in it, and most natural assets often don't have owners at all or you may not own them.

And if we can take this incredible instrument and bring it into the mainstream, I see an ability to protect natural terrestrial and marine assets, but ultimately to protect lives and livelihoods of well -being of dependent communities.

And it's an exciting time and no better community than the understanding risk community to take these great theories and actually get them into practice and get them into the bloodstream of mainstream economics in both public and private sectors.

Thank you, Carson.

Thank you, Ron, for explaining to us about the links between insurance and the Nature -based solution and how insurance can play a role in the finance in Nature -based solution. So now we heard from the public, private, and insurance angles from your role.

What would be one key in an enabler that would help scale up finance for an Nature -based solution? So please keep your answer. One minute or two minutes. Yep. So from Ms. SML.

Thank you. As well as to benefit the people, it's true we look only to the construction costs, then acquisition costs, as well as when we need to apply non -structural measures such as raising awareness process of the communities, however implementing NBS should be looking as long as to the investment opportunities as it will provide multiple benefits including environmental, social and economic impact and build resilience and in the end it will be more cost effective.

Thank you.

Thank you, Ms. Mel. Next coffee, please.

I would say capacity, capacity, capacity. We really have to invest a lot in building knowledge and not just from the engineering side. I know that GFDRR has a really cool initiative in place where they're helping to advance knowledge on how to actually design a proper, native -based solution.

It's really cool. But also knowledge on what are the financing and business models that can actually work in this space. Because, again, the private sector has generally stayed clear from these types of investments because they're typically seen as public good and therefore not revenue generating.

And so, yeah, again, there are a number of interesting initiatives at play that are really designed to actually help to advance this. I know, for example, the World Resources Institute has something that's trying to develop these bankable pipelines.

The Swedish International Development Agency also has an initiative for having guarantees for native -based solutions. And, again, where with PF, we have the implementation. But we're hoping to get finalised results towards the end of this year.

So, again, these are some really interesting initiatives that will really advance knowledge on this issue. And there's a lot more to come. So, yeah, stay tuned, I suppose.

Thank you, Kaffee. Next, everyone.

I'm so impressed with the GFTRR center of expertise that was highlighted in the video clip and it could be a great forum to bring three legs of the stool together in perhaps some exemplar countries that I think are going to be the key.

And the three legs of the stool, firstly is this leg of the stool, if I could put it like that, the sort of the disastrous financing and risk world which are represented significantly here at the conference.

The second in countries is a group that should be sort of at the heart of this community too but are not yet and that's the financial regulatory and community who are driving climate and nature -based risk disclosures.

They often inhabit the sort of sustainability world who are kind of the other side of the coin to risk and it's that disaster, sorry, that climate and nature -based regulatory disclosure side who are the people who are going to allow the natural assets to have their value.

So the final community in a country are obviously the custodians of those natural assets, the environment agencies or whatever. So maybe through the overarching framework of

countries' national adaptation plans, we can link those three legs of the stool and retrain the invisible hand to put nature where Adam Smith should have put it 200 years ago but understandably didn't kind of have the time.

So now we need Adam Smith version 2 .0. So that would be so exciting. It's happening. There's a great program in Costa Rica I think it's going to be spoken about by Carlos later on this week. So that would be wonderful and maybe it's something we can do and maybe it's already happening with that platform we heard about in the show.

Thank you, Rowan. So thank you to our panelists for their valuable insights and contributions. So we've heard about the implementation challenges and success in Indonesia, and the insurance industry role in scaling nature -based solution, and the barriers and solutions encountered in World Bank projects.

So now, as we approach the conclusion of our session, I'm excited to share a significant development that aligns perfectly with our discussion today. As we saw in the video at the beginning of the session, global facility for disaster reduction and recovery, GFDRR, and the World Bank have been at the forefront of promoting and financing nature -based solution for climate resilience.

Today, they are launching a new initiative that will further catalyze this effort. So to ask more about it, I would like to invite GFDRR to share the details. Brendan, the floor is yours.

Yeah, thanks. Thanks very much Kanako and it's actually incredible how much at least I can learn in a short panel like this I know we just have not even 45 minutes and three speakers and short interventions But actually they hear all these different perspectives.

So I think what you're mentioning right on Yes, we have a lot of support for nature -based solutions. And yes, you saw beautiful pictures of Mangroves coral reefs who doesn't who doesn't love them, right?

The question is How do you find these intervention? investment opportunities How do you find the benefits that these things actually bring to communities and not just to communities but to the government?

To the private sector and then how do you construct a good investment plan? Knowing what these benefits are and knowing what these opportunities are. I think that's something that we're struggling with So we have a lot of governments cities coming to us saying We hear you talk about nature -based solutions.

We see our ecosystems deteriorating We see a lot of climate risks, but where do we even start if I have a city in Burkina Faso? I'm building a role that where where are these opportunities for nature -based solutions?

If I'm in Fiji working on my coastal protection, we have a lot of development challenges Like if I have a limited budget, where do I start investing in these kind of approaches and what we've developed is indeed There's nature -based solutions opportunity scan which is a geospatial approach that we're applying within the World Bank system And now we have applied it over 60 cities and coastlines including in in Indonesia as well to quite rapidly look at which nature -based solutions are Investable in different types of circumstances being at the city be at the coastline What could be the priorities if you're interested in flood management in heat management and in biodiversity protection?

And how do you go about about prioritizing those different typologies now today? We're actually launching this Report and for our colleagues in the World Bank and our government partners You'll be able to look at this and if it makes sense for your project for your Circumstance to use this approach to find investible options and to make a financing plan for that as well Then we are there to help you with that if you're one of our friends and partners in the academic world and the analytical Sphere and also in the insurance sector.

You'll be able to access the entire methodology All the data sets are outlined there are some examples and we hope to build this as a Community and also learn from you how we can further improve this because what we try to do is, you know Go from panel discussions on h -based solutions to actually implementation in the last couple of years We've really seen that this is possible We have a large number of investments But

there's still a lot of questions on a financing a lot of new opportunities and we hope that this this helps a bit So looking forward to your thoughts on that as well.

Thank you

Do we take some final words? So thank you, Brendan, for this exciting initiative aiming at scaling up nature -based solution worldwide and facilitate their integration into World Bank projects. So we arrive at the end of our session.

I would like to thank, again, our panelists for their insightful contribution. And thank you for the GFDRR team for organizing this session. And last but not least, thank you for the audience for attending.

I hope this session will serve as an inspiration for us all. Thank you very much.