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So good afternoon, welcome to our session Bridging the Infrastructure Gap, tools for resilient investments in infrastructure for Latin America and the Caribbean.

So this work has been financed by the Canada Caribbean Resilient Facility, which is in partnership with GFDR, administered by the World Bank. And this particular work was done in collaboration with WSP.

So Latin America and the Caribbean has a big infrastructure gap that is estimated at 150 billion dollars a year or the equivalent to 2 .5% of GDP from the region. In the last decade, the region has invested 2 .8% of its GDP in infrastructure, but it is estimated that in the decades to come, the region needs to invest between 4 and 7% of its GDP, which is big amounts of money that are needed.

So how do we close this gap and how do we prioritize investments and where do we find all that money? So during this session, we will try to give you some elements to answer these difficult questions, but before that, let me introduce you to our distinguished panelists and presenters.

They are in the room so that I can also see the presentation, but we have Francis Fontenelle, permanent secretary of the Ministry of Finance from San Lucia, and Dr. General Joseph, which is the project manager of the Housing and Recovery Project from the Ministry of Housing and Urban Development in Dominica.

And we have also Mr. Bernard Myers, senior sector specialist from the World Bank, and they will present later on, and Mr. Mohammed Degani, senior disaster management specialist, also from the World Bank, and I'm Narayaka Rasco, senior disaster management specialist, also the World Bank.



So with no further ado, I will ask Mr. Degani to present us about the LACRISING tool, which is a tool that helps governments to assess the vulnerability of infrastructure and also identify the needs using public and global data that is available.

Thank you. Thank you, Nerea. Okay, so good afternoon, everyone. I'm Mohammad Degani. I'm a consultant, DRM, and asset management consultant with the bank. I'm actually happy to present this work on my birthday, so let's see.

Yeah, thank you. Thank you. So let me know if I'm actually passing the time, Nereya. So one of the big challenges in the developing and underdeveloped countries is that they do not have a good idea of how vulnerable their infrastructure is and how much they have to invest in their infrastructure.

And even the vulnerability and risk assessment in these countries often take a few years, like two or three years. And even if they want to do that, this needs a lot of information and data, particularly at the asset level.

So the question behind this research and the project was that can we develop a quick assessment tool that can actually scan the infrastructure pretty quickly? So today we're introducing RISING, the Resilient Infrastructure Scorecard and Investment Goals tool.

It's a quick and rapid scan assessment tool for vulnerability of the infrastructure and prioritization. So the capability, the distinguished capability of this tool is that it works with a variety of level of data, from very basic information that is available globally or publicly to detailed information that is available.

The method behind this is not very complicated. It's pretty simple. It's not a black box, like many commercial softwares that you can see, and it's low cost to use. It's not very costly to use. So for now, the tool incorporates different infrastructure like schools, hospitals, roads and bridges, and drinking water system.



There's the assessment against earthquake, landslides, floods, and hurricanes. For the pilot run, this tool was actually implemented in a few countries, in Costa Rica, Belize, Ecuador, Grenada, and St.

Lucia, and also Panama. So once you populate the information and data into this tool, what it generates is a scorecard. And the scorecard has two main levels. This is the summary scorecard at the higher level, which tells you, it gives you an overall sense of how your infrastructure vulnerable is to a specific hazard.

So for example, you can see, you know, different infrastructure sectors, what assessed portfolio, it means what are the number of assets in that infrastructure sector, how vulnerable they are, is it severe impact or high impact, what percentage of the assets are vulnerable to the hazard, what is the condition, and then the last column, sorry, the last column is how much investment you need to make,

the estimated investment needs. Now, this is the summary scorecard. When you go to the sector level scorecard, okay, when you go to the sector level scorecard, you can actually see the assessment against multiple hazards for that specific scorecard.

This was designed, this scorecard is the results for Panama, the numbers are illustrative, but this is typically how it's generated for the other infrastructure systems and countries. So you can see for Panama bridges, what you can see is that how the bridges are vulnerable to landslide, coastal flooding, rivering, and hurricane, the percentage of assets that are vulnerable and the level of vulnerability.

So for example, you can see 18% of the bridges will have severe impact if they're exposed to landslides. So this is the sector level analysis. And then you have a little bit more information about the infrastructure assessment at the sector level.

This is the investment prioritization. It means that it gives you the investments based on the criticality of the assets. What are the most important ones? What is the priority one group? What is the priority two group?



What is the priority three group? So how much, if you have a bucket of money, you have to first invest in the most critical assets. That's priority one. How much investment you want to make in that. So it gives you that assessment.

That is the need. You have to, for example, invest a few thousand million dollars in that few critical infrastructure that you have. Now, this is also another detailed information for the infrastructure sector.

It gives you the investment needs per different administrative level. It means in each district how much information, how much money you need to invest four bridges in different sectors. So, if I want to close this part, we talked about, you know, this tool is a vulnerability assessment tool, investment prioritization tool at the portfolio level.

Again, I emphasize on the fact that this is portfolio level and it works with publicly available data as well as the detailed data. So that's the good thing about this. It's also the applications beyond that would be narrowing the scope of the program.

So, if you have a big portfolio of projects and you want to prioritize them, with this quick scan tool, you will know which ones to touch and leave the other ones for now. The other application would be to grade the infrastructure.

I don't know how many of you have seen the American Society of Civil Engineers scorecards for the US. They always issue a scorecard, which is, for example, it says, bridges are D plus, water system is D minus, A is the best, E is the failure, F is the failure.

So they issue that scorecard. This is something like that. It's a grading system for the infrastructure. And then, one of the things that is pretty interesting about this tool is that it will help you for the contingency liability assessment.

If you're actually doing an insurance or if you are from the financial departments, you want to know, you know, what is the liability? What is the contingency liability? What happens if these infrastructure fail?



How much you have to invest in that? What is the risk? So that's important for the financial and risk insurance perspective. So with that, I want to actually close my remarks, and then I hand it over to you then.

Thank you so much.

Thank you. Thank you so much, Mohammed. So now that we have seen the aspects more related to really the infrastructure and more technical aspects, I will then ask Mr. Meyer to join us here to tell us about experiences and lessons learned from the Caribbean on the public financial management side.

So good afternoon, I'm Bernard Meyers. I work as a public sector management specialist at the World Bank. And what I want to just share, over the course of these last few days, we've talked about resilience of infrastructure assets.

What I want to make a plug for is that one of the ways we do that is also by increasing the resilience of institutions. And one institution in particular I want to talk about is the role of the Ministry of Finance in how the special role that they place is they're really at the center, I'd say, of how governments operate and function in response to disasters.

And particularly public financial management systems are part, or PFM, are part of that sort of institutional role, because I think in many ways it creates the kinds of incentives that, and enabling conditions for sound and responsive government operations and ultimately that's one of the ways in which governments build trust with their citizens, that they will be there and be able to respond in the case of a disaster.

So in the last few years, the World Bank governance team has been working with governments in the Caribbean to do just that and strengthening institutions by collaborating with the governments in the Caribbean.



Now, frankly, the inspiration for much of this work on public financial management systems comes from the experience of the 2017 hurricane season and the lessons that were learned from Dominica. So the Caribbean is generally gonna be very sensitive to extreme weather events, but 2017 was an especially volatile year.

Dominica, for example, was hit by two hurricane five, or two category five hurricanes and almost back to back. And that destroyed or heavily damaged about 90% of the buildings with estimates of damage totaling over 200% of GDP.

So a staggering amount for any country. There were some lessons that came out of that. One is that there tends to be a lack of a, necessarily of a strong disastrous financing strategy that made sort of a lack of a contingency fund or insurance program, some of the tools that could have helped, at least with some of the initial financing.

Secondly, government struggled to find the right balance between speed of spending and maintaining some of the procedures and protocols that would be in place during normal operating times. On the positive side, the government had benefited from having procurement contracts in place ahead of time with some established vendors and prearranged prices so they could avoid exorbitant prices after the hurricane struck.

But on the other side, procurement processes had not necessarily anticipated ahead of time, maybe all the needs of different groups, whether that's women, the elderly, children, and how those needs might vary.

And then finally, that it would have been helped by having perhaps a public asset management database to better quickly account for what was destroyed and where insurance was needed. So several countries in the region, including Antigua and Barbuda, Dominica, St.

Lucia, Grenada, have taken advantage of some of these opportunities to strengthen public finance management in a few different ways. In some cases, it's been to implement new regulations to allow them to really expedite procurement so that they can procure goods very quickly.



In other cases, it's to establish resilience funds or contingency funds so that funding is available immediately or setting up changing budget regulations so that they can expedite spending very quickly.

And then in other cases, to just develop monitoring systems to better monitor and measure climate change -related expenditures in the budget. Now, this is not relevant, not just for the Caribbean, but really for countries across the globe.

And so for that reason, we developed a diagnostic, sort of an assessment framework so that countries could assess how disaster resilient and responsive their own PFM systems are and where there might be opportunities to do strengthening.

And to do that, we looked at sort of five kind of core functions of a public financial management system and some sort of three cross -cutting areas. And we published that in an assessment framework and a guide that asks questions, so sort of yes or no or partial questions, say, do you have regulations to allow this, or does your system do this, yes, no, or partial.

And so these cross -cutting pillars includes the institutional arrangements, making sure that the disastrous emergency management agency has procedures to coordinate with the Minister of Finance, for example, IT resilience to make sure that your IT systems and record -keeping is going to be protected and preserved, and even the other cross - cutting area would be in terms of social inclusion, taking into account the needs of all groups and particularly who might be the most vulnerable.

And with that, and so just sort of some summary remarks and just that when we talk about resilience, it's more than just physical assets. It should be thinking about what are the key functions that need to continue with minimal disruption, and keeping in mind that the policies and procedures that make for really good PFM systems during normal times might be counterproductive when it comes to disaster response and recovery in terms of.

and that even though central finance agencies, Ministries of Finance are sometimes overlooked when we think about emergency response, we think about the emergency



management agencies, but really they should have a seat at the table and are really central to disaster risk management, and then finally to be taken to account the needs of all groups and what those most vulnerable parts of the population might be when you're thinking about disaster response.

So with that, let me stop there. We're going to unpack tomorrow one of the pillars in this assessment framework, and that's the one that looks at disaster -informed public investment, public asset management.

So how does a ministry of finance make wise decisions? First about new public infrastructure, but also how to care for the existing assets, and so we'll talk about that a little bit more tomorrow.

Thank you very much, Bernard. So now we are going to have a discussion with our distinguished panelists. So I will ask if you can sit in front here, Dr. Joseph and Mr. Fontanel. And if Berna and Mohammad, you can also join the conversation.

And we want this to be a natural, organic conversation. So I'm going to kick start with one question or two questions. And then we're going to have a discussion. And what we are interested in is really to know the perspectives and the needs of the countries and what they face, what are the challenges, and how we can help overcome those challenges.

So to start, Dr. Joseph in Dominica, what are the challenges you face when you are confronted to a reconstruction after a disaster like 2017? Or when you want to replace or upgrade key infrastructure?

So we just want to understand what the reality is in Dominica. So if you can, let us know what is the situation and challenges you face. Thank you.

Okay, I think Mohammed summed it up very nicely when he identified that the lack of data is a very pertinent problem in a lot of small island developing states, and in Dominica it's no different. So we do have a lack of comprehensive inventories of our



various assets, and that causes us to have difficulty in prioritizing investment, which is meant to maintain and rehabilitate those assets so that we can ensure that we are developing in a resilient way,

and also improve our disaster risk management. Also, it is, in Dominica, we do struggle sometimes when we are able, for certain types of assets, to identify the size of the population that is dependent on this particular asset, how the asset plays a role in various sectors, the economy, and so on, and if that asset were to be compromised or lost, what would be the economic implications, what would be the implications for functionality and movement and so on?

We also have some difficulties in looking at, so apart from the vulnerable conditions and the criticality of assets, we also have difficulties in the dependency chain, so identifying which types of assets, if there is a damage to a particular type of asset, what will be the knock -on effects on other various assets, so this is something that is also difficult to qualify in the Dominican context, and whilst from our experience of Hurricane Maria in 2017,

what we've developed is a very, I would say, a good understanding of how our hazards perform under hurricane wind conditions, but we have to look at it from a multi -hazard exposure context, and so whilst we may have a good understanding of how certain types of assets may perform or how vulnerable they are to a subsequent hurricane event, we may not necessarily have the same understanding for other types of hazards,

such as earthquakes, floods, and so on, and of course, I think this is something that is across the board for small island developing states. We are faced with human resource and institutional capacity constraints, so it is extremely difficult to get the human resource required to go out and characterize the vulnerability of assets at a granular level or even a global level, so these are some of the challenges that we face in Dominica.

and these have been laid very bare by the experience of Hurricane Maria.



Thank you, thank you so much. So there is really a need of better understanding the risks that pose the different assets in the Caribbean, and then how we assess that, and how we communicate those risks.

So if I may ask from Sallusha, Mr. Fontenelle. So from the Ministry of Finance, from your side and perspective, what are the challenges you face when you're confronted to exactly that, trying to finance infrastructure, either new infrastructure or maintenance, or upgrading the new infrastructure.

What are your challenges and your needs?

Well, I think the most obvious one is affordability. Most of what's unusual, we have persistent, what we call, deficits. So can we afford that particular investment? Because at the end of the day, we have to respond to what we call, do you have fiscal space?

And we have to say that we are financially prudent. We are fiscally prudent. So among in the midst of all those constraints, we still have to respond to the building of the bridge, the building of the school.

Also, determining the age and the integrity of the structures, and I think the previous presentation would have hinted to that. In terms of data to tell us, OK, we have a stock of infrastructure. We have a stock of bridges.

How old are those bridges? What is the structural integrity of those bridges? And should we put money aside over time so that when the time comes to repay them, that money is there? And we also have another issue, which is determining the extent to which we should build.

And an example I personally experience is the Ministry of Infrastructure came, and they said they wanted to build a bridge. And the bridge, I'm just using a hypothetical figure, say of \$100 million, that's the cost of the bridge.



And we say, why is so expensive? They said, we want a bridge that would withstand a category 5 hurricane. And we said, a category 5 hurricane. But we don't really get category 5 hurricanes. What would a category 3 hurricane bridge cost?

And they said, OK, it might cost us \$75 million. But we said, OK, the last time we had a category 5 hurricane was 50 years ago. So why should the first, on average, we should build for a category 3 hurricane?

But they said, no. The longer it takes for you to experience a category 5, is the closer one is around the corner. So determining the extent to which you can build, which you should build, is an issue for us.

How much we should put in that investment? Should we build? Because right now, what we're saying is that what they call low probability, high impact events. And these are the issues that we have in the Ministry of Finance in terms of making that determination.

Yeah, thank you. So it's really difficult to make decisions in that context because you have these restricted fiscal space. At the same time, you want to build a resilient country, but that costs us more funds.

So at the end, your issue is how to prioritize those investments having a limited amount available. So it's like how we can use these investments for the higher return or higher impact in terms of gaining.

So I was wondering the discussions of the presentations we had here previously. Would there be something, this rising tool, or the aspects that Berna was talking about, how making the financing more resilient, how would that help the Ministry of Finance?

Or what is the needs? If you would be in one only country, and Dr. Joseph is working more on the infrastructure technical side, what information could she bring to you, to the Ministry of Finance, to be able to make that decision, like say, OK, either the bridge to sustain a category 5 or 3, how much it costs, which one will be more beneficial?



So that is very complicated decisions that you need to make. So I'm just wondering if these type of tools could help the Ministry of Finance and also the Ministry of Housing or Public Works from the infrastructure side.

So I just want to have impressions that you had.

So it's very insightful and it's also very correct, especially in the small island developing state context. We do have, in terms of the financial bandwidth, that is always limited, and so we really have to prioritize what projects we do undertake.

But I would say that from the Dominican experience of Hurricane Maria, what we have learned is that it is, despite our constrained fiscal space, we really have to make these decisions in which we factor in the risk associated with not ensuring that our infrastructure is designed for future events.

So before Maria, we had, you know, the conversation was, do we really need a hundred -year return period structure, or a hundred -year return period bridge, and so on. But what we saw, the devastation of Hurricane Maria, and when we're talking about a loss of 224% of our GDP, it becomes very important for us to protect ourselves from future events of that magnitude, because the cost of recovery is significantly more than the cost of investing upfront in the type of resilient structures that we need to mitigate that disaster risk.

So in our end, what we've been having to do is to respond. You know, for the year something happens, the ministry says, OK, this bridge has been washed away, and we have to respond. We don't have a scientific approach or a structured approach towards dealing with our assets.

I'll be frank about it. We always just only reactive. We always react into the situations. One can argue that we don't have enough money to be proactive, and so we always have to be reactive. But I suppose we have to find the medium.



We have to find the mechanism. Because for us, I think, and recently we've been doing this, is to get a stock of all our assets, how old they are. So one can sit down and say, OK, for the next 10 years, we'll focus on those particular assets.

And I think the framework that was introduced in terms of the rise in the framework will certainly assist us in that respect.

Thank you. So maybe, Mohammed, if you want to intervene, how this rising tool can help at least partially or this type of prioritization with information that we can collect, knowing that we are doing this assessment with available data.

I mean, if countries have more data, probably it will be better. But if we have a minimum data, it's still useful. So I just want to better understand how that can help.

So let me respond this with the experience we had with the verification of the results in some of these countries. We found that based on the information, for example, in one of the countries, the schools have serious problems against some of the hazards, and they have to invest in the schools.

So that's one of the benefits of this assessment, too, that they've realized that one of the infrastructure sector needs more investment. I would say that another benefit of this tool that was realized during the verification process was that, okay, you have basic data and information, but if you want to collect additional data and information, what that information would be.

Just to give you an example, the tool assessed the intervention cost for one of the bridges, X million dollars. When it was verified, you realize that the intervention cost was higher than what was estimated with the tool.

And the reason was that the information of the length of those bridges needed revisiting. So that means that the length of the bridge, the deck area, is one of the critical information that must be collected in the asset registry by the countries.



That's very important in the assessment, in the criticality assessment, and also in the investment needs assessment. So it also identified that what are the information that you need to actually collect in addition to that.

So just to add what Mr. Fontana said, this is a striking question that if you have your given two bridges with different costs, one, \$700 million with a return period, hurricane five level, and then the other one, \$75 million with a hurricane level three, they have been given the risk and all the information that they needed.

But how these countries make decisions, it's very important. I think if we realize and we understand how the decision making is happening in these agencies, that would happen even more refined and just a tool that helps them, you know, the prioritization.

Thank you, thank you so much. I don't know if somebody else want to mention something or maybe Dr. Joseph.

Something I would like to add, especially when we talk about the limited fiscal space, I think that this is where it is very important for our development partners to come and board. And I think a tool such as the lack -rising tool, what it allows us to do is to identify to our development partners the areas that we want to prioritize for spending.

And I think this is the tool allows us to ensure that decisions we make are certainly data - driven. I think this is something that we certainly have to move towards more so in the Caribbean, considering our vulnerabilities.

So I do think that there is a lot of, this is something that is useful and there is a lot of scope for application of this type of tool in the Caribbean.

Very nice.



One of the things that we talk about in this sort of PFM assessment framework is the importance of having an asset registry, and particularly identifying critical infrastructure assets. So things which not only have a high cost, but might have a significant economic impact if they were to go out, or if they were to fail, or to not have service available.

And through that, it's intended to allow one to be able to understand what's the condition of the asset, what's the potential cost, whether it's insured, so that government, so that ministers of finance and ministers of ministry can take these decisions with a limited sort of fiscal resource of what the priority investment should be, whether that's in retrofitting or reinforcing an existing asset or making a new investment.

But the starting point would have to be at least information on what those critical infrastructure assets are. And there is a labor cost to sort of getting started and taking stock of that, but it's a worthwhile one to sort of make that investment to have that infrastructure asset registry and asset management policy.

policy as well.

Thank you so much. So I don't know if there are some questions or comments from the public. And they will help us with the mics.

Hi. Hi. Hi. I'm Marta Pereira. I'm from INS Engineers. And I have been working actually in Dominica in 2017, and now again doing a resilient road asset management system. And from our experience in the country, one difficulty that we find is resources and capacity of the teams.

So for example, we have built a very fancy tool, but we need to collect data in order to fit that tool. The first data collection was done by our own teams, but that needs recurrent inspections in order to assess the condition in the coming years.

So changing the mentality of the team, the philosophy, implementing or embedding this new task, which is data collection is something that we are finding difficulty. And also



training people to use the tool in order to give their higher levels the priorities to send to the finance people.

So that changing of philosophy and building the capacity within the team is what we are finding most challenging.

Yeah, thank you. So of course, one thing is to have the tools, and the other one is to use them. But at least we are starting somewhere. What is good is either we have tools where we use existing information, but still, as Mohammed pointed and you are pointing it, there are still information that probably would be like the length of the bridge.

We are not thinking we need it, but actually we need it. So that kind of things are things that we are going to gradually improve and build in with existing tools. But yeah, the question of capacity is important.

So I don't know if you want to comment on that regarding capacities.

Well, it's a very technical area. And I could imagine it might be very challenging to get the persons that you require for that data input. But I don't think it's beyond our ability. We can identify or zone in on, what do you call it, students who are making a project and get students who are in that particular area during their summertime to get them to work on it.

But I think it's very important because, I mean, that has been said 10 years ago. I remember the permanent secretary in the Ministry of Infrastructure. She was on a mission to identify all the critical bridges in St.

Lucia and to determine their structural integrity. And it has not been completed. So it's something that we need to work on because it's important. And like you said, those that are pretty much, those bridges that if they go down today, it will cause a ripple effect, a knock -on effect.



We need to know where they are, what is needed for them to be kept structurally sound.

So the criticality of the assets is important because to know which one of the bridges will fail and then the whole system collapses because they are very important bridges connecting the city to the other, that kind of thing.

So when we do these risk assessments, it's not just one bridge that we are looking at, but it has to be like the network and how all this is connected and which one will be the breaking point that will make the whole system collapse.

I see you have a question there.

This is supposed to be my ticket. That's okay. I feel I'm on all from Haiti and I feel so related when Our colleague from Santa Lucia said affordability What what I was interesting in it sometime we really focus in on the successes and There is some time much more lessons to learn from the failures.

So my question for you guys. It's If you have to deal with a disaster in the future god forbid we are not hoping for that But if it's ever happened what Key actions you will always try to keep yourself away from Because it might seem to be Important, but if you ever take that action the negative externalities after the catastrophe Will be too much to bear So what I really want to know what a few actions or key actions that Whatever the disaster you might have to deal with you will always try to keep yourself away I hope I'm

I think one of the very critical lessons we learned post -Maria is the importance of maintenance of our infrastructure systems. A lot of failures that we experienced post the disaster could have been averted, at least the scale of the failure could have been averted if we had robust maintenance practices in place.

So we had situations where, say for instance, a culvert that was cleared of debris would have been able to at least convey water during the storm. But unfortunately, it was unable to do so, and so that compromised the whole section of road.



So we have learned that certainly not prioritizing maintenance, not programming maintenance effectively, that has a substantial cost in a disaster event. In that, things that you kind of work with a certain amount of spending upfront, you end up spending a lot more to rebuild entire networks of roads simply because you did not do basic maintenance.

And that same point, our experience in Sulusha, is that the government has certain buildings, and the government rent from certain people. The buildings that the government owns, it runs down much faster than the buildings that we rent from persons.

Because you see, and we find out, we tend, for whatever reason, we do not put a maintenance budget aside for our buildings. So maybe the model has to change. Perhaps bridges should be private sector, and we pay a toll, and the private sector now, you know, that is their bridge they will undertake to maintain it.

But our experience has shown that we tend to focus less on maintenance, because of the same issue of affordability. When you come to a budget, okay, this is the budget, a million dollars, and then you say, okay, no, we need to bring it down to 900,000.

What goes first? Take out the maintenance, take out this, take out this. So perhaps the model has to change.

And I would make a plug -in for looking at budget process and budget rules to try to incentivize, at least not to neglect, sometimes to the maintenance of existing assets. Obviously, there's always gonna be a fixed pie.

There are gonna be difficult decisions. But as part of a broader asset management program and policy to be integrating those decisions and that, okay, maybe there's a little bit less for new investment because you actually have to fund some of the maintenance of existing.



Even though we always know new assets are politically more popular because it's always nicer to do that and maintenance is less politically visible. But again, you can use incentives to do that. Another thing I mentioned, we've talked about mostly public assets, but sometimes the governments are also paying for, unfortunately, have implicit liabilities to help reconstruct maybe private assets, homes and things like that that are destroyed.

And although this is not a Caribbean example, in Turkey when they had the earthquake there that destroyed a lot of homes, there were building codes that were designed to withstand earthquakes, but they just weren't enforced.

And so there was a lot of shoddy construction because there just hadn't been a commitment to reinforcing the application of those building codes.

Thank you. Yes, please. Another question there.

OK, Max, I'm here. I'm in the Grenadines. As I listen to the discussion, I think it's always easy to get funding to construct new infrastructure. But the maintenance is always a challenge. And to me, the time may have come where the governments may have to promote volunteerism when it comes to maintenance.

They can set aside some funds to provide the input you want to do the painting, you may want to buy the material, but may encourage person to volunteer to do the work itself. Because to me, because we are so limited in resources, and when it comes to prioritizing, you want to put your best effort into maybe new infrastructure.

It could be a very political tool to cut ribbons. That is what the governments love to do, cut ribbons. And then, because it's a public asset, and there's not much ownership at the community level, people may not put enough effort into maintenance, to take care of the buildings.

And the government do not have that resources and time to go back and do what they have done. Maybe they have spent a lot of millions of dollars from the World Bank, and they want to go and borrow another set of money again to rehabilitate that.



So leave it there. And they're going to construct new facilities. So to me, the government will have to spend more time encouraging persons to own these buildings and to volunteer themselves into maintaining these so that you can always have a good upkeep of these infrastructures.

Thank you very much. Is there one? Yes, please.

Good afternoon. I'm Chai from Cambodia. I'm from the Ministry of Rural Development. This topic is quite interesting for me because we are doing this. We got the fund from the World Bank, 170 million, to the consecutive road, which is made by FLAT.

So apart from that, we're also doing the assessment, which is the first presenter present. I would like to request how and where I can access because we don't want to build things from Skype because we also need to do the assessment as well because we have quite similar problems with the other countries.

Like in terms of finance, we don't have enough money. There's a lot of road we need to build and there's a lot of maintenance need to be taken care of. So we need a tool to prioritize and we need a tool to present to MF that this is what really the need from our ministry as the implementer.

So maybe later I would join the session hoping that we have more things to learn. Thank you.

Yes, yes, of course. So we are kind of getting to the end of the time we have. But yeah, if you take away this type of tools to really understand what is the status of the infrastructure, which ones are the most vulnerable, and then be able to compare between different sectors.



Because at the end, all sectors have needs, and there is this competition. Which one is more important, building bridges or schools or health, and for especially small island states, it's even more complicated because of the fiscal constraints that they have.

But also in bigger countries, there is the same issues. How to really prioritize the investments that are more needed. So these type of tools are really, we hope that they can help the governments in these tasks.

So for now, we have been piloting these in these six countries that were mentioned at the beginning. But the idea is really to have this tool more robust, and then expand it, and make it usable for anybody that needs to do this.

And from the other side, we are also connecting these to all the public financing management that is needed. Because it's not just the technicalities, but it's how we finance these. So the two work together, and we need to find ways to make them work better, more efficiently together to make these decisions.

So tomorrow, we are having a session where we are going to do a deep dive into how these tools work. So join us tomorrow at 2 o 'clock. So we are going to have a first session, more or less one an hour and a half, on the rising tool, followed by the experiences from the PFM side.

So you are welcome to join us tomorrow in the afternoon to really better understand these tools. And of course, if you are interested in the application of this tool in your countries, please contact us, and we'll see from the bank side how we can help you.