

June_19_Small_Hall_003

Harnessing transdisciplinary approach for diversity -inclusive disaster recovery and risk reduction. Okay, so this is organized by AGS Civil Engineering Coordination Council Technical Committee, TDA for building societal resilience to disasters.

So I would briefly explain what's Technical Committee 21. So we are civil engineers. And what we are doing is conducting some research and discussion with experts like this session and producing some papers.

So, so far, what we found. Such a transdisciplinary approach is quite important and experts from diverse fields we can innovate solutions and we can respond to various needs. This is our findings. So today, what we will discuss.

So diversity and inclusive DRL and recovery. So why we intended to organize this session? We are civil engineers. And I think civil engineer is a major player for disaster risk reduction. Including me, we love to construct something.

And yeah, we are always engaging some reconstruction works, want something damaged. However, of course, there are many other issues and we cannot resolve everything. Furthermore, if we domain some resources like funding or people or institution during disaster time, it may affect, adversely affect on other areas.

Like gender issue or nothing, health, et cetera, et cetera. So that's why today we'd like to discuss other disciplines, experts. Yeah, we have nothing experts and agenda experts. Thank you so much for attending.

So this is just our concept. So transdisciplinary approach, we believe such academia, civil society organization or public sector and private sector, we should work together to reduce disaster risks.

Okay, so this is just my introduction. And my name is Mikio Ishiwatari, University of Tokyo. And today we have three panelists. I'm sorry, first, Congressman Momo. He cannot join today. He had to attend the president in his constitution, sorry for.

And the first speaker is Professor Sachiko Kanbanan, Coversity College of Nursing. Second speaker is Diana Alango, sorry for. Senior agenda -based violence and social development specialist. And third speaker is Mr.

Muhammed Lakhmany Chachm. Senior manager of Chachatirta, a public corporation in Indonesia. Okay, so first, we'd like to invite Professor Kanbaran, Kanbaran sensei, ono shikonigashimasu.

Good afternoon, everyone. Yeah, my name is Sekko Kamara from COVID State College of Nursing. Today I'd like to talk about my one story about becoming a nurse and disaster fall, disaster recovery and disaster risk reduction.

And yes, this is my profile. I was born in Okayama, a rural area. But after that, Hanshin Awajie earthquake occurred. Anyway, I became a nurse and contributed to the RRL. So why I can do the transdisciplinary approach?

Because maybe I work for the RRL as a civic, just a global citizen. I'm not a nurse, a scientist and one citizen. So I can work, I thought. Yeah, at the time of Hanshin Awajie earthquake, I was a student.

And at the recovery phase, I studied there in Kobe. And part -time job in Kobe worked as a volunteer, especially in temporary house and church. And I don't have nursing and marriage. And also I don't know what is disaster recovery and disaster risk reduction.

Then I realized, oh, this is disaster risk reduction, I thought. But then I learned nursing. And then, sorry. And I realized, oh, this is nursing. And I learned nurse. And also the nursing area, no disaster nursing beforehand.

So far, so far. And but the Florence Nechingel, many nurse and every nurse work in front of the front line of disaster setting. And they work very hard with community and for survival. But no report and no research, no academic institute for disaster nursing.

So then in Japan, disaster nursing academia and the practitioner and nursing academia developed the Society of Disaster Nursing, 1998. Then, so definition of disaster nursing, just like that. Already they define that disaster nursing involves a systematic and adaptive application of nursing, knowledge and skill for disaster risk reduction.

And that's emphasized, collaborate to interdisciplinary approach at that time. And I also launched the epi -nurse. That because I had, I feel the limitation of the, limitation of other academia. Now, only research, I cannot, I don't know nothing.

So I launched epi -nurse two, four work as energy or like a non -governmental, non -academic global citizen volunteer for not only an earthquake, but also future unexpected disaster. Yeah, then from a nursing perspective, the diastolic reduction, like this.

Yeah, you know, all of you know about the risk formula, but for us, anyway, hazard, all hazards, much hazard already and escape from any hazard and protect survival life and maintain health, especially for all vulnerable people.

And then we should rebuild the living environment, especially for wash issue and human, based on human basic needs. And so, as a result, the nursing occasion become like a fast aid mental health or secure food to the past.

Yes, and there are typically nursing on disaster risk reduction, because we need, always we need a map and technology to adapt to community recovery and disaster risk reduction. So we should learn, not only adapt, but co -create the technology also.

So I need collaborative work is required. So work not only as a nurse, but work for nurse and work with nursing. Yeah, this is one example of collaborative research and a

transitional approach with disaster risk management section and cross-sector management, because only nurse, if no nurse in the hospital, we cannot meet the community people.

Then, and yeah, actually in the, when at first I went, I go to the hospital, they have, yeah, yes, no casualty because no survival. So, but that's not correct. So I go to, of course, mobile clinic. Yeah, they, we can find out only symptom.

So when I go to shelter, yeah, I know we can meet anyway, survival. They have already many, many vulnerability and many, they own the life. So now this is, we cannot diagnose, diagnose, but they have a life.

So how we can care and when and how to know. So we have to think about that. And beforehand, we need that map. Like this, yeah. We, we at the time of an apartment earthquake, we can use smartphone and smartphone.

And I do realize every people, almost people, not connected to, even though not connected to broadband, but they know, they have a map, they have a map, but on use only for at the time, only for the coding.

But anyway, we can communicate with them. And later at the time, because 2G or not 3G, 2G or not connected. So based on that and other technology and just take some picture and send go to school using a broadband and send to Kathmandu.

And we can compare of what is the differences. Yeah, only Kathmandu, they have shelter and many facility and many inequity we can visualize. And yeah, this is this kind of work. And yeah, we need the data and the technology to our action.

Then, on the other hand, at the same time, the relief of Delgogoroka earthquake in 2018 flowed in western Japan. In fact, at the time, I'm on maternity leave, so I live in, I live in this flood area, but just come back from AMDRR in Mongolia, around battle.

Because my maternity leave, I suddenly have to go back to Japan and Mabi, and I still spend that time with my baby. On the other hand, then, but I have to work as a community, when I go to shelter, many old friends, and many of my friends and people stay there.

And I realize, if I'm a relief, even a first responder, I didn't know that daytime and nighttime are very different situations. Only a first responder can go just after disaster. So, and who is community?

Where is community? I didn't know, but I know, because in my hometown, I can meet the community, all the community, and I realize, because very near from my family, and my family also work for community and with community.

So, and we can go to shelter at night, and many, many health programs. So, I think need not disaster relief in daytime, but need only nighttime, or even only nighttime. So, and I use the traditional, in my house is become shelter, because my home, very, very traditional Japanese, traditional living life, that using well, well, and stove, wood stove also, and Japanese traditional, and 100 years before,

before in 100 years, my home is moved to the safe area, because 100 years ago, at the time, very hard floor, the same area. So, my house moved to the safe area, so my house become a very safe shelter.

And then, and also, another insight, I realize, because of the data of shelter, the number of shelter, and we realize, oh, they move to, move to go back, back to maybe town. Yeah, at first, by the response and the rescue, they make the people, survivor, to move to safe shelter, very, very far from their own hometown.

So, but community people want to go back to their home to see how damage. So, and this open data can, let me know about the survivor, always moving. And so, so my traditional mapping method is old, I thought.

So, I make the map for survivors to move somewhere. So, I made map, yeah, where is the safe toilet, where is the safe shelter, so that the survivor can go there. So, and then using the Google map and open storage map and combination, yeah, to adapt.

Yeah, at first, use open storage map, because the new and can distribute open storage map is very good. And then, for navigation, Google map is sometimes useful and sometimes not useful, because the Google map navigate is not, not counted about the disaster, disaster damage.

Then I realized that many survivors stay in this place, stay in their own house, not in shelter. And we have some yafu mapping, yafu people through mapping after that. I can understand, yeah, people through mapping understand mass gathering.

When survivors, where survivors evacuate. And if, now a day, we can use smartphone people data, but now a day, people, security also, we have to, how to manage the security and personal privacy also, now a challenge I thought.

And also, we published this data. Yeah, if we know where, which shelter is occupied or not occupied, very, very easy we can calculate before if we use open data. But so, and of course, at the time of the flood, not from, not for the earthquake, we can use the data that in Japan, many evacuation map is for earthquake.

So anyway, put the evacuation center, but at the time of the flood, some, most of the evacuation center in community is not, not available. So people have to go away. Yeah, this kind of, and the mindset stage is required at the time.

Anyway, and through our work and this kind of transition, not interdisciplinary collaboration, but the transdisciplinary co-creation is very important. And usually, the ship also be required, I thought, and because I collaborate with many students, nowadays, and many have a good idea and innovative idea, but they have.

And based on that, not only the RRL, but also how we say, how well-being, not where is community, but who is community is very important, I thought now. Yeah, and so I need,

I really want to think about open governance and open data and global, not international exchange, but global learning, co-learning is very important.

Yeah, my story is skipped, but as a result, I thought this kind of open governance mindset and co-creation mindset is very important, I thought, because I have an idea, because of survival and with survival, I can understand this kind of needs.

So, my research continuously and now the global collaboration with not only the RRL, but for community, global civic pride or city promotion, we need this kind of global challenge. So, also now academia, open governance, also now promote.

Thank you very much.

Thank you, everyone. Okay. Hi, my name is Deanna Dango. As I was introduced, I work at the World Bank. I'm a senior gender specialist. I've been working on gender-based violence for two, 20 years, two decades.

And it's so exciting to be here and thank you for inviting me. I'm married to electrical engineer and he's never invited me to any of his conferences. So it's great to have an applied anthropologist being invited to share with you a little bit about our work and how it intersects with disaster risk management.

So let me start with telling you that one in three women worldwide experience some type of violence in their lifetime and that can happen either at the hands of an intimate partner or it can happen at the hands of a stranger usually in the form of sexual violence.

So the point here is that before a disaster occurs, women are experiencing violence. And so what happens when a disaster in the onset of a disaster is that that violence can be exacerbated because of the risk factors that increase, but also new forms of violence can appear in the communities that we're working with.

We have data that shows that displacement increases violence against women between 40 and 55% in countries like Colombia and Liberia. Not necessarily related to disasters, but displacement occurs and this violence increases.

It not only increases in frequency, but it also increases in severity. And that's why we have to embed in both disaster preparedness, response and recovery this knowledge that violence is occurring and that women will need help during and after a disaster.

And so the good news is that we also have a lot of evidence that shows that data shows that violence against women and girls is preventable. And especially in disasters, there's several things that we can do.

So today I want to talk to you about how the World Bank works with governments across low and middle income countries to help them prepare and understand the intersection between violence against women and girls and disasters.

And to do this, we've created something called the Violence Against Women and Girls Resource Guide. And this resource guide is meant to be a very short resource guide that we can walk through with governments to help them understand the intersection between violence against women and girls and disasters.

We know that several of those involved in disaster response and recovery and rebuilding efforts are not gender based violence specialists, just like I'm not a civil engineer. And so what we want to do is work together with those at the front lines to have them understand what they can do to respond and prevent violence against women.

So this brief that hopefully I can share with anyone that's interested has a few sections that are important. And again, we tried to keep it really short because it's just an introduction conversation that we have with governments.

But the first thing is we highlight the key points, like the key points that I just made to you that violence is happening before the disaster and it can happen during the disaster. And some different types of violence can happen during disasters based on close living

quarters, based on the breakdown of social fabric, based on people losing their protection networks, based on police and first responders having to divert their attention to other things and leaving kind of a vacuum of police presence that could lead to more violence.

So we highlight why the violence might increase and then we hopefully through the resource guide show them what they can do to both prevent and respond. But before we get into what they can do, we talk about ethical and safety guidelines because there's a lot of ethics and safety guidelines that have to be taken into account when talking to survivors.

This is not something that you can go into a community, into a shelter and ask freely about how many women are experiencing violence. There are several methodologies that we have to take into account when talking to potential survivors so we don't do more harm and we don't introduce re-victimization into the lives of these survivors.

So after we talk with them about ethics and safety, we teach them to do a rapid situational analysis. What might be those points where violence can increase? Do the latrines have locks? Are our shelters well lit?

Are there spaces where women who might be experiencing intimate partner violence can be put away and far away from the potential perpetrator with blocking access to them? So some of those things we have in a really quick rapid situational analysis that's part of the resource guide.

And then we come into kind of the juicy part of the document which are the areas of what we can do both before, during and during the recovery of a disaster. And these are some examples of those interventions but we split them up into three levels.

have policy level recommendations, we have activities that can do it be done at the institutional level, and then we have activities to include the voices of So we always recommend that governments work on violence against women and girls.

using those three levels that are very important. So, for example, here are some examples. create protocols that recognize that violence against women increases, make sure that you're listening to the different voices of the community, and remind them that they're not just about women.

yourself that women are diverse right that there's women with disabilities also might have experienced trauma, but that they're a resource in understanding how this community in particular has dealt with gender -based violence in the past and integrating their knowledge into the present response.

So what we don't want to do is in the aftermath of a disaster have a bunch of UN agencies come in and create guidelines and protocols on how to respond to GBV that don't take into account any of the work that the local women's groups have done to respond to survivors of violence.

And we always want to include working with community -based organizations, not just those who provide services, but that are well -versed with what women are experiencing in the community and that can inform us of those potential risks in the future.

So this is another example of activities that we recommend after the onset of a disaster. Again, there's coordination mechanisms for gender -based violence that exist pre - disasters. We want to make sure that those involved in the recovery of a disaster integrate into those coordination mechanisms, recognize that they exist, instead of building parallel coordination mechanisms.

We want to recognize that GBV expertise can be helpful from designing shelters to informing those that are first responders on how to refer someone that shared that they've experienced violence to a trained service provider.

There's a lot of work that can be done by integrating a GBV expert into the team of a disaster risk response group. We also have, there's already guidelines. UNHCR has come up with shelter guidelines, camp guidelines.

There's a lot of resources on how to build women -friendly spaces after the disaster. So we want those to be integrated. Again, we don't expect those first responders to know about them, but if you integrate a GBV expert into your team, they'll know what those standards are and they can guide on those standards.

We also, there's other activities on distributing dignity kits and having outreach for women and girls is super important. So after a disaster, how can women and girls that are experiencing violence, how can they access support?

Who can they go report to and having this information distributed safely without the, throughout the community? Recognizing that violence against women and girls doesn't only have physical consequences.

It also has mental health consequences. So working with all of those who have the responsibility to provide both physical and mental health services and have them link up with survivors is very important.

So the idea here is that the government should recognize that GBV, gender -based violence response and prevention in a disaster requires a multi -sectoral response. So one of the things, and that everyone has a role to play, no matter what your profession is in this room, there is something that you can do.

So the resource guide also has a table with very kind of punctual activities for those designing camps, for those first responders, for those providing health services, so they can see themselves reflected in this response to violence against women and girls.

And those activities come with indicators. So we can always monitor and measure if what we're doing is being accomplished and what we hope to achieve to prevent and respond to violence against women and girls is being achieved.

So really kind of our ask of governments is that they initiate conversation on how gender -based violence can be responded to in disaster risk management and their preparedness activities. They innovate in what they integrate and really that they

intentionally invest and put resources and finances into building out the protocols, the standards needed for gender -based violence prevention and response after a disaster.

Thank you so much.

Thank you, Diana.

Next, we would like to invite the common sum. Yeah, this is our representation. Yeah,

Anyway, it's working. Thank you. Let me introduce myself. My name is Mohammad Lukman Ruhakin, so it is Arabic pronunciation, but I'm Indonesian. I work for JASA Theta One Public Corporation, a state -owned company by Indonesian government who manage five reformations in Indonesia, which are taught by Asahan Reformation.

Thank you. So, we have, we manage five river basins in Indonesia, which are one Toba Asan River Basin in North Sumatra, and then Sarayu Boko Nto, Chiratun Saluna, and Bongoan Solar River Basin in Central Java, and also Brantas River Basin in East Java.

So these are the, our resource management, water resource management that we have done. So, catchment areas management, river environmental management, water quality, and also water quantity management, water resource infrastructure management, also flood management.

And then we provide raw water for energy and also for industry, for also domestic and municipal, and also we have water treatment plan, and we made it seven tourism location and also environmental laboratory.

So we have the concept for the disaster, so four aspects of the concept, first of all intervention, which concept of instruction to behave, a chain carry damage mitigation, and also emergency measures.

And then the second one is emergency provision, which concept of emergency planning, training and exercise, and early warning and alert system. And the third one is event analysis, so we done the recommendation of the event, evaluation on emergency planning, and strengthening of resilience.

And the last one, we done the condition or recovery, so we done the construction and reconstruction, and also financing and prevention. So this is the concept that I talked before, that by utilize existing data such as rainfall and prediction, historical and real - time hydrological condition, and then we provide information about flood discharge, prediction analysis, predicted flood area and parameter warning alerts,

and then the output of this data is early warning and emergency response. So this information will be used as a reference for the operational activities and submitted to stakeholders, local government, and also local communities by social media and also the website.

And we also have a program for community empowerment, three things that we have already done. First of all is education and training, so routinely outreach communities activities regarding disasters and environmental sustainability, so conduct awareness campaigns about disaster risk and safety measures to be taken before, during, and after a disaster.

And then for the community involvement in Japanese language, we call it Cho -go -tang -gul, or guardian of the river dike. So we join with the local government and also local communities, the people who live around the river, so to guard the dike, and also empowering the former sign miners.

And for the utilization of the technology, we have done early warning system to cover remote areas with support from the local community, so you can see the picture that this simple technology that it will be given a sign when the water level is increasing, so people know about the danger of the water level.

And also we have a community involvement as a female community empowerment. We, especially in reforestation and conservation program. So we providing seeds, fertilizer

and other things where we collaborate with community and so they can do the plantation as well as city for the female.

This program run in especially in Toba Regency, Samosa Regency, Humbang -Hassun - Nutan Regency and not Tapanuli Regency in Seoul and not Sumatra. This is the female involvement in our program such as reforestation and conservation.

And the case event, I share the two event in last February. So in Saloona River flood event in central Java. So the flood is set in the Lucy River. Lucy River is one of the river in Saloona River. Was observed at Klambu Dam.

Klambu Dam is infrastructure upper the Lucy River. We manage the Klambu Dam. It was 1200 cubic meter per second and it can be, it bring to the broken deck. So almost three regencies was flooded at the time.

So this is the process of the disaster management. We provide kind of heavy machineries and then the community help us if they provide the manpower to give the emergency tag something like that. So the second one is Sadar and Brankal River flood event.

Sadar and Brankal is the tributaries of Brantas River in East Java. So heavy rainfall condition were observed from the Kalisadar automatic rainfall recorder. It was almost 175 millimeter. And then the disaster was about 950 cubic meter per second.

So it also, the deck is broken also and then the resident residential areas is flooded as well. So Brankal and Sadar is in Mojokarta city. So this is a process when we conduct the recovery of the event.

So, you know, Mojokarta city has a female mayor and she led the coordination between local government and social, sorry, local government and central government and also national disaster agency. And also the state owned company that involved in that area.

So we, our contribution is construction of emergency tax, reparation of local embankment and support other instance for social kind of measure action to affect that disaster victim. So this is the picture that the mayor that led to the coordination.

This is also open the public kitchens, I'm going to give the food for the refugees. So I think that also opportunity disaster may happen to anybody, any age and any gender. So let's hold together no discrimination with full understanding from our disaster resilient community.

Thank you very much.

Yeah, thank you very much. Thank you for nice presentation. So we still have some time for discussion. First, yeah, I would like to open the floor. Any questions or comments you have?

Thank you very much.

Do you have any comments or questions? So yeah, so any comments or questions for presenters? Okay, so please consider your questions. For first, yeah, my question to panelists is, yes, the opening, Mr.

Ban explained privacy issue at the Evacuation Shelter. But as comparison says, showed 30 years ago, we already experienced such a privacy issue in Kobe earthquake. But still, we are repeating. This is not a peninsula earthquake.

Yeah, such a shelter management. Yeah, it's a crucial issue. Why? Why we are repeating such a similar problem? And why, how we can resolve? So, I mean, from one by one.

Yeah, because I'm nervous, warm, I'm a citizen, so we observe. I can see everything, and I have insight and recognition already, and we understand what are the challenges now, but why we cannot make the solution or make the data for that.

And now, there's also another issue, communication. For communication, we can make my work many pictures also. But nowadays, the privacy issue and the security also, maybe we have to challenge more and more.

I think even though the annoying math, what are the challenges we should share about that? Yeah, because in the community, as an individual, I live on. So, I wonder, always, sometimes, often, at the time of disaster, I thought, they want to protect the data, or they want to protect the people, which is higher priority, I thought.

Thank you very much. So, not necessarily private issue, and not necessarily the shared issue. If you have any view, please.

Yeah, no, thank you so much. I think in the aftermath of a disaster, there's so many pressing needs. And that's why I think that having planning prior to a disaster that recognizes why privacy in separate areas for women, for example, are at some point even life -saving efforts, right, that have to be integrated.

And having that capacity building and understanding be kind of really embedded in taking on to those that are able to plan the shelters in the immediate aftermath of a disaster where there's so many pressing needs, but that it become on the top of their mind that one of those pressing needs is to keep, for example, women and girls safe, right?

And so I think we're still not there because we have to do a lot of transdisciplinary capacity building. So a civil engineer can tell me why it's important to have separate safe spaces for women and that that become part of their language and logic as well when they're imagining and constructing the shelters.

I think this session is amazing to raise awareness. I'm really honored to be here, but I think we're at probably the starting point for those conversations, but it's great that they're starting. And with government, we really try to have this multi -sectoral kind of approach to these things around privacy and planning of shelters.

And so hopefully we're on the road to doing this better.

Yeah, I guess if we talk about disaster, it's not about recovery, so it's also prevention, right? So I think the most important thing is coordination and also collaboration. The aspect from local government, also communities, and also private sectors, which is private sector, pure private sector, or just state -owned enterprise, and also the central government that has the regulation for the kind of disasters,

because in Indonesia, you know, a lot of disasters happen, kind of flood, and then landslide, and then, you know, volcanic eruption. And so I think the most important thing is collaboration and coordination.

Thank you very much.

Any other questions or comments do you have?

Thank you, thank you to all the speakers today. My question is, so when we try to connect different stakeholders at the time of the disaster, it's usually too late or very challenging. So we always say we need to have these interdisciplinary relationship collaboration before disaster happens.

And I think those investments and activities are increasing. My question to you is, is it enough at the moment?

Yeah, yeah, yeah, I think, yeah, actually now we have very good collaboration. Yeah, but the co -creation is much more important because, and that is the challenge is, you know, sometimes I become a researcher and sometimes I become, I collaborate with a government officer and I collaborate with the business.

Yeah, and I think that, yeah, in fact, I feel the motivation, the incentive for motivation is very different and planning duration is very different. Yeah, research, I want to research what they want to research.

And government people have already government plan, so they just follow the government plan and policy and stakeholder, maybe a stakeholder want to use the money for the donor also. So, but anyway, if they have same vision, they can co - collaborate and co -collaborate and co -work together, I thought.

So, but no vision, or sometimes I think many, what just they do, they want to do, I thought.

Yeah, thank you.

No, I mean, I think it's a starting point, but I think it has to be tied to financing for everyone's priorities, right? And sometimes in the aftermath of the disaster, we've done a great job of having these interagency coordination meetings, but then we fall back into our silos and we're like, well, we need the money for the food.

Who cares if the women have dignity kits to manage their menstrual hygiene needs, right? Because we're like, I'm the food person. And so I think we need intentional coordination, financing for everyone's priorities, so we don't fall in these traps of competing priorities, where I think that inter -institutional multisectoral coordination can often fail.

Yeah, if you say that it is, is it enough or no, I think it's never enough, it's inevitable. So we should improve, right? So from this year to another year to next year, it will increase the programs and also the kind of fun to collect, you know?

So I think it's never enough. So it can be an improvement for all this.

Thank you very much

Thank you for everything. I'm from city of Kraschke. Kraschke city belongs to the Okima prefecture, next to a Hyogo prefecture. I'd like to ask the one thing. Utilizing the positional information when the disaster happens, especially in your case, please give us some advice to utilize for emergency action after a big disaster.

Especially, I am a civil engineer. I'm treating a GIS, so could you give me some advice?

Yeah, because I, from the nurse perspective, because of this, the nursing insight is very important. And, yeah, sometimes open data, existing open data, it's not a pretty different map from after disaster recovery, a very different map.

Yeah. And in nursing perspective, we have insight and already observe. So, I want to plot our work. Yeah. So, if, yeah, because at the time of disaster relief, I think the plan of disaster recovery plan or disaster relief plan, we, sometimes, that is a strong obstacle for us, because at first we observe, always observe, and need that adaptive technology or demand -based innovation and the solution is required.

So, if we want to follow the solution, not solution, but we have to follow the disaster relief plan, we cannot do anything for community people. Sometimes, I feel. So, if this kind of, with a loop, observation -oriented and decision -making and action, our work like this.

So, I want to observe our observation to survive people and for survive people and plot and utilize, I want to.

I'm going to jump in with some of the ways that the community of violence against women and girls uses positional data, because we do. First, it's important to have a mapping of where services are before a disaster happens.

This means legal services, psychosocial services, health services, livelihood services, shelters for women that want to leave abusive relationships. If you have those data before a disaster, then hopefully you can update it after a disaster and see which of

those structures are still able to provide services and have the human resources in the capacity.

You're already able to quickly tell women which services that they know about are still available and which are not. If you have new services, add them to the map in a real-time kind of data use. I also think it's important for monitoring.

If you provide the community access to a way to, through data, show you hotspots for violence, then you can take action and create something like lighting in a place where a lot of unwanted sexual abuse is happening because there's no light and it's where the latrines are.

It's a simple fix of putting a light. I think using information and the positional use of data superposed on maps is super helpful for identifying hotspots and where services are available for survivors.

Yeah, I said before that we use the information technology to proceed the data as kind of a rainfall data, so you can predict the flooded area, and it's spread by social media. So, that's the answer.

Thank you.

Okay, thank you very much

Most time under.

We have to move.

Thank you very much.

Yeah, just pick up some keywords from discussion. So, yeah, for managing disaster, we may have some risk. We cannot cover, we may drop some important area, like gender - balanced, protecting vulnerable people or killing vulnerable people.

So, secondly, we need knowledge, and Deanna said compensation, compensation is important and awareness. Yeah, so in this area, transdisciplinary approach is quite important, how to communicate to people.

And thirdly, yeah, I would have some co -creation, conversant. So co -creation by multi - sector or multilevel, governmental community, and community, of course, with the Waki. Like my friends, Jogo, Jogotang, Jogotangan, Jogotangan, Jogotangan.

In reference, like...

Japanese, Japanese language, Japanese, not Japanese, not Japanese.

Okay. Yeah, and for such a co -creation, yeah, ICT definitely needed such a mapping or some ICT or GIS, et cetera. So this is another area for transdisciplinary approach is needed. Okay. Thank you very much indeed.

And yeah, I agree with you and this is just starting and we need some vision for all of us. We should create some vision that hopefully we can continue this discussion.