**SDG 6 Clean Water and Sanitation**

2023.09 ver.

**Introduction**

Good day wherever you are and today we will have another session on the intellect introductory lectures for youth engagement on 2030 Development Agenda and Sustainable Development Goals.

**Speaker**

And today's speaker will be Amanda Loeffen, she's the CEO of “Human Rights 2 Water”, it is a Swiss non-governmental organization. And the company her in this conversation will be myself, Lichia Yiu, representing Center for Socio-Economic Development.

Amanda has a very rich background and wide experience, she's a general manager business development executive in water, energy, and sustainable development. And she has worked extensively in Australasia which including the island states, Europe and North America.

The focus of her work is looking for sustainable solutions based on human rights to improve water governance worldwide but at the same time she works in the area of resilience to climate emergencies which is happening more and more. And of course, on top of it her perspective and lens are really from human rights and from the human rights indicators and for this purpose she also engaged in UNECE, people first PPP stakeholder engagement and develop the evaluation assessment tool which will hopefully soon be made public.

And she is also part of the work of human rights to water and the vision of this NGO is a world where all people realize the human rights to water and sanitation. And the mission is to use and share expert knowledge on how the human rights to water and sanitation should be integrated into law, policy and practices to realize safe and sustainable access to water and sanitation for all including the most vulnerable and marginalized. And with these few introductions remarks we will start for today's lecture.

**Lecture Overview**

And I would use a question-and-answer form to address the following content areas basically describing what is SDG 6, the current state of implementation the challenges and where young people can engage and contribute.

**Q1a**

So Amanda tell us **what is SDG 6 and why is this really so important.**

Well hi first of all, thanks for inviting me to talk today.

So SDG 6 is the Sustainable Development Goal on Clean Water and Sanitation that's water for drinking as well as all sorts of water for a healthy environment and also for waste water for access to toilets for people. And I'll go through that in more detail later on.

So it matches because there are more than two billion people around the world who don't have access to clean drinking water which means they get sick; they don't have time to work because they have to go and fetch water; or they may not have time for education because they're busy looking after the sick it's a really big problem. And there are three-quarters of a million without any basic water which is even more of a problem. On sanitation the numbers are even larger access to toilets is a really big issue and a lot of people just don't have any toilets at all, it's called open defecation. And the toilets that are in many places are very basic and shared and not close to home so it's something that really needs a lot of work.

**Q1b**

Yeah so it seems like the water issue is really also ties into human dignity because if you have to do open defecation and wild space which is dangerous or in a public space which is really not deep and dignified I think this indeed we need to work on this topic urgently and **what does the SDG 6 entails in terms of targets and indicators?**

**Goal 6: Ensure access to water and sanitation for all**

Now there have been a number of targets developed by the joint monitoring program which is a joint World Health Organization and UNICEF initiative and they have the responsibility from the UN. What U.N water group to monitor how different countries are reaching their targets the big the SDG 6 targets. And those targets have been set out there are six plus two transversal targets and I'm going to run through them very quickly with you just to give you a feel for what they are.

The first one Target 6.1 is on universal and equitable access to safe and affordable drinking water for all, and it's measured by the proportion of the population using safely managed drinking water services. Safely managed means that it's free from contamination from any bugs that make you sick that it's also close to home or in the home that it's tested to make sure that it's good quality. There's a lot of sub sections to that but that is the main target and it's surprising how many people don't have that access.

6.2 is access to adequate and equitable sanitation and hygiene for all and to end open defecation paying special attention to the needs of women and girls and those invulnerable situations. And the reason that women and girls are given special attention is because in a lot of countries where they don't have toilets in the home it's not very safe for women and girls to go out to the fields to effectively use them as a toilet because they feel embarrassed during the day. They go out during the night and then it's not very safe and they have all sorts of safety issues so there's a really big issue there. And also women and girls have different hygiene needs, especially in schools where there are often no separate toilets for girls or not enough or running water so it actually is preventing a lot of girls from going to school because they don't have easy access to toilets so one week of the month they stay at home when they have their periods.

So it actually is more of a problem for women and girls but it's a worldwide problem and the lack of hygiene and the lack of toilets leads to a lot of unnecessary deaths particularly of young children under five. So it because of the contaminated water and the lack of control over the way that the waste is treated and it's measured by the proportion of population using safely managed sanitation which means that their waste is properly treated and not going straight into the water the surface water or the rivers. And that there is a hand washing facility with soap and water for increased hygiene so really basic need.

Then we get into 6.3 to 6.6 or more around water management but equally important.

6.3 around water quality to reduce pollution, eliminate dumping and minimizing release of hazardous chemicals and materials. You can imagine that if you are releasing those products into the river systems or the lakes or the aquifers then that's going to create a real problem with access to clean water for drinking or for personal use and it's ecologically a disaster too. So the it's measured by the proportion of wastewater that's safely treated and a proportion of bodies of water with good ambient water quality, this is a target that's currently not 100% measured everywhere but there's a lot of work going on to try and achieve that.

6.4 is to substantially increase water use efficiency across all sectors and ensure sustainable withdrawals and supply of fresh water to address water scarcity and substantially reduce the number of people suffering from water scarcity.

So you can imagine in hot countries or areas where there are often droughts water scarcity is becoming a bigger and bigger problem with climate change. And the sustainable use and efficient use of water is going to mean that the water that is available can be used for more people. So the indicators are around the change in water use sufficiency over time so how much water each person uses and secondly the level of water stress and fresh water withdrawal as a proportion of available fresh water resources so that it was decided as a standard that would measure how much water is being taken out relative to how much water there is.

6.5 is a target for implementing integrated water resource management at all levels including transboundary cooperation. So IWRM as it is called is the process of managing the whole water resource as a river basin not just looking at one particular point or one particular use but looking at all the uses for the water and the health of the river system and also the process includes stakeholder engagement with everybody that lives in that river basin. And that's why it can be trans-boundary because often rivers run from one country to another or between two countries and so there needs to be cooperation to make sure that the people downstream also have enough water of the right quality not just the first ones to get the water coming through. And the indicators are number 1 the degree of IWRM management implementation so is there an IWEM process.

And number 2 the proportion of transboundary basin area that has an operational arrangement for water cooperation which could be through groups of people that meet on a regular basis to discuss the data that's available and how they should be managing.

The last technical Target 6.6 is around protection and restoration of water-related ecosystems mountains, forests, wetlands, rivers, aquifers and lakes. So this is the ecosystems is the one that's often forgotten about because we're worried about people and ourselves of course we're very selfish but actually the environment is really important if we want to have a sustainable solution and if we want to have to preserve that for our grandchildren and their children and their grandchildren we need to protect what we have or there will be any more clean drinking water for future generations. And all of it is very connected you need to manage the whole of the ecosystem in order to protect the quality of our water and that's measured by the extent of water related ecosystems over time.

We also have two Targets 6.a and 6.b which are around the processes involved in helping to improve access to water and sanitation. 6.a is around expanding international cooperation and capacity building support to developing countries in water and sanitation related activities and programs and including topics such as water harvesting desalination, water efficiency, wastewater treatment, recycling and reuse technologies. So in other words educating people about improved ways of managing their water conserving water, protecting water quality and using other sources such as the rain water or desalination to find sufficient for everybody.

6.a.1 is the target which is counted as the amount of water and sanitation related Official Development Assistance (ODA), which is effectively the resources that are going into this effort and it's at the moment it's the best way of measuring this. It doesn't explain exactly what's happening but these are very high level national targets so it's a step in the right direction.

Secondly we have 6.b which is supporting and strengthening the participation of local communities and improving water and sanitation management and it's measured by the proportion of local administrative use units with established and operational policies and procedures with participation of local communities in water and sanitation management.

So if you think about the SDG 6 and the goals and the number of people that have access which is globally around the 90%, the last 10 percent are the ones in the hard to reach areas in the marginalized areas and they're in rural or mountainous areas where there isn't easy access to piped water supply or centralized sewage systems. And so these people need to find cost-effective solutions that suit their purposes they can't wait for another 10 years or 20 years until there's sufficient money to build massive infrastructure so there needs to be supported to involve the local communities in finding solutions that are best for them that can happen as quickly as possible.

And this is a really important effort that's going on and in my view not enough of that is happening at the moment.

**Q2**

Yeah Amanda I think you just gave us a very rich overview based on the target indicator and particularly struck by the Target 6.a and 6.b these are the sort of means for implementation to achieve the results that we would like to see what in your view **how much progress have we been able to make even though you commented on the 6.b and saying that we there's still a great room or distance to cover so could you tell us a little bit more about the rest of the targets.**

I can so I've put in this picture because I like it it's actually from 2017 and so although it's already five years old. It demonstrated that at that time we had 2.2 billion people without water and 4.2 billion without taking managed sanitation. I'll let you read these in your own time but you can see the numbers are huge, three billion without basic hand washing; lack of funding to meet water and sanitation targets; two and five healthcare facilities with no soap and water; and 700 million people could be displaced because of water scarcity by 2030.

**Progress**

If we look at the progress that's happened since that time you can see that there's definitely been an improvement, the blue chart is water and if you look at the top light colored blue basic drinking water which means it's not necessarily at the home, it's not necessarily tested to the highest quality but there is water available so it could be surface water. For example, straight from the river in 2015 65% of people had access and it's now up to 78% so that's an improvement safely managed is much lower so high quality clean drinking water that's safely managed delivered by pipe to the house or very close was 36 and it's now something between 39 and 44.

So you can see that at the current trajectory we're not going to get there by 2030, the increase needs to be 12 folds from today so from 2020 to get to the targets in 2030 and fourfold for basic level.

And the same story is true around sanitation, 80 percent or 84 today roughly have access to toilets but very very basic if we look at safely managed the numbers are in the high 20s and we need to have 20 times increase to reach 100% by 2030. It's not easily achievable in the next eight years if you remember this is the 2030 Agenda.

So everything is aimed towards achieving 100% by 2030.

Basic hygiene which is around hand washing has been less measured in a lot of countries it's there's not been as many data points and not every country has information on this but the information that we do have indicates that it's around the high 30s and there's a 42 multiplier to reach 100%. So there's been a little bit of progress but there is a lot needed to be done. And if you think about what life must be like for people that don't have clean drinking water that their children are sick they don't really know why they constantly have diarrhea. They spend a lot of their time fetching water especially the women and girls and then with respect to toilets I mean dirty toilets or no toilets or toilets they have to share with the rest of the community, it's not a very nice lifestyle to have. And a lot needs to be done in this area.

**Q3**

Yeah the yes progress being made but there's not enough and I was looking at the necessary so the speed in order to achieve the final goal by 2030, the sanitation is a for me is staggering to think that one of the main source of public health hazard is from sanitation and the general sanitation sort of a treatment of the waste. So I'm very concerned and I wonder what has been the challenges preventing progress because we assume water is somehow god's giving and is available and it's everywhere but it's not true. At the same time of course we can forget about the desert and the forest station but also sanitation building a latrine is some effort that has been studied by the World Health Organization in the 70s and 80s trying to sort of build simple electrons.

**So what are the problems in terms of implementing SDG 6?**

**Challenges**

Well I have to say that it's there's not one problem and they're going to be different problems in different areas but if I were to try and think about the main ones that exist it's the first one is what I mentioned earlier in that the people that don't have access to wood or toilets are the ones in the difficult to reach areas or they have lack of resources to be able to supply them.

And so it's the easy of central urban people, middle class that can afford to pay those people have access, it's the ones that are in that are living in poverty that live in remote areas and where it's the landscape is more difficult to or more expensive to manage.

And then on top of that I think there's also a lack of understanding or that you know in rural areas especially that just because the water looks clean it isn't necessarily clean and there could be bugs in it or there could be contaminants and as the aquifer levels are dropping which they are through over extraction, through the problems of just general water scarcity and also some of the water is getting contaminated by aggression from the sea because the levels drop so low so the water itself is more contaminated and more difficult to reach.

Then on top of that we have we have population and people, and we have a growing population that needs more that demands more we have fragile states where there is unrest and things that are a bit broken so it makes it very difficult to sort out even basic problems like water supply.

In some places there's a lack of political will, they know that they need to do something about it at the government level but it's not the sexy topic like building roads and airports and showing infrastructure. It's actually a bit something that I want to talk about it's about building toilets and clean water and it isn't something that priority list. (On top of priority list) Yeah it really isn't and that it's exacerbated by the turnover room for politicians who may be only there for four years they want to achieve something showy in the time that they're available so that is an issue.

And then not least important is climate risk because we are taking one step forward and two steps back in some places you’re your creating opportunities to access water but there's less of it because the aquifers are dropping and there's more scarcity and the temperatures are increasing so it's not going to be easy to solve

**Q4**

Yeah and I think the ecosystem approach that you earlier mentioned it is indeed very important because on the one hand you have areas become drier and drier and less rainfall and another which is suffering from flooding.

So we do have a problem of distribution and I think the innovative solutions also need to be found in order to address this. Otherwise it's too much or too little just so we're not moving here sort of at the right direction in terms of ensuring everybody has drinking water. So in this regard I'm wondering **whether there's some good examples in practice that you in terms of SDG 6** that you can tell us another whole story but some summary fashion and maybe young people can go and look at it and also example in terms of how young people can get engaged in dealing with the water scarcity and water as a human right topic

**Youth Participation**

I have two suggestions.

I'm obviously talking about what I know and experience but we have a youth platform on our website and here is the link, it includes a lot of the water networks that are around the world like the World's Youth Parliament on water, the SWA Youth Parliament, Youth the Swiss Water, Association Youth. The contacts are all on our website so depending on where you live and what you want to do, you may want to have a look at that you're very welcome to become a member of our youth platform either as an individual as a member of human rights water or as an as a youth network as a member of our youth platform so please have a look at our membership page.

We have a number webinars that we what we organize at least one or two a year are specifically for young people our last one was this February which was around how to find resources for youth efforts in water and sanitation.

And we invited a number of youth network leaders to talk about what they're doing and also some funding agencies to talk about how they could go about finding resources.

And the last minute point here is that if you do be decided you'd like to become a member of our organization, we are looking for country coordinators that would like to run training in their own countries and it's currently a voluntary effort because we're not highly resourced but we do offer education support resources in terms of materials and we also have a global community of practice that meets on a regular basis so you can talk to other people doing the same work. And our next meeting I'm going to just move to the next slide.

Oh no it's not yet, I'll let you ask me the next question first, Lichia.

**Q5**

I'm very impressive with this is a networking approach and peer-to-peer support and learning and I think it's a fantastic effort. So could you just go ahead and tell us **what do you think and what you're going to do as a next move?**

**Youth Participation**

Sure well so this is just an idea and it might will either appeal to you or not.

But I've recently got involved in some work on citizen science and that is that is a way of collecting data through local citizens that is otherwise not going to be available basically. And there's one that I've come across called **“MiniSASS”** and we want to use this through our country coordinator program it's basically, it's freely available. You use it's like an app, you go to a river and you have a look and see if you can recognize what bugs and animals are in the river and you have a chance to compare them to. And effectively the quality of the water is related to the number and variety of species that live in the river so it's a really simple system to use.They give you a chart to identify their little creatures their things like mayflies and bugs and so on and you go to the river you with your school with your youth community, with your friends whoever you want to engage with and you can take water samples have a look and see what you can find and then the beauty of that is that it's uploaded to Google Maps and then your river has given is given a code on the water quality as a result of your work. So your able to actually do something really valuable that contributes to the global understanding of water quality which is one of the key issues that we're trying to deal with.

So we're going to be starting that with the World Water Quality Alliance which is the UN environment initiative to create more local water forums and we're doing it as a kind of joint venture with our country coordinators. And so we're doing a training in July on that and I would welcome anyone to get in touch with us if they would like to participate and set up their own local water forum, become a member and learn a little bit more from us and also talk to other people around the world who are doing the same kind of thing so it would all be very helpful and fun I think a bit of a learning.

Well this is very exciting and I actually like it I like it very much because I could imagine when the teachings of biology course or environment course, teachers and a group of students could go out and do this as a learning exercise. At the same time contributing their findings to a global mapping in terms of the state of the health of our water system. So congratulations for coming up with this very innovative idea.

I didn't invent it, I'm just borrowing the idea but I liked it so much I think it's a great exercise I like it very much yeah.

So with that I think we are coming closer to our today's conversation and thank you very much Amanda for a very rich in a very short time to explain a very complex topic about water. And I think what is important for us to know is that water is not just concerning individual consumptions but its availability and access affordability for everyone.