



European Union

# Water and Beyond

EU transformative approaches  
for international partnerships



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## Session 5 - With knowledge and skills: water as the engine for economic development and jobs

### Content

<b>Session 5 - With knowledge and skills: water as the engine for economic development and jobs</b> .....	<b>2</b>
<b>Introduction</b> .....	<b>2</b>
• Michela Miletto, WWAP Coordinator, the United Nations Educational, Scientific and Cultural Organization (UNESCO) .....	3
• Moshood Tijani, African Ministers' Council on Water (AMCOW) .....	5
<b>Pool:</b> .....	<b>7</b>
<b>Panel discussion</b> .....	<b>8</b>
• Pieter Hoekstra and Erna van der Werff, Project Coordinators , Platform of Vocational Excellence Water .....	8
• Antonella Vagliente, General Director, Young Water Solutions (YWS) .....	9
• Almotaz Abadi, Managing Director, Union for the Mediterranean (UFM) Secretariat responsible on the Water Policies and Development .....	11
• César Carmona Moreno, Senior Expert, Joint Research Centre (JRC) .....	12
<b>Parallel break-out groups sessions on key thematic issues</b> .....	<b>13</b>
• <b>Parallel Breakout Group 1 : Policy (Note taker: Eli Puerta)</b> .....	<b>13</b>
• <b>Parallel Breakout Group 2: Practices</b> .....	<b>14</b>
• Q&A from zoom: .....	17

## Session 5 - With knowledge and skills: water as the engine for economic development and jobs

### Pillar 3: EU International Partnership Priority on 'Alliances for Sustainable Growth and Jobs'

12:30 - 14:00

307 participants

#### Introduction

Facilitators: Murray Biedler, Project Officer, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and Lesha Witmer, Steering Committee, Women for Water Partnership (WfWP)

Chris Burns: today's session 5 is about transformative partnerships the EU is developing around the world, this is why we have people from all over the world during these intense 4 days. Together we are looking for solutions for water to play a key role in development, in creating jobs, in saving the planet, and also our health in the process. Yesterday, we talked a lot about finance, today, we are focusing on jobs, on employment with two main sessions as well as two break-out sessions. We will have a focus on water, development, job creations, Green Deal Alliance, and sanitation.

*Chris Burns also put the accent on the different networking solutions, giving an explanation on how to book meetings, he reminds participants to use slack and the hashtag #WaterandBeyond on social media to cast the message wider.*

Chris Burns: let's go with today's session 5, "With Knowledge and Skills: Water as the Engine for Economic Development and Jobs" which is connected to pillar 3 "EU International Partnership Priority on 'Alliances for Sustainable Growth and Jobs'".

*Chris Burns explains the structure of the session. Then he gives the floor to the two moderators of the session.*

*Murray Biedler recaps the structure and minutes of the session.*

*Lesha Witmer presents the first Keynote speaker, Michela Miletto. She explains how she is grateful for the work Michela has done for disaggregated data and indicators. She gives the floor to Michela for the first keynote of the day.*

### **Keynote on water and jobs by:**

- **Michela Miletto, WWAP Coordinator, the United Nations Educational, Scientific and Cultural Organization (UNESCO)**

My presentation will focus on discussing the link between water and jobs and its domino effect. Three out of four jobs that make up the entire global workforce are water-dependent. This is one of the main findings of the 2016 edition of the United Nations World Water Development Report; there is a clear connection between water and employment.

Jobs in water-dependent sectors make up for approximately 78% of the global workforce, 42% of which in heavily water-dependent jobs. These jobs have a high direct dependency on water like agriculture, mining, or the supply in sanitation and many types of power generation. 36% of the global workforce works in moderately water-dependent jobs, which means jobs with indirect dependency on water like construction, recreation, transportation, healthcare, and most of manufactory and transformation industries.

Water is an essential element of our economy and a major source for job creation. The scarcity and disruption in the supply of freshwater limits the growth potential for decent high-quality jobs across the economy. The lack of water due to climatic extremes could jeopardize the productivity in different sectors, in particular, agriculture and livestock for many countries. Decreasing productivity means food insecurity which brings economic insecurity and unemployment especially for young generations, which amplifies the domestic and global risks including social exclusion, discrimination, gender and age inequalities which can jeopardize social stability. In this situation, migration becomes a necessity, because it is the only way to adapt to climate-induced environmental stresses. The magnitude of future migration fluxes will be related, among others, to the number of decent jobs created including water-dependent jobs, especially.

Studies show the important human resources gap in the water sector, especially in the water services. Across OECD countries in particular, the gap is increasing due to an aging workforce and declining interest. On the other hand, the need for these jobs is very high. Reliable information concerning the current state, quality-quantity, and the future scenarios of water resources is often lacking. Data are lacking and especially disaggregating data concerning both water and employment domains which represents a difficult challenge. There is also evidence that the capacity of government and organizations, institutions are weak in

many countries and need to be strengthened and regenerated to improve water-related employment opportunities.

There is also a larger gap in labor market participation between women and men which is practically unchanged since 1995. In many parts of the world, women occupy undervalued and low-paid jobs and their skills are often unpaid and unrecognized. And now, in the face of the COVID pandemic situation, there is sad evidence that women's burdens have been even more increased and worsened.

Water investment plays a role in generating and sustaining employment opportunities across all water-dependent sectors. It also has a multiplier effect as this unlocks the potential for employment creation in all sectors. Targeting investment in water supply and sanitation is not only key to reach economic growth, but also to reach poverty alleviation goals more effectively and rapidly.

The allocation of water resources to economic sectors will largely dictate the growth potential for jobs. Adaptation to climate change can generate new employment opportunities, especially in research and development sectors or agriculture and water-dependent industries. Innovation in a greener economy with new technology processes and practices like wastewater recycling, renewable energies, climate change adaptation, and water use efficiency can create new decent jobs. Therefore learning new skills and capacities is key. This may improve the resilience of the community individuals and reduce the need to migrate for the young generation especially.

Lesha Witmer: I think there are two things that are very interesting in what you said. We have never consciously revisited water development reports. It is great to have a great job done on that. The other interesting point is to stress the skills and the capacity development. We are all worried that the SDG6 and the related water targets would not be met if we don't act. It is not only about creating new jobs, but also getting more capacity to reach SDGs. Would you like to comment on that a little bit?

Michela Miletto: it is important to focus on that and to concentrate on the framework and to take this into consideration in one of the action pillars. That is why we need data and more capacity and provide a strengthening of specific skills. It is also important to realize that we are all interconnected in this world. During the COVID pandemic, we have seen very well how water is connected with different dimensions as health, economic or social dimensions. If

we don't have the ability to face challenges, it will be difficult to go ahead and reach the SDG6 goals in time by 2030. First of all, we must look at capacity in terms of connecting the knowledge to policies because we need an informed decision. We have to build beneath these statements; the only construction we can do is to improve knowledge.

Lesha Witmer: what you are also saying to our friends from the EU Commission and other professionals in the field is if you design your programs, make sure that you look horizontally. Think of the impact on education, employment; if you get more formal jobs in the informal economy, your GDP goes up so it is a great incentive. We have to look at the horizontal consequences of what we want to do; both the impact of water on the jobs, but also how we can make sure that in the policies, this element always shows up and not as an afterthought.

Michela Miletto: this is exactly what the agenda 2030 is teaching us, to make connections among different dimensions.

*Murray Biedler presents the next speaker.*

- **Moshood Tijani, African Ministers' Council on Water (AMCOW)**

I'm looking at the perspective for capacity building in the water sector in Africa. We know that water permeates all sectors of life, and sustains all forms of life, livelihoods, and well-being. Water is a component of national development that creates and maintains jobs in all sectors of the economy. A lot of economic sectors are water-dependent; transport and construction, agriculture production, fisheries and forestry, resource/ extractive industries, energy generation, water treatment/ recycling. To put this in a nutshell, half of the global workforce is employed in water and natural resource-dependent industries. Human capacity development is composed of two elements; education and training. Education concerns knowledge and information and training concerns skills and competencies. These elements are enabling environments and organizational incentives. This leads to effective performance and service delivery. In the water sector, we need institutional and policy strengthening and human resources capacity development. This is how we can have sustainable groundwater resource development management.

It means that there is a need for investments in the water sector; this will generate a lot of jobs. The benefits are numerous:

- a) improved water supply and sanitation contributes to poverty eradication, economic well-being, and livelihood of the population;
- b) improved water resources management boosts human capital development and countries economic growth;
- c) improved water resources management also improves water supply for agriculture and enhances food security;

- d) improved water resources management and water supply contribute to increased industrial production and productivity.

The question is how to improve water supply, sanitation, and water resources management without capacity building and training and public and private investments. Therefore, political will and recognition of investments in capacity and infrastructural development in the water sector must be seen as good business.

In terms of capacity building, AMCOW sees 6 key areas:

- a) curriculum review and trainers' capacity building;
- b) technology-driving and transformative learning;
- c) investment in research and innovation in HEIs;
- d) investment in infrastructure and adaptable technology;
- e) inclusive gender and youth participation in the water sector;
- f) strengthening the capacity of policy/ decision-makers.

This is why investments in this sector are important. The mission of the AMCOW is to support the member states to develop, manage and utilize water resources to assure water, food, and energy security in Africa.

The contribution to capacity building is based on three broad working thematic focuses of the action groups in respect to groundwater management:

- a. policy and institutional systems strengthening;
- b. tools and means of technical solutions;
- c. capacity building towards sustainable groundwater management.

The action groups are divided into six subgroups:

- 1. policy, governance, and institutional strengthening;
- 2. country support management tools;
- 3. capacity strengthening and drilling professionalism;
- 4. knowledge and information sharing;
- 5. resources assessment and aquifer mapping;
- 6. private-public finance.

A successful capacity development implies effective human capability and better institutions that ensure sustainable management of groundwater resources.

In terms of moving forward, there are some recommendations:

- a) National Water Education and International cooperation in co-creation of water and groundwater knowledge;
- b) education and capacity building with respect to the surface and groundwater resilience under climate change at different education levels;
- c) promoting open peer-to-peer learning between national governments in order to improve capacities and education on water resources in Africa;
- d) increasing financing of research collaboration in groundwater and surface data sharing in Africa;



- e) remote e-learning tools especially in this period with the pandemic;
- f) encouraging multi-disciplinary training involving water-related practitioners;
- g) creation of short courses on water management for policy-makers and senior managers.

What is key is collaboration; we need international partners. Collaboration is the core of SDG6; expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities in programs in our case in Africa. The policy recommendations are financing of knowledge base, all level involvement, partnership and support, transformational and technology transfer.

Murray Biedler: I appreciate that you focus on the identification of multi-sectoral needs in terms of water resources management but also agricultural sectors, food security, transport, education, and distance learning. You identify the needs, the public health issues linked to the pandemic we are facing. Can you comment on that aspect?

Moshood Tijani: in the context of the pandemic, the e-learning program should be one of the focus of the capacity building. Of course, it is essential to also have face to face learning, practical learning, but when using alternative e-learning, we can reach as many people as possible, which is our objective in Africa. This is a cost-effective way of training. Of course, we need the support of international development partners. That permits to create job and we create development.

*Video: Human Capacity Development in Africa's Water Sector*

*More than a quarter of the population in Africa does not have sufficient access to safe water and sanitation. In some critical areas, it concerns more than half of the population. Years of work have improved the delivery, increased the training, and raised financing for the sector. All these elements are important to provide sustainable access to water and sanitation. But the most difficult challenge remains; there is no reliable information on what and how large these gaps in human capacities are. That is why a human capacity program was created in 2013. This mission was given to Nepal Water Centers of Excellence. They are universities and research institutions in different regions of Africa that are identifying and addressing the main gaps in human capacity with the help of the European Union and UNESCO. This program's aim is to use the resources correctly in order to work more effectively towards access to water and sanitation in the different countries.*

#### Pool:

1. Which key challenges or objectives are the most important? (MCQ)
  - Knowledge & Education as a key link to capacity development for creating sustainable employment: 66%
  - Youth can tackle WASH challenges & create viable employment at the community level: 21%
  - Water and sanitation are key for economic development, jobs, and income generation activities: 65%



- Better coordination between sector industry needs & education of professionals and technicians: 46%
- Government must set policy frameworks and stimulate more jobs and youth opportunities: 43%
- Governance for transparent and open access to the collections and sharing of data and information: 37%

## Panel discussion

- **Pieter Hoekstra and Erna van der Werff, Project Coordinators , Platform of Vocational Excellence Water**

Pieter Hoekstra: we will present to you our educational project on vocational excellence in the water sector. We will share the outcomes of the project so far, but we also need your help. If you are interested to be a part of our project, meet us during the BO groups session.

If we want to educate the future water sector professionals to the emerging water sector needs, we need to develop certain skills and attitudes from vocational students in water-related education. International experiences can strengthen these skills and competencies. We need to broaden our horizons and learn from other countries and regions. The lessons learned in the world can help us with the challenges that we face. Our partners work together to discuss and this is how the collaboration has begun. There are challenges, like periods of drought and an aging workforce. Our challenge is to make sure that the current workforce keeps up with the rapid innovations in the sector, and that the youth are interested in working in the water sector.

Erna van der Werff: we believe that vocational education needs a strong position and regional innovation ecosystems in the water sector in Europe to strengthen the sector. Our first step was to create a close understanding of the skills ecosystem of the water sector in each country and gaining knowledge about economical and societal challenges and needs. By making a context scan of each country, we created a strong basis to build the centers of vocational excellence. Our project is designed to create the infrastructure needed to embed vocational excellence in the sector in Europe. This is the ground for future curriculum development. We unite the actors under the one umbrella of our platform of vocational excellence. We are currently jointly creating this upscaling strategy. What we see coming is hybrid teachers, that is teachers that are teaching students in the classroom, but also working in companies or water boards and industries. We also want to enhance the reputation of the water sector, increase the number of students and organize water weeks for students and international summer schools

for students. Our big ambition is to create educational material on a digital EU wide platform. We want to attract students and create a kind of library of experiences for them. We are looking for partners beyond Europe so if you are interested, meet us in the break-out group.

Pieter Hoekstra: you can see the map with our partners in Europe. We are covering a big part of Europe, but we would like to have more partners in Europe and outside Europe. We are facing challenges in each region with droughts, flooding, freshwater. In each region, the solution is different; there is no possibility that one solution fits all. We are in continuous dialog with the five regions to identify lessons learned, opportunities for collaboration, sharing resources, and creating new opportunities among sectors, making the whole more than the sum of its parts. The different regions could benefit from the experiences of other regions.

Murray Biedler: your presentation was very interesting as it places a very strong emphasis on technical vocational education and training. It is an interesting trend to follow. It is also interesting that you told us about linking up with the private sector and industry for training, etc. as we could see in the poll results that it is clearly an issue.

- **Antonella Vagliente, General Director, Young Water Solutions (YWS)**

I will explain to you what we do in order to create more decent jobs. Young Water Solutions is an international NGO based in Brussels that empowers young people in low and middle-income countries to implement solutions to water and sanitation issues in their communities. For us, young people are key stakeholders not only when it comes to decision making, but also when it comes to empowerment or for concrete solutions on the ground. That is what we are doing since 2015. In 2017 we created the Young Water Fellowship program. It is an incubation program that enables conditions for young creative entrepreneurs to evaluate, to pilot their solutions, to create social business results. It is a one-year support program that provides training mentorship and funding to these entrepreneurs.

There is an application to enter the program and then we select some of them to work with them a whole year and we invite them to a fully funded start-up training so they can shape their business model. This is not only business training, even if the content is based on business to show them how to have long-term strategies, how to create employment and to have their products or services delivered to their communities. We also work on integrated water resources management, we help our entrepreneurs to have an integrated perspective on water, to have a gender approach to their businesses. This capacity building is key to make sure that social businesses are going to help with respecting SDGs.

We know that technology and business support is not enough to launch a business so we provide them with funding of around 5.000 euros each so they can try their solutions. We match them with mentors according to their needs and connect them with other enablers that can take them further after their pilot.

*She shows pictures of their training and the successful project in Brazil with solar-panels filters.*

We have had 3 editions of this program, now our focus is on a regional and national level. We have implemented this program in East Africa, Senegal and Latin America thanks to our partners. We have supported 39 young entrepreneurs from 22 countries and with their projects they have impacted over 30.000 people with their small-scale projects. I will explain two cases.

The first one is a girl from Rwanda from our first edition in 2017. She was only 20 years old. She had created a small water kiosk, that she had to close due to issues with local authorities. She came to us with the idea of providing safe drinking water to rural and urban communities in Rwanda. She got 5.000 euros for her pilot project developed in 2018. Less than 3 years later, she has a business that gives employment to 20 people permanently and 15 other people on a part-time basis. She has not only a water kiosk, but she also has filters that she sells to urban areas; she gets water to schools. She was able to reach more than 50.000 people. It is a perfect example of how investing not only in big infrastructures and breakthrough technologies, but also local initiatives with social business perspectives led by local people, in this case, young people, can have a huge impact when it comes to job creations. Not all entrepreneurs can have this impact in such a short time, but most of them can engage people at community level.

The second example is a more recent one, it is a young man from Burundi. He had started to make soap and hygiene products and with only 3.000 euros, he got a certificate to sell his products at the market and on farms. He is now employing six people permanently and he produces over 3.500 bars of soap weekly that he sells to 2.300 people living in rural communities. He concentrates on disabled people as he has a disability himself.

Murray Biedler: nice presentation and it is interesting to describe how providing opportunities in terms of training and seed funding can have a real impact on a number of beneficiaries. And the youth have the energy and the capacity to do so.

- **Almotaz Abadi, Managing Director, Union for the Mediterranean (UFM) Secretariat responsible on the Water Policies and Development**

I will speak to you about a policy document that has been agreed upon at political and technical level in the Mediterranean area since 2017. The main objective is to look at the water as a catalyzer for a corporation economic development because the soul of our work is the enhancing of the regional cooperation as well as enhancing social-economic realities of citizens in the Mediterranean. We are 42 member states, all of the EU countries and the 15 countries from the South and East of the Mediterranean.

The study was focused on the angle related to opportunity and challenge for the Mediterranean youth. In the MENA region, there are more than 2 million young people (aged 18-24), however, more than 30% of this youth population is unemployed. The crisis related to climate change is one of the hotspots and we also faced issues due to the COVID-19 pandemic. The European Union has stimulus packages that support jobs and the water sector with the onset of COVID-19 including economic recovery packages, the WASH sector, and also to ensure that water-related projects and WASH stay a priority at political level in order to keep water running for hospitals. In the study there were also aspects related to data science for water conservation and development on water usages and we discussed how young people should be engaged on social platforms and water use associations to achieve the goals.

The study had also brought the youth perception, for water jobs and future skills required for water, technical skills included in the package, and some other skills that are lacking like creativity, interpersonal skills, ability to work in groups, leadership, communication, languages. Water can be seen as a catalyzer for cooperation. You must focus on the dimension of bringing young people into the loop to be able to speak the same language as those international actors, including the funding mechanism.

Some takeaways: areas of entrepreneurship acceleration in 2020 include technology-based startups as well as those focused on agricultural production with the importance of circular economy. The role of systems thinking, and understanding the interconnections between water and other interconnected sectors were highlighted as an important skill set for entering the water sector job market. The role of volunteering and community engagement was highlighted as important to encourage youth who are building the required water sector job skills. Some political recommendations have also been developed.

- **César Carmona Moreno, Senior Expert, Joint Research Centre (JRC)**

I will explain to you the work that we are doing in developing countries in Africa. I will present the concepts of NEXUS and the development of capacities as a way of supporting sustainable economic development and creating jobs.

Amongst the most important challenges for development and conception, we can find the identification of the appropriate and timely adaptation measures in Africa. Cooperation between different sectors is an obligation. That's why we must establish intersectoral links to meet sustainable development goals. This is the case for transboundary basins where a balance is needed between all sectors. There is also a balance to maintain between the countries that share these resources.

The process is very practical, based on the reality on the ground. First of all, an evaluation phase of the current situation in the country or transboundary basins. This goes hand in hand with the development priorities in the area. Understanding interactions across sectors is the second step according to feedbacks from different sectors. At this step, we talk about concrete cooperations or compromises to be made in the case of competing objectives. This leads to the next phase, the NEXUS dialogues. The dialogues are led by political decision-makers and different actors from the civil society with concrete scenario development which will be discussed. We must establish strategic developments but also the scheduling of investments as development measures.

*He shows a slide with the transboundary basins they work on.*

Studies are led in close cooperation with excellence centers in Africa and our colleagues from UNESCO for aspects linked to capacity development. I will talk to you about digitalization and green transition. It is important to develop skills and knowledge and to analyze and share data with all the actors. We have worked closely with UNESCO and the excellence centers to provide a response in the fight against COVID. During this exchange, we have discussed remote and e-learning solutions. The role of these new ways of learning is crucial.

Science is a development driver (knowledge and development). But this only has a meaning if we answer to concrete needs and priorities coming from policymakers, but also the private sector to which we must transfer technology. The academy and other platforms as mentioned earlier are there to make sense of this knowledge in order to train future professionals and policymakers which will make the implementation of services possible. Clearly, policymakers and the private sector must contribute to the academy so a state of the art training is always available.

## Parallel break-out groups sessions on key thematic issues

- Parallel Breakout Group 1 : Policy (Note taker: Eli Puerta)

13:25 - 13:45

84 participants signed up for this session

Remark from the Notetaker:

There was a technical issue and the note-taker reached the group 1 discussion later on (5 -10 min later). The notes started from the comments of Mrs. Lea Appulo:

- Participant: Lea Appulo, Wetla:

Water resource management involving women young generation and empowering them and proving them with the rights skills is beneficial not only for job creation but also for environmental protection and all benefits coming from wise water resource management.

- Participant Mr. Moshood MNT:

My additional comment to that is that we need to support and to do a lot more, that access and financing & investment in the water sector are very key. As long as we are able to invest in human capacity it will definitely create jobs and it will be better for everyone.

- Participant Christophe Schmandt:

Question for Mr. Moshood: I am sure you are very aware of the economy, between on the one hand the need for top-quality water sector services, often that job falls to utilities and other in utilities the pay can be low, especially if tariffs are cap low for various political issues, and affordability reasons, all of that. How do you see connecting those two extremes of making the sector attractive for the jobs needed to deliver the water services versus making the water resources available while keeping wages low?

- Reply from Mr. Moshood:

Thanks that is a very nice question. I will call that the ‘drawback’ of the African continent when it comes to the development of water infrastructures and water projects in the water sanitation sector. Because in many African countries, the population is still regarding the provision of water as a social service from the government and the government is still using it for political games, so providing water for popular poor villages means more votes for the politicians. You know! These are the challenges. We need to educate them to know what has value. This is the reality, we need to educate the policymakers with science and data for them to realize what has an economic value and that the economic value is very high.

- Lesha Witmer:

It is not only the economic value, I am waiting for the next Water Report on water value. We can learn a lot from that, not only from the economical angle, but also from a finance, cultural or social angle, I think we can learn a lot from that.

- Reply from Mr. Moshood:

If we make the policymakers realize that, the population can then try to shift their thinking from wanting to get free water all the time, so appropriate pricing can be applied and at the end of the day it will be better for all.

- Another last question: Water, I think, should stay sustainable (who wants to react on that?)

- Participant Yael Mason:

I believe in advocating for integration and water management, that is for the governance aspect and the policy aspect, I believe if you include in your policy, in your legislation that you need a professional work power, then you can get to the VET system and make sure that technological colleagues, middle schools, high schools, give to this. By creating the policy you can create the market. If you create the market there is a chance to elevate the salaries and attract more manpower this is at least what we have done in my country, Israel.

- **Parallel Breakout Group 2: Practices**

Number of participants: 63

*Lesha explains how to access the break-out groups. There is unfortunately no translation for the BO groups. Murray and Lesha will try to ensure everyone understands.*

Murray is commenting on the BO group 2.

We will look at the thematic knowledge, skills, capacity development, transfer, and implementation. I will be the moderator, but we will listen to your questions.

A question to Cesar: when you presented the slide on NEXUS and particularly on the process, one was state of the art, the second was NEXUS assessment and the third one was NEXUS dialogues. All these require some effort to arrive to a dialogue. Can you please tell us which step is the most challenging?

Cesar: all are quite challenging because the solution that we need is complex. There must be at the end a strategic planning development or investment plan so this requires a very good understanding of how it works on the field. If you look at Niger, it is half the size of Europe, it concerns 9 countries that share resources so this is really a challenge. That's why you need a very strong cooperation with the different institutions at national but also regional level in order to understand what is happening on the ground. Regarding the NEXUS assessments, this is also quite challenging because we need to understand what are the main issues associated with each sector and to find ways in which these sectors can be developed. This leads to the process of addressing the development priorities. I can't tell that one is more challenging than the other.

Murray: this is clearly a very long process.

Antonella Vagliente to Murray: you have a lot of experience with the centers of excellence. I wanted to ask you what are the lessons learned, the key message that you would share in how to bridge the gap between what is needed and the capacity?

Murray: the key one which is very important is to know that Africa, in our experience with the work we've done there, is a continent composed of individual countries and member states. The key to reforming the water sector is not only developing better education or better technology because water sectors are very country specific. They relate not only to the



national environment, which can be shared by some countries but also shared by history and culture. If you want to reform the sector, you need to assess the sector first. And you need to do this on a country by country basis. Because even if you have the same language, the same people, the same geography, the same environment, all of that does not matter as each country has a different political and historical framework and development.

Nico Elema: to present myself, I'm the manager of the Centre for Collaboration in Africa (CCA) at Stellenbosch University International of the NEPAD network of cities of excellence in Africa. I think my colleague Ashwin Seetal from CSIR could answer this question.

Ashwin Seetal from CSIR: in terms of diversity across the continent, to give you a sense, in Southern Africa, you have very diverse country-specific differences. If you compare Botswana and South Africa for example on the operational system, it is really different. What we try to do is to share our experience the best we can on how we optimize the whole notion of capacity in order to support the unique circumstances in each country. You really need to pay attention to that if you want to implement or develop a program in the region.

Murray: another question for our colleagues Erna and Pieter. With your experience in Africa, we worked with higher education professional engineers, training, programs, technical and vocational training. From all these directions we address challenges. What we found when adapting with the COVID, is that more educated people seem to adapt more easily to distant, electronic, online training. Can you tell us how it can be addressed in the future?

Erna van der Werff: it is a point we discuss on in our consortium. We talk a lot about this because especially in these circumstances now with the pandemic and COVID-19 you really see that the vocational students have difficulties going to school. It's more difficult to engage them in online classes because of the practical approach. We do address this, and that's also why we talked about this library of experiences more where you would as a student engage in virtual reality, in which you have several options, and where you get trained also on competencies and not only on knowledge. This is really about how you would react to the situation. That really develops the competencies like proactivity, troubleshooting, all competencies that are very important for young professionals and technical professionals in the sector. It is more difficult to train them digitally, but we explore the possibilities there are.

*Pieter has no other comment to add.*

Murray: we have time for another quick question and if not, we must go back to the main session. No question at the moment, thank you very much, and thank you very much to all panelists that were here with us during the session and the break-out. Any other question or comment from the background in the chat box or in the Q&A will be answered later on. Click on the chat box and return to the main session. We'll see you there in a bit.

*Return to the main session. In the meantime, there is an invitation to look at the pool questions.*

## **Report back by group rapporteurs**

*The poll has not been asked twice during this session.*

- **Group 2:**

Lesha Whitmer: any interesting stuff from your break-out group?

Cesar presented, in terms of the challenges, the state of the art, and how it is happening right now and the next phase or component which is assessment of various sectors. He also gave his mind on how to identify collaborations and points of interest and the dialogue, which is now in implementation. And to the question in terms of challenges “which phases are the most challenging”, Cesar answered “all of them”.

One of the important lessons learned from our work in Africa on capacity development in the water sector is that the water sector is not specific. Water is linked to several elements like the production/results, the history, the culture, the environment, and the different political elements that each country develops. You really have to look at the country's specificities, the policy frameworks and how that sector is built. You have to identify the challenges in terms of e-learning and technical education versus technical vocational education training, which is more hands-on. There is a need of evolution in the current context but it is a lesson that has been learned now.

- **Group 1:**

Mr. Moshood and others pointed to the fact that we need to look at all the values and not only the economic or votes values because one of the issues is that politicians are not investing in WASH simply because they do not see the economic or political value in that.

*She points out that the new World Bank Development report that will come on the 22nd of March will be talking about all values of water and it will be a lot of learning for policies in the future.*

*There were another few comments about the issue around how to educate and involve the informal sector and she promised that they will come back to them with Christophe to discuss a bit further about that and come back with comments.*

There were other questions on what if people do not have access to the digital world, so if we go for education how can we make sure that education actually reaches them and there is not only web design. Let's summarize it in that.

Thanks for participating. We will stay in touch with all of the participants.

- Q&A from zoom:

De Niclas Gottmann - DG INTPA à tout le monde: 12:37 PM

Feel free to browse people to connect with and schedule meetings here:

<https://waterandbeyond.b2match.io/participants>

Please find all the information on today's keynote speakers and panelists here:

<https://waterandbeyond.b2match.io/page-1801>

<https://waterandbeyond.b2match.io/page-1801>

De Moshood MNT à tout le monde: 12:40 PM

Welcome to all to this important meeting and Greetings from Abuja. Moshood Tijani, AMCOW Abuja

De Niclas Gottmann - DG INTPA à tout le monde: 12:56 PM

Please find interesting background information and presentations concerning all 'Water and Beyond' sessions on our Capacity4Dev space. For this session, please visit:

[https://europa.eu/capacity4dev/public-water\\_and\\_sanitation/discussions/knowledge-and-skills-water-engine-economic-development-and-jobs](https://europa.eu/capacity4dev/public-water_and_sanitation/discussions/knowledge-and-skills-water-engine-economic-development-and-jobs)

De Niclas Gottmann - DG INTPA à tout le monde: 01:11 PM

Please find all the information on today's keynote speakers and panelists here:

<https://waterandbeyond.b2match.io/page-1801>

Please join the Slido survey here: <https://app.sli.do/event/ezonkdn2/embed/polls/89487a3b-d62c-4a98-a11d-e20afda9afaa>

De Niclas Gottmann - DG INTPA à tout le monde: 01:17 PM

Otherwise you can join the survey by visiting Slido.com and entering the hashtag #WAB2021

De Erna van der Werff à tout le monde: 01:17 PM

Platform of Vocational Excellence scanning tools: <https://www.povewater.eu/wp-content/uploads/2020/11/Final-Report-of-context-scans.pdf>

Platform of Vocational Excellence Water website: <https://www.povewater.eu>

De Lesha Witmer à tout le monde: 01:42 PM

see interpretation possibility below on your screen

De Niclas Gottmann - DG INTPA à tout le monde: 01:50 PM

Breakout 1 - Governance and Policy: <https://montauk-be.zoom.us/j/81901383366>

Breakout Group 2 - Knowledge and Skills: <https://montauk-be.zoom.us/j/82588938060>

Remember: you have to leave this session to access the breakout session. The links can also be found on the website. Please remember to come back to the plenary after (we will also share the link in the respective breakouts). Thanks!

Small scale miners have been a great threat to water resources yet create significant employment albeit within the informal sector. What can we do ensure that this important sector receives capacity building that ensures increased consciousness to sustainable water resources management?

Murray Biedler UNESCO 01:44 PM

This is a particularly important question for Africa which hosts a number of strategic minerals and for many of the countries in which mining is an important economic activity. this is

important for large scale mining as it is for small-scale artisanal mining. there are some legislations but it is early days.

Sara Ahrari (Simavi, NL) 01:03 PM

Question to Mr. Masood, how would they see that the digital gap of women having less access to digital tools to follow the trainings that are often remotely? Any good experiences on how to close the digital gap?

Lesha Witmer 01:49 PM

Sara we have seen your question. Murray knows a lot about it. But we have very little time and answer later on of line