

## HIGH LEVEL PANEL on HYDRO-DIPLOMACY

On the Side of the UN-Water Summit on Groundwater 2022, coordinated by UNESCO

*Under the High Patronage of*

**Mrs. Irina Bokova**

*Co-chair of the International Science Council's Global  
Commission on Science Missions for Sustainability*

*Former Director General, UNESCO*

**Mr. Erik Orsenna**

*Chairman, Initiative for the Future of Great Rivers  
(IAGF Initiative pour l'Avenir des Grands Fleuves)*

*Academician at Académie Française*

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*The Conveners*

**Ambassador S. Gompertz**

*Board Member, The Bridge Tank  
former Ambassador for the  
COP21 French Presidency*

**Minister (Dr.) Hakima el Haite**

*Board Member, The Bridge Tank  
former UNFCCC Champion for  
climate & Minister for COP22*

**Dr. Joël Ruet**

*Chairman, The Bridge Tank  
Institute for Innovation,  
Ecole Polytechnique*

**Minister Hamed Semega**

*Board Member, The Bridge Tank  
former High Commissioner,  
Senegal River Basin Organisation*

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*"Rethinking Hydro-diplomacy: International Rivers as Instruments for Peace*

*Shared experiences, solutions, and sustainable resources management"*

followed by the launch of the

## WORLD WATER for PEACE CONFERENCE

December 6th, 2022, Paris & hybrid

## CONFERENCE VERBATIM REPORT

### **SESSION 1: TESTIMONIES OF PROGRESSIVE WATER POLITICS**

*10h30-11h45; each speakers' intervention: 5-6 minutes & 2 rounds of discussion*

*Objectives: Building on the introductory session, this session will give the floor to political decision makers from around the globe for them to share and discuss their experiences with water and its management. This shall provide an insight into existing practices and offer new ideas towards more progressive water politics and a renewed approach to hydro-diplomacy.*

Moderator: **GOMPERTZ Stéphane** (Mr. Ambassador), Board Member, The Bridge Tank, former Ambassador for COP21 French Presidency

- **KHAN Runa** (Ms.), Founder & Executive Director, Friendship NGO, Bangladesh (on Zoom)
- **EL HAITE Hakima** (Dr. Minister. Ms.), Board Member, The Bridge Tank, former UNFCCC Champion for climate, Minister of Environment, Morocco & Host of COP22 (on Zoom)
- **LALONDE Brice** (Minister Mr.), Former UN Under Secretary, Former Minister of Environment, France
- **TOURE Sidi** (Minister Mr.), Minister, Ministry of Animal Resources and Fisheries, Côte d'Ivoire (video)
- **SIDIBE Diaka** (Dr. Minister Ms.), Minister of Higher Education, Scientific Research and Innovation, Guinea (video)

#### **Introduction by the Moderator, Stéphane Gompertz:**

- After addressing organisational questions, Mr Gompertz first turned to Ms Runa Khan, joining over Zoom from Bangladesh, and invited her to share her personal experience in this first session dedicated to the sharing of very concrete and personal testimonies on the things that have already been done and that can be done in the future.

**KHAN Runa** (Ms.), Founder & Executive Director, Friendship NGO, Bangladesh (*on Zoom*)

- Runa Khan started by expressing how honoured she was to be among the participants of the conference, saluting Erik Orsenna and Claus Sorensen. As the world goes through crisis after crisis, Ms Khan made a plea for decisions to be made and concrete actions to be taken. What is currently missing is solidarity of actions between all stakeholders, from scientists to activists, to decision makers. Water is going to be an important topic in the future. Despite people being active on the ground, working with those most impacted by various water issues, e.g. erosion, migration

breakages of non-managed infrastructure, and the decline of mangroves), solutions are missing due to a lack of action, mismanagement of resources, and wrong decisions being made at the level of decision makers.

- Ms Khan stressed the need to tackle water issues in a holistic way, as water is not for a country to manage but for a much more global part of humanity. Water cannot be separated and approached issue wise, it has to be spread to other circles, e.g. the climate impact circle, and handled together. Calamities of water (from having too much water to not getting enough) are affecting all forms of life today. Runa Khan mentioned the example of mangroves to illustrate that all forms of life are impacted by water. She further stressed the importance of coordination and the need for a platform not only on the ground but at the level of decision makers. “There is urgency to push those issues forward fast before it gets too late and the impacts are thrust upon us instead of us reaching out to ensure we get to collective action on the ground.”

**Question from the Moderator:**

- How do you ensure cooperation and convince people of working together?

**Response by Runa Khan:**

- Ms Khan stressed the importance of soft skills, of verity, of truth, of working with respect, of deep listening and understanding what other stakeholders are saying and what they are not saying. There is also a need to listen and believe local communities, understand their pain, listen to their solutions if they have some, and work with respect by listening to the local communities as they know the land. She encouraged participants to keep faith and not to be disillusioned, and underlined the importance of people on the ground doing the work. Ms Khan described Europe as the most conscious driven region on the planet with many people wanting to do good, from the top to the bottom. There is therefore a need to take them all on board. Change starts with one person, who can then create a whole circuit of change, Ms Khan concluded.

**Question from the Moderator:**

- What are the main obstacles that could jeopardize or slow down common action on water, both locally and internationally?

**Response by Runa Khan:**

- Being overawed by reality and getting seeped into disillusionment were the examples mentioned by Ms Khan. After COP 27, Ms Khan said, the Club of Rome asked her what she thought should be done. Her response first pointed to the whole modalities which need to be changed, and then to ask five

decision makers what they had seen about real issues in the COP, be it in the blue zone, the green zone, the innovation hub, etc. There is a need to keep faith and believe that one person can make a change, however small it may be. While money is a very important instrument, people are needed behind that money. Ms Khan pointed to the fact that it is extremely easy to find excuses and say that things don't work. What is required is mutual trust and stepping back on our own selves to understand the issues at hand. We need, according to Ms Khan, to have a long-term vision on action and not just a quick fix approach.

### **Transition and introduction of the next speaker, Hakima El Haite, by the Moderator**

**EL HAITE Hakima** (Dr. Minister. Ms.), Board Member, The Bridge Tank, former UNFCCC Champion for climate, Minister of Environment, Morocco & Host of COP22 (*on Zoom*)

- Hakima El Haite started her address by sharing a personal experience from her childhood in the city of Fez, Morocco. Her childhood house was built along a river. But about 10 or 15 years later, when she came back to that same house, the water had been gone. This experience taught her how important water was for the life of the city. Using that example, Ms El Haite reminded listeners of the centrality of water for development and the sustaining of life, of any population, of any country. "Everywhere you have water, you can have development because you have agriculture, you can secure food, and build infrastructure," Hakima El Haite said, adding that "water and development are two sides of the same coin, which is the coin of peace."
- Ms El Haite then addressed the alarming situation in Africa, where millions of people live on very little water and where women and youths spend 1.4 million hours a day across Africa to look for water. Water is at the basis of many conflicts in Africa and there are many more than the 37 conflicts about water we know about, with hundreds of conflict in Africa generated because of water. Water is not only a vector of development but also a vector of stability and peace, which may help minimize migration. The problem with how international observers are addressing the issue of migration lies in the fact that they only think about it when it reaches their borders in Europe. Migration within Africa, from rural areas towards the biggest cities, due to climate change and shortage of water is enormous. 46% of surface waters and 260 rivers basins are shared between two or more countries around the world. These areas and resources are at the basis of conflicts, Ms El Haite said, citing the examples of Jordan, Palestine, the West Bank, and Israel, and that of the Nile, between Egypt and Ethiopia. This is where the geopolitical role of managing water at an international level stands out.
- From her long experience in dealing with water strategies in Morocco, where she developed the sustainable and integrated approach to basin management, Ms El Haite learnt the need for

international rules and tools, and the importance of solidarity among users of water and basins. 10 years ago, Ms El Haite developed the water management strategy in Marrakech. This created huge conflicts between different users of water, from the industry to agriculture, tourism, and golf courses. This turned out to be a very hard political decision about what to do with water in Marrakech, having to choose between the development of tourism or agriculture. While these decisions are difficult for political decision makers, Ms El Haite stressed that such decisions were sometimes needed in order to set priorities between the different users. The second kind of decisions needed is also very political, as it requires managing the users upstream and downstream, something which is needed across basins. Minimizing the conflicts which are generated by the management of water internationally necessitates multilateral tools, institutions, and decisions.

- Ms El Haite described putting water at the heart of climate negotiations at COP 22 as one of the things she was most proud of because it was one of her major fights. Before that, water was not present within the arena of COP. COP 22 in Marrakech was thus the first COP to welcome the international community of water, which led to the creation of the Water Day at COP.
- As the Global South is bound to suffer more and more from the global shortage of water and the impact of climate change, it is the right time to bring proposals to allow multilateral institutions to elaborate the required tools.

**Comment and follow-up question by the Moderator:**

- “How do you think we can do more on awareness among users, as you rightly mentioned the users of water and the conflicts that can arise among them? How can we persuade tourism operators that it is eventually in their own interest to have clean water at their disposal?”

**Response by Hakima El Haite:**

- After acknowledging that she might not have the experience on an international level dealing with conflicts in transboundary river basins, Ms El Haite pointed to her strong experience at the local level in Morocco, having worked with 12 out of the 16 regions in Morocco. From her understanding of the users, be they upstream and downstream, Ms El Haite pointed to the importance of a specific aspect to keep in mind. When dealing with users upstream, the water is clean and the needs are known. There is the need to register all of those needs to check if those are scientifically appropriate and if they align with the international indicators. Depending on the year and the varying precipitations, users must be managed according to the pre-set priorities and the political orientation of the government. The problem arises between users upstream and downstream because of their differing priorities. Users upstream are not dealing with the quality of water, they are dealing with the quantity of water and how to share it. But at the same time, they are producing pollution which

is degrading the quality of water downstream. This water that is used for agriculture, golf courses, and drinking water upstream is not appropriate to the same users downstream anymore. This led Morocco to consider quality and quantity together, as there would be no use to water with bad quality.

- The second huge problem Ms El Haite faced was the value of water because water was considered in Moroccan culture as a donation from God, something free which was used without counting or taking into account how under pressure water actually was and how it needed to be taken care of. Ms El Haite's second fight during that period was to make people aware that water had value. As this value should be paid, Morocco put in place a very small fee for the cubic meter of water but people are not paying this fee. Morocco installed authorisations for the exploitation of water, ground water, surface water, but despite the shortage of water, people are still not aware of the value of water.
- What we now need, according to Ms El Haite, is to develop awareness of the value of water at the local level in each nation but also awareness at the level of international organisation that the same framework should be developed between basins and countries. Ms El Haite used the example of Ethiopia and Egypt: when Ethiopia decided to build this huge dam upstream of Egypt, they did not take the needs of Egypt into consideration and the consequences this would have on the Nile, on river transport, agriculture, nor did they consider the dam's social impact. This is where multilateral systems and institutions have not only the role but the responsibility to define this solidarity between upstream and downstream, within the basin, and between the two countries. These are tools Ms El Haite developed on a national level but which might, with a lot of political effort and involvement of multilateral institutions, be appropriate to manage conflicts within basins.
- According to Ms El Haite, we now stand at a crossroads where water will either be a vector of peace and prosperity for all or a weapon like energy is now becoming. There is therefore a major responsibility to make multilateral systems - particularly the UN and UNDP - realise they have a major role to play to avoid that we use water as a weapon but instead make it a vector of development and peace.

### **Transition and introduction of the next speaker, Brice Lalonde, by the Moderator**

**LALONDE Brice** (Minister Mr.), Former UN Under Secretary, Former Minister of Environment, France

- Brice Lalonde started his address by turning his attention to the 2023 Water Conference in New York. To make it a success, there should perhaps be a mission to go around the countries, especially to those which have not ratified the UN conventions on water. This is the first thing to do, according to Mr Lalonde: to go and present good examples and good practices, the best being in Africa and the Senegal River, with complete sharing benefits, shared vision, trust, and institutionalisation.

- Mr Lalonde then shared a story with the panel. Every year, the sea level is rising by a few millimetres. But in 2011, it did not increase, it stopped, even receding a little. What happened during that year was a moment with huge evaporation and all that water, instead of going to the sea and increasing the sea level, fell on Australia, Asia, and Northern South-America. Eventually, one year later, the water went back to the sea and the level went on to increase. This was found by two satellites (GRACE), which could see *one* water, because we have one water, Mr Lalonde stressed. Science has moved very far, giving us a completely new understanding of water, e.g. we know how to desalinate water, how to keep it, and what to do. What we have to do is keep water on land as much as possible.
- In our history of water management, we started at the local level and moved towards integrated river basin management. Mr Lalonde stated that it is now getting much more complicated; when there is integrated water management within basins, even if it is shared between riparian neighbours, if these don't know that there is going to be an atmospheric river coming soon and falling on them like a small sea in the span of 2 days, they are not going to be able to manage.
- We thus need to combine the local management, which is so important and is being done so well in Senegal, with a scientific worldview on what is happening, according Mr Lalonde. These two aforementioned satellites also saw that 13 of our most important aquifers of underground water are being depleted. Brice Lalonde added that underground water is often missing from international conventions and that the focus was also often put on quantity and not on quality, which is very important. The problem is found in the fact that we have more and more conventions on sharing surface water but not enough on underground water.

**Question by the Moderator, Stéphane Gompertz:**

- Do you think there is a reasonable hope that future technological inventions can deal with the issue of underground water? Are we going in that direction?

**Response by Irina Bokova:**

- Ms Bokova stressed how critical the points made by Mr Lalonde were. UNESCO is working a lot in the aquifers and has launched a couple of initiatives for water diplomacy and science diplomacy. The last report published by UNESCO, the World Water Assessment Report, is about groundwater and is also focussing very much on the aquifers, proposing concrete solutions. This was a contribution to the preparation of the UNESCO meeting taking place in Paris that week and also a preparation for the future.

**Comment by Joël Ruet:**

- Mr Ruet said that what Mr Lalonde had said was key, especially regarding connecting the different actors and networks on hydro-diplomacy. We cannot encroach on sovereignty. But if we do not make those topics beyond sovereign, we kill our efforts.

**Comment by Arnab DAS** (Commodore. Dr. Mr.), Director and Founder, Maritime Research Center (MRC)

- After saluting the quality of the interactions and the event's good geographical distribution and involvement of diverse stakeholders making it very enriching to be part of this, Arnab Das started by stating that in matters of hydro-diplomacy, we need to look at regional basin approaches rather than bilateral or multilateral approaches. The extra-regional participants must then bring some value, as there is enough know-how available. Customisation of that know-how for the specific river or area needs to be understood well. The different stages of rivers, be it upstream, downstream, or midstream, have an optimum usage of water. Upstream this could be hydropower, then different agricultural applications or tourism. Sometimes, so Mr Das, we give more importance to certain applications which are wrong. That's where sustainability becomes a big issue. While there is a requirement of science and technology, they cannot replace the traditional knowledge. Even the financial model needs to be sustainable. That is where the extra-regional participants can bring in these valuable ideas into a larger regional basin-level plan. According to Mr Das, even with bilateral treaties agreeing to a certain water-sharing model, lack of adequate infrastructure often makes it impossible to even consume the water that has been allocated. In many countries Mr Das has seen, he found that water quality and water resources were handled by different ministries.
- Mr Das went on to say that if we are serious about hydro-diplomacy, we need to come up with a plan, develop a pilot project in one area and build a model on how to go about it. Regarding the underwater component, Mr Das pointed to that fact that it is important to recognize the particularities of tropical conditions, whether it is for sediment transport, or water usage. Tropical conditions are very different and the West's know-how is far more entrenched in the temperate and polar regions but does not apply to the tropical region. Mr Das reiterated the need to combine traditional knowledge with science and technology. Science and technology cannot replace traditional knowledge but should work to enable traditional knowledge to be scaled up. According to Mr Das, scaling up is the most important thing today.

**Comment by Annukka LIPPONEN** (Dr. Ms.), Chief Specialist on Water Resources Management, Ministry of Agriculture and Forestry, Finland

- Ms Lipponen took the floor to briefly respond to Mr Lalonde regarding the international law basis on transboundary groundwaters. The Helsinki Convention or the 1992 Convention has been considered



by some as being too focused on water quality but actually how the environmental and transboundary impact is defined is very broad, it does not cover quantity and quality aspects extensively. Regarding groundwater, the global conventions do cover all transboundary groundwaters in the case of the Helsinki Convention, and for the New York convention the transboundary groundwaters connected to international water courses. There is quite some legal basis there already, and the Draft articles on the Law of Transboundary Aquifers have also taken forward this international application on groundwaters.

- The reporting and monitoring of the SDGs and notably the indicator 6.5.2., which measure the advancement of transboundary cooperation, has drawn political attention to what is the state of knowledge, what is the level of cooperation on transboundary groundwaters, which is very important, as there are big gaps there. But there is a lot to draw upon, also model provisions on transboundary groundwaters, which have been developed under the Helsinki Water Convention. It is therefore about putting it into practice and extending the current agreements, Ms Lipponen argued. There are other examples like between France and Switzerland, which have an agreement on transboundary aquifers. This can be built on and water-diplomacy can make use of that experience.

**Comment by the Moderator, Stéphane Gompertz:**

- Transboundary cooperation is necessary, Mr Gompertz noted, before recalling a conflict between France and the Netherlands over the residues French industries in Alsace were putting into the Rhine water.

**Response by Brice Lalonde:**

- Mr Lalonde picked up on Mr Gompertz' remark, stating that he remembered that incident, as this practice stopped after the Basel incident with Sandoz, which led to a realisation of the pollution this provoked and led to an agreement on the Rhine.

**Question by Christian BRETHAUT (Dr. Mr.), Scientific Director, Geneva Water Hub (GWH), Global Observatory for Water and Peace (GOWP)**

- Making use of the presence of former ministers around the table, Mr Brethaut asked a question related to the policy process, namely what could be done to actually influence New York. He then recalled Erik Orsenna's comment that the UN Water Conference in New York would be a defining moment on water and peace in particular. Looking at the Conference of Parties which took place a few weeks earlier, resistance could be seen from certain less convinced parties, talking about security and peace in this sector. How do you bring these themes at a higher level and convince the less convinced people? - as the present conference is like talking to the convinced.

**Response by Irina Bokova:**

- It is a difficult question, we know what is at stake, we know the data, the trends, we have a lot of technology but probably lack financing. The necessary financing for development, for the Sustainable Development Agenda 2030. With the overall pushback on practically all the 17 development goals because of COVID, geopolitics, and the war, these questions are in a very dire situation. Ms Bokova shared how worried and concerned she was, because she did participate in many meetings in the run-up of the 2015 Agenda adoption in New York, as well as in Paris for the climate agreement to support this process. What is needed now, according to Ms Bokova, is a renewed political contract around this. That is why the Secretary General convened this meeting on water and Goal 6 because we really need a new political agreement between member states. Once member states agree to that, they should be held accountable, Ms Bokova argued, because it is not just about the UN or UNESCO – in fact, member states are the ones signing and adopting agreements, e.g. Agenda 2030. Member states should be held accountable; this is the role of the UN and its different agencies but not only. They should be held accountable by civil society, by the different kinds of communities, because at the end of the day, they have negotiated and they have agreed on this. We cannot just put it aside by saying that it is a complicated world – they have committed. Ms Bokova noted that the question of financing is very important but that financing is decreasing on many development projects. Budgets are tight, international development aid is decreasing, even in developed countries. And financing is critical in many of these issues. Ms Bokova expressed her hope that increased financing would come out of New York, in addition to science. Science has to be supported, has to be financed, has to be recognized and trusted. The science-policy interface is missing, Ms Bokova noted. The necessity of the science-policy interface was recognized previously, e.g. with the Agenda 2030, and is pushed now once again. There is however mistrust, and this missing point there.

**Response by Brice Lalonde:**

- There are people talking about the limits of planet Earth, Mr Lalonde noted. The last publication said that a limit had been passed on the so-called “green water,” which is the most important for life. It is not in the watershed, it is in the earth, in the ground, in the vegetation, in human beings, in animals. It is the real water for life. That is starting to be missing.

**Response by Hamed Semega:**

- Reacting to Mr Brethaut’s question, Mr Semega stated that the missing link is the civil society. What needs to be done next around the issue of water is to expand the discussion from experts to civil society, in order to really know what issues people have, as these problems will result in conflicts or wars. For governments to really be involved, the civil society should be empowered to take these

questions and force the government to act. If this does not happen, we will be going around in circles in COPs and conventions.

**Comment by Marie-Laure VERCAMBRE (Ms.), General Director, French Water Partnership**

- It is important for everybody to have in mind that the March 2023 Conference is not a negotiated conference, there will be no political outcome. There might be a political announcement, maybe regarding a special envoy. It is important to have this in mind when we discuss here what we want to attempt, what we would aim for. There will be statements by member states, commitments will be made, for which we hope they will be held accountable, but it is important to have this in mind. This puts things into perspective that we still do not have these COPs for water, though we do have COPs on transboundary waters. Maybe what we want to keep in mind is the high-level political forum on sustainable development in June, maybe we want some countries to think about resolutions if we talk about the UN. But, Ms Vercambre invited the panelists not to expect the world from this conference. A lot of people have in mind that this is the first such conference since 1977, which is hard to believe, but still, there is not going to be anything negotiated. There might be interesting statements, there might be very ambitious countries, ambitious conditions, and interesting ideas coming out of this convention but that is about it, Ms Vercambre noted.

**Comment by Erik KUINDERSMA (Mr.), Senior Policy Advisor Water Governance, Waterschap Rivierenland, The Netherlands**

- Mr Kuindersma wanted to respond to the comment made by Mr Semega on water issues and civil society being included. In the Netherlands, there is a special government on surface water management with elections, own taxation systems, with an own board, independent from the national government. The people do not know what they are. Organising it does not mean that it works. The Netherlands have wonderful water management organisations but people do not really know what is happening.

**Conclusion by the Moderator, Stéphane Gompertz**

- Bringing the session to a close, Mr Gompertz mentioned some of the many points addressed during the session: water can be a reason for peace but can also be reason for warfare; policies based on science are better, and science needs to be increasingly taken into account; we stressed the importance of groundwater; we recognized that all the conducted efforts need to be made at the local level and the global level, that civil society needs to be included.

**RECORDED CONTRIBUTIONS TO THE HIGH LEVEL PANEL****TOURE Sidi Tiemoko** (Minister Mr.), Minister, Ministry of Animal Resources and Fisheries, Côte d'Ivoire

- In a pre-recorded address to the panel, Minister Sidi Toure stressed how important the panel was for development and socio-economic stability in the world. Hydro-diplomacy's aim to ensure economic and social benefits for transboundary basins and to work to avoid militarization and water-related conflicts has an important role in achieving the SDGs, in particular with regard to climate resilience, peace, and security. There are many interstate issues around water: not only the sharing of water, but also food security. The sectoral approach alone is no longer enough to work on water issues. The question of its governance is central and vital for all humanity. River basin organisations make it possible to work on issues related to agriculture and the effectiveness of financing networks and structures. The agricultural sector is a huge consumer of water. Reducing this will require technologies that are appropriate and accessible to all countries. But how to finance these technological changes? The question of financing is at the heart of water stress. According to models established by climatologists, a global warming of two degrees will have an impact of 30% on rainfall within 10 years. Faced with the shortages ahead, agriculture will have to leave increasingly arid areas. Rural areas will lose their population, moving to large cities. The presence of these climate refugees will increase water stress. Water scarcity will increase the security threat. This shortage will also cause an economic and environmental shock. Economies will be altered and ecosystems will change. There will be fewer green areas, less fauna, less flora.
- Water resources have never been so at risk, especially for Africa. Mr Toure mentioned pollution related to gold panning or dredging - activities that have had a detrimental impact on the supply of water in urban areas, livestock watering, fishery resources, agricultural resources, and human health.
- Another challenge for the continent is found in access to drinking water, which constitutes a main constraint to development. Access to drinking water makes it possible to meet several challenges: hygiene and health, development of agricultural production, development of industrial production, etc. In the early 2000s, more than half of the African population did not have access to drinking water. Faced with this, the supply of cities remains complicated, which is why rivers and lakes are used as sources of drinking water, which promotes the proliferation of diseases and mortality factors. According to the WHO, 80% of diseases are waterborne. The annual mortality of people caused by water is estimated at 30,000 people.
- Significant efforts have been made in Africa to improve access to water, particularly within the framework of the International Decade for "Water for Life" 2005-2015. Even if access to water has

improved, the issue of water treatment and sanitation remains the soft underbelly of these efforts.

The Member States of the Niger Basin are convinced of the need for coordination and environmentally sound management of water resources in the Niger River Basin to promote economic and social progress.

- Faced with all of these findings, it is time to adopt innovative policies, strategies and programs for better protection, safeguarding, and management of our water resources from the various attacks and forms of pollution, coming from many economic actors. The African continent does not really lack water resources but instead displays contrasting situations. With the exception of arid and semi-arid areas, Africa is very water-rich. The optimal use of this resource must be based on 2 essential levers:
  1. The development of infrastructure, which is clearly lacking, in particular hydraulic infrastructure to ensure the water supply for people, livestock, and agriculture.
  2. The establishment of appropriate institutional arrangements. This determines the effectiveness of resource protection measures and equity in its allocation to the various actors. Taking into account the plurality of actors and their visions increasingly contributes to giving policies an original tone. On the international level, dynamics of cooperation are already at work. At the local level, the adaptation of techniques and collective management of resources are the preferred avenues, particularly within community groups and water management associations, which are multiplying in cities and rural areas.
- Mr Toure concluded by thanking and congratulating the organisers, experts, and participants of this high-level panel on hydro-diplomacy and expressed his deep conviction that the discussions would result in recommendations and shared solutions for a better management of resources and international rivers to ensure peace and security in river basins.

**SIDIBE Diaka** (Dr. Minister Ms.), Minister of Higher Education, Scientific Research and Innovation, Guinea

- Minister Sidibe started her pre-recorded address to the panel by thanking the organizers of the conference for the invitation to take part in this conference on water and peace and to bring her testimony on progressive water politics in Guinea. Minister Sidibe first described the geography and the climatic and environmental context of Guinea - a very coastal and maritime country, with 300 kilometres of Atlantic coastline. The country has a climate with two seasons, which vary in duration depending on the regions. Guinea can be divided into 4 natural regions, due to the country's diverse ecological conditions: 1. a maritime and coastal region: Lower Guinea, 2. the Fouta Djallon region: Middle Guinea, 3. a savanna region: Upper Guinea, and finally 4. a dense forest in southern Guinea: Forested Guinea.

- To better understand Guinea’s situation, in particular that of the Fouta Djallon Highlands, it should be remembered that several rivers are born on the slopes of the Fouta Djallon and flow into the Atlantic Ocean through large deltas. These highlands are the birthplace of the main transboundary rivers of West Africa: the Senegal River, the Niger River, the Gambia River, and the Mano River. Life and socio-economic development are organized around these rivers in several West African countries, with organizations such as the OMVS or the OMVG.
- However, the problem today is found in the ecological balance of the Fouta Djallon, which is severely disrupted by combined actions of populations and livestock, which are both growing rapidly. We can note the accelerated degradation of natural resources due to traditional agriculture, abusive logging to meet increasing firewood demand, uncontrolled bush fires and overgrazing, which greatly reduce the vegetation cover. Other reasons, such as demographic pressure, may also come into play. Guinea’s policy today is to respond to these threats, Minister Sidibe stressed. Since 1981, Guinea, the countries of the sub-region, and the international community have mobilized to initiate actions aimed at reversing the process of degradation of the natural resources of the Fouta Djallon Highlands. These Highlands cover approximately 20% of the Republic of Guinea’s territory. In addition to its agricultural, animal, and water resources and to its populations, the Fouta Djallon Highlands abound in important mining resources.
- Several initiatives are underway around the Fouta Djallon Highlands:
  - The integrated natural resource management project of the Fouta Djallon Highlands;
  - Subregional collaboration on the observatory of the Highlands as a decision-making tool;
  - Natural resources management, which include the reforestation and awareness-raising component and the increase in income for the population;
  - The monitoring and evaluation of protection performances and the dissemination of results.
- To achieve these initiatives of preservation of water sources, as minister in charge of scientific research, it seems essential to Minister Sidibe to:
  - 1) Develop and guide research theses to have quantitative and qualitative data on water resources. This data is crucial to ensure a better planning and sustainable management of these resources. There is not enough data on flow rates of the countless waterways found in the Fouta Djallon, nor on their annual variability;
  - 2) Make use of new technologies to process and analyse this data, such as big data, supercomputers for better forecasting and optimization of spatio-temporal knowledge;
  - 3) Develop territorial diagnoses projects with universities and research centres;
  - 4) Integrate the environmental variable and climate change on a global scale.
- The degradation of the Fouta Djallon Highlands worries Guinean authorities. This trend needs to be reversed in order to support sustainable development in the region, with the involvement of all

6<sup>th</sup> December 2022, Paris & Hybrid stakeholders and the combination of efforts at different scales. For a few years now, the authorities and development actors have realized the urgency of the situation affecting the Fouta Djallon. Everyone carries an important responsibility to ensure the restoration of the natural resources of the ecosystem – the water tower of West Africa – and ensure a water-secure future in the subregion. Finally, Minister Sidibe concluded by saying that failure to act today to safeguard the Fouta Djallon Highlands threatens water security for our children and future generations.

**END OF SESSION 1.**