

## Opening Speech for ENEG, Portugal 23 November 2021

Mr. Minister,

Dear Portuguese friends of water

É com grande prazer e honra que estou convosco, hoje, nesta bela região do Algarve. Gostaria de agradecer à APDA, especialmente ao seu presidente, Rui Godinho, que tem, seguramente, a minha amizade. O Rui é um homem brilhante, mas discreto. Tenho a certeza de que a maioria de vocês não conhece o papel significativo que o Rui desempenha no Conselho Mundial da Água. Para além de ocupar o cargo de Tesoureiro nos últimos três anos, tem sido, acima de meu conselheiro, cuja sapiência e experiência têm contribuído para o bom desempenho do Conselho Mundial da Água. Meu caro Rui, tenho muito orgulho em poder trabalhar consigo!

Perdoe o meu português, mas esta é, sem dúvida, uma língua que torna mais fácil expressar o que o coração sente.

Dear Colleagues and friends,

Let me continue in English, which is also not my native language.

Yes dear colleagues, why are we all together, today, in this beautiful place on the Atlantic coast?

Why are all water operators gathered to make so many efforts to guarantee water security for all everywhere in the world?

Because all over the world we are coming together to find answers for those in need.

It is a great honour to meet you today because Portugal is a great water nation. Its skills and know-how are widely recognised in Europe, Africa and throughout the world.



Of course I am not going to talk to you about the water situation in your country. You know it much better than I do. I will simply say a few words about the water situation in the world, the problems we meet, the existing solutions and the responses we are trying to provide.

Yes, we are here because the Earth is thirsty.

Because the Earth is more and more thirsty. And when the earth is thirsty, Man is hungry. Our countries are not only thirsty of water and hungry for food. They are also thirsty and hungry for development and progress. While global population is increasing, so are its living standards, calling for additional amounts of water every day.

Water surrounds us, water brings us together, and water stimulates us. But when water is scarce, its absence generates tensions and crisis between communities and countries. And scarcity also threatens the environment and global ecosystems.

Yes, the world is in danger because water is in danger, therefore everyone is in danger. But the problem is that in all the burning issues which the world is facing, water is still struggling to become one of the most urgent global priorities.

Water and air are important because with water and air comes life, food, health, education and peace.

This is the reason why water is now an essential element of geostrategy and, as such, a component of geopolitics. This is the reason why water is a political priority.

In addition, there is a new emerging obligation to share water between Man and Nature. Man's impact on Nature is too strong. We must respond to the requirements of human development and at the same time to the respect of nature, by maintaining biodiversity and protecting ecosystems.

The excessive urbanization reduces the quantity of non-renewable resources, but also generates pollution and waste. It modifies, alters or destroys the ecosystems, both on a local and global scale.

These threats are showing that demographic growth and climate evolution are intimately linked. This is why it is urgent for nature conservancy that we learn



to consume less and to consume better. This will be the double objective of the next decades

That is, dear colleagues, our mission, as citizens of the world, to guarantee water security, for us all and by us all, at every level possible.

To ensure this mission, the World Water Council works on three pillars:

- -Knowledge, which is to be shared and not begged
- Financing, which is to be adapted and not granted
- and Governance, which is to be accepted and not forced upon citizens

The first pillar, knowledge, could be defined as enhancing research to find new ways of managing water that are both economic and ecological. The more we innovate in research, the more we can bring renewable resources and nature-based solutions for water management, the more we improve water security.

Providing water security means, first, securing availability and protection of water resources.

Providing water security everywhere also means establishing a balance between water for today and water for tomorrow.

To reverse the trend, to improve access to water, we must increase our capacity in making water and sanitation benefit from the digital revolution which is happening now.

Digital technologies can be integrated at any step of the water cycle to improve water's value chain.

Digital technologies range from:

- Sensors to detect pressure and losses on the whole network;
- Monitoring to control, optimize, and anticipate operations;
- Forecasting to predict weather events;
- Data processing to understand the demand, adapt the offer, and optimize billings and tariffs;
- Treatment Process improvement for greater cost and energy efficiency;
- Virtual and augmented reality to design new plants and networks.



All kinds of mobile tools using mobile phones or private computers are playing, step by step, a major role.

Day after day, these tools are establishing greater links between those who deliver a public service and those who consume it.

Let us make the best out of wireless networks, data analysis, Internet of Things, clouds, blockchain solutions, for water, but also for sanitation, waste, air, and energy.

The digital revolution is making the citizen feel closer from the decision making process and is reinforcing the feeling of a more local and participative democracy.

But don't be fooled dear colleagues, all technological progress has its limits and burdens.

Let's never forget to always put the human being in the loop. Man is not meant to serve technology.

It is technological progress, today being digital, which serves humankind.

And the Internet of Things, cloud technology, blockchains, cryptocurrencies, cannot allow users to step away from public authorities and create what I call "Uncontrolled and Autonomous Authorities."

Besides, I must also mention the great threat posed by cyber security. Not a day, not an hour without, a public or private service, civil, or military, national or local authority, being attacked by hackers.

The water and environmental sector are not left apart from these threats. Water treatment plants, factories, water services are going to be stopped or damaged as much as financial services or human resources.

Intelligent use of innovation means allowing widespread access to new water resources, such as desalination, reuse of wastewater and use of underground aquifers.



Now, the development possibilities brought by knowledge are enabled by the second pillar, which is finance. The situation can be summed up as "water is short of money, but money is short of water".

One of the fundamental issues is the generalization of sub-sovereignty which allows, for example, a city in a poor country to borrow without a state guarantee while demonstrating its ability to repay. Another issue is that some of the poorest countries and communities lack the capacity to construct programs that meet funders' bureaucratic criteria.

All in all, it means that the era of water centralism is over and that we must ensure fair distribution and complete openness.

That is why the third and last pillar is governance. Water governance must be efficiently shared by the State, which ensures the resource's availability and regulates its proper use, with the assistance of the private sector.

Then there is also the role of river basins authorities, which coordinate resource distribution and use, while ensuring quality through public policy. Basin management has helped countries like Mexico, Senegal, Brazil, obviously Portugal, and many others improve their water security.

Finally, there is the level of local governments and residents who are responsible for treatment, distribution, and cost collection.

Therefore, if the citizen, who is also a consumer, gets involved in this 3-level governance, the pillars are proving their efficiency.

There is one more point on which I insist, and it is a sensitive one: water reserves or water storage systems. Today, there are locations on every continent and in nearly every country where humans and nature lack water at some point. Today, as previously stated, scarcity is a problem, not only in Africa and the Middle East, but also in the United States, India, Australia, and some places in France and in Portugal.

That is why it is more than urgent to re-think the concept of dams and reservoirs. We must enter a new era of freshwater management based on the concept of aquatic biodiversity, the only sustainable way to protect biodiversity.

Aquatic water reservoirs will not only protect the ecosystem, but also benefit mankind by helping it to cope with thirst. As this concept, due to its novelty, is still criticized, the World Water Forum in Dakar will be the perfect scenery



to discuss and expose concrete solutions. And specially nature-based solutions.

I would also like to underline the importance of rural areas. For years, we have only talked about "smart cities" when it comes to innovation, but never about "smart rural areas." Who, however, guarantees water protection? Who is responsible for water production? Who is responsible for the preservation of forests and rural areas? People from rural areas, not city inhabitants. Where does the food come from? The farmers, not the city dwellers.

To fulfill these commitments, we must all work with a horizontal and fundamental approach. Local authorities understand things better than the central government. Therefore, mayors, local communities and local groups must be given more responsibilities. Indeed, if there is no electricity, no water, no medical facility, it is impossible to build a school in the poorest countries. This horizontal and basic approach is required. In the future years, it will most likely become mainstream in the field of 'water-thinking.'

Allow me to conclude by mentioning the right to water. It is a complicated right that is simple to declare but difficult to enforce in practice. For more than two decades, we have demanded that every human being have access to sufficient, high-quality water at a cost that is affordable to the poorest.

Some of the numerous possible solutions include the inclusion of the right to water in constitutions, the availability of free minimum allowances, or social tariffs. The solutions are political, and we must insist that they be provided.

"Water is politics," and the only way to stop water misery is for everyone to commit. This is the World Water Council's mission, but it is also ours as individuals. Dear friends of water, if you should remember only one thing from this presentation it could be:

Water is a political issue to which every citizen has the duty to contribute.

Thank you for your attention