Resilient Policies: Achieving UNFCCC and SDG goals through water management

An Official UNFCCC Talanoa Dialogue 30 August 2018 Stockholm, Sweden

Organized by: Alliance for Global Water Adaptation (AGWA), Arup, Stockholm International Water Institute (SIWI), UNESCO – International Hydrological Programme, World Water Council

Programme web link: <u>https://programme.worldwaterweek.org/event/7882-resilient-policies-achieving-sdg-and-unfccc-goals-through-water-management</u>

Introduction



Where are we? Where do we want to go? How will we get there? These questions form the basis of the 2018 UNFCCC Talanoa Dialogue and informed the structure of our panel discussion held on 30 August in Stockholm, Sweden at World Water Week around the theme of linking climate and sustainable development targets through adaptive water management. World Water Week, held the last week of August every year in Stockholm, is the largest annual global water conference and attracts thousands of participants from around the world working to address our most pressing water challenges. This was a unique opportunity to bring the inclusive Talanoa spirit to the global water community and to practice what we advocate: greater integration and coherence between the global sustainable development and climate agendas. This event was designed to bring real-world examples of how we are already working to achieve our climate and development goals through adaptive water management, and to offer recommendations for how we can move farther, faster together. The session included a welcome by Dogan Altinbilek, Vice President of the World Water Council, an opening statement by Torgny Holmgren, Executive

Director of the Stockholm International Water Institute, a diverse panel discussion moderated by Alice Aureli from UNESCO's International Hydrological Programme and a closing statement by Raha Hakimdavar from the United States Forest Service.

The co-organizers and participants in this dialogue truly believe that water is a vital connector between these domains and that adaptive water management practices and tools – such as natural infrastructure for urban resilience and disaster risk management – can help create coherence and co-benefits across both sets of goals. Reliable, high quality water resources are a prerequisite for long-term resilience and sustainable development. Additionally, actions taken now to mitigate greenhouse gas emissions (GHG) and adapt to changing climate conditions must take water resources into account; the failure to do so could imperil the projects themselves and negatively affect water security for decades. For instance, clean energy solutions that consume or produce water byproducts must consider impacts and trade-offs for other potential uses such as for clean drinking water or food production.

The actions we take today will have lasting impacts over the next 50 to 100 years, and beyond. Therefore, it is vital for us and for our future generations that we get it right. As Parties begin to revise and strengthen their Nationally Determined Contributions (NDCs) ahead of 2020, we are embracing the powerful Talanoa spirit and hereby offer our contribution to this global conversation. It is our hope that these stories and narratives from a diverse group of individuals working across sectors to address climate change, accelerate sustainable development and improve water security will provide inspiration to policy makers and practitioners alike.

Vinaka vaka levu.

Summary of participant responses to the Talanoa Questions

James Dalton, Director, Global Water Programme, IUCN

Where are we? This past year has shown us that even those who thought they were insulated from the negative impacts of climate change are also vulnerable. For example, extreme drought and wildfire above the Arctic Circle in Sweden has shocked the country. Swedes perceived themselves to have an advanced degree of knowledge, level of planning, preparation, and capacity to respond effectively. Despite this, they were left flat-footed and in need of international assistance to deal with these hazards. Partially this comes down to the fact that even – and perhaps especially – in the most advanced countries we've lost our fundamental connection to natural systems. This is not a problem of finance – where we really need to ramp up action is in increasing our understanding of and connection to *natural systems*. As of now, ecosystem resilience is not built into our plans and programs for addressing climate change or sustainable development, which means we have no resilient ways of addressing climate challenges as they arise.

Where would we like to go? Policy is not an endpoint. Achieving the SDGs or Paris Agreement targets are not in and of themselves the ultimate goal, rather they put us on the right trajectory. We need these goals with timelines because currently we are not moving at the speed and scale with which our challenges demand. We need to think more holistically about how we achieve a sustainable, resilient future for all. For example, as written, most of the NDCs can be read essentially as wish lists for investment and do not address issues holistically across sectors, which is essential for meaningfully reducing GHG emissions and increasing adaptive capacity to meet the changes that are coming and, in many cases, are already here.

How will we get there? Policy needs to do a better job of acting as the connector, not reentrenching existing sectoral or thematic divides. At IUCN we've been working for 5+ years in Kenya on precisely that and in that time, we've seen a massive increase in capacity and financing for this work, particularly through bilateral and multilateral climate funds. 40% of that funding goes to capacity building so that today we have institutions capable of building the political and knowledge capacity at the administrative level. What is needed next is to translate that knowledge back down to the local level so that these resilient solutions can actually be implemented.

Jan Cassin, Director, Water Initiative, Forest Trends

Where are we? We are beginning to recognize and quantify the value of nature-based solutions to more cost-effectively, resiliently, and sustainably achieve our water targets under the SDGs. Water managers are starting to embrace natural infrastructure as a compliment to traditional gray infrastructure. We know there are multiple benefits to the expanded use of natural infrastructure including for the climate, for health and human wellbeing, and for our natural environment. As such, these benefits can be accounted for across a range of SDGs. But we are not yet operationalizing that knowledge in decisions, finance, or policies, such as through our initial NDCs.

Where would we like to go? One of the reasons [that we are not yet operationalizing that knowledge into decisions] is because the ways that we manage land, water, climate, etc., both

within our institutions and in our governance structures more broadly, continue to be siloed and disconnected from one another. Even *within* water management this remains a problem.

How will we get there? Stormwater, drinking water and wastewater are all managed separately – we need to manage for one water. National and city-level policies and plans, as well as public and private sector investment, needs to reorient itself to explicitly focus on how we can achieve multiple benefits across sectors for human health, economic wellbeing, rural livelihoods, climate mitigation and adaptation, etc.

Nevil Muncaster, Director of Asset Management, Yorkshire Water Services, Hull, UK pilot programme for the City Water Resilience Framework (CWRF)

Where are we? Where I come from in Hull, a city in the northeast of England, we live below sea level which means both historically and currently we have problems with flooding. Climate change is not going to fix these problems and, in fact, sea level rise will likely exacerbate them. Traditionally when our stormwater systems flood, we build more pumps, etc. This intensive, fixed infrastructure costs millions of pounds and is only a short-term solution that doesn't address the underlying flood vulnerability.

Where would we like to go? To address vulnerability, we have to work collaboratively, which is not how our municipal structures have historically operated. But we are starting to think differently and create new partnerships.

How will we get there? We, the Yorkshire Water Authority, are working with the regional environmental committee, Hull city council, and local authorities to create a sustainable long-term flood risk management plan for Hull and its environs. These are groups that have not traditionally worked together, and in fact have been quite suspicious and distrustful of one another. A big part of this partnership in the beginning stages has been about building trust. Now that we have established a baseline of trust amongst each other, we are working to build a sustainable and resilient water future for the people who live and work in Hull.

We are still in the planning stage of this project, but we have identified a range of gray, blue and green infrastructure projects that will help reduce flood risk in many areas and we will begin implementation soon. However, in the UK – as elsewhere – we still need new and alternative types of investment that will recognize and promote the multiple benefits that these solutions can bring. So that is one area that will need to be addressed if this project is to remain viable in the medium to long-term.

Cate Lamb, Global Director, Water Security, CDP

Where are we? Where are we in terms of meeting our goals under Paris and the SDGs? From a private sector perspective, we are still not doing enough. However, CDP has been working with companies now for over 18 years to hold them accountable for the activities they are undertaking to deliver on the Paris Agreement and Agenda 2030. To date, all of this has occurred on a voluntary basis. Real progress has been made. Many companies now have water-security related key performance indicators (KPIs); others are beginning to consider water in their long-term plans

for growth and development and are making changes to their business models to become more water-sustainable. We now have nearly 8,000 companies disclosing that they are pushing their own GHG emissions down. However, as a percentage of global business, this is minor.

Where would we like to go? The pace of change is not enough. We need to ramp up disclosure and as well as the rewards and penalties in place for compliance [with GHG emissions and water security KPIs]. Another area that needs further attention is private finance. Major financial institutions control two-thirds of the money circulating in the global economy. We need to harness the power of this capital and align it with our development and climate objectives. These banks, such as HSBC, Santander, ICBC, etc., control financial flows to companies, providing loans that in many cases accelerate climate change and compound our water security challenges. If we fail to address these financial flows, we can forget about reaching our goals. Private lending must also shift, rewarding companies that take water security seriously and cities that are embracing more sustainable development models.

How will we get there? We need a radical transformation in the way that business models are structured; we need to incentivize and catalyze new forms of business growth. We need to realize that the way that most business models are currently designed are fundamentally incompatible with a 1.5°C future. We need to ramp up disclosure and transform it into a mandatory requirement. Companies need to take a risk-based approach to management and growth. This will help the boards of these companies see that the trajectory that we are on, that they are on, poses a serious risk to the financial stability of their companies and industries. It can also prompt them to invest in innovation and discovering pivot points to put them on a more sustainable trajectory that also has benefits for the global economy.

Governments need to set the expectation for this action in the form of financial regulation that clearly indicates that it is no longer acceptable for businesses to act in this way, it is no longer acceptable for banks to allocate funds in this way. CEOs and board directors need to ensure that their business plans and lending strategies align fully with our international, national, and local ambitions.

Lindsey Aldaco-Manner, Research Associate, Texas A&M Water-Energy-Food (WEF) Nexus Initiative

Where are we? In the San Antonio region of Texas, U.S.A. alone there are over 290 water authority agencies (spanning utilities, planning, research, extension, groundwater, etc.). What is the cooperation level between these agencies and state planners? Very low. In fact, 58% have no communication whatsoever with state agencies.

Where would we like to go? While the global goals of the Paris Agreement and Agenda 2030 need to be connected to the national and local level, the local level also needs to be connected across silos. We need to improve communication and cooperation at all scales.

To close the session in the spirit of the Talanoa Dialogues, Raha Hakimdavar from the United States Forest Service shared a story of water in her hometown of Esfahan, Iran.

A river runs through my city

A river runs through my city

Have you heard of it?

It's a famous city, or once was

There are famous bridges, crossing that river, the one in my city

There have been songs written about this river and its famous bridges in this famous city Maybe you've heard of them

It's long been the admiration of poets, and philosophers, and engineers alike

People, *important* people, *noble* people, used to travel from faraway lands just to get a glimpse of this river in my famous city

And when destiny uprooted me to a new home, far away from the city with the famous river and the famous bridges

I took solace in my memories of that river, the river that gives life, the *Zayandeh-Rood* Do you know it?

Visions of my father, resting his head on one of the thirty-three arches of the *Sio-Se-Pol*, looking out at that beautiful river flowing through the city that he loved, the city that we left Families picnicking and sipping tea nearby on hot summer nights

Children playing, their screams of joy annoying the love birds nearby fighting for their privacy in the dark

Men stealing a moment of peace in the early morning hours on their way to work, sitting on the steps of the *Pole-Khaju*, the Khaju Bridge, looking out

The echoing sound of old songs being projected through the acoustics of the bridge's arches at dusk, through the voices of men past their prime reminiscing of life in a finer time

Arches perfectly constructed to keep and share century's long stories and secrets in song Those are some of the fondest memories I have of my childhood, important memories that led me to where I am, and where I stand, here before you

They all exist because of the river I speak of, the *Zayandeh-Rood*, the river that gives life You see, I come from a city of romantics and this river has long been our muse

But for too long now, those famous bridges crossing that famous river have become obsolete That famous river I speak of, the one crossing my city

Is no longer a river at all

It is completely dry

The birds and fish that used to play are long gone

Replaced by standing puddles of sludge and a putrid smell of life still trying to survive So when the river that gives life, no longer does, what are we to do? Do we change its name?

What has happened, you ask?

The reservoirs upstream are low I hear, a consequence of persistent drought

As for policies, yes, there should be better ones And the management, well, let's just say it's flawed

And the management, well, let's just say it's haved

"God willing, the water will come back" they say

But what if God is not willing?

What do we do then? What can we do, then? I don't know

Esfahan, nesve jahan

Esfahan is half the world, the poets and the philosophers, the famous ones, would say Well if half the world is contained in my famous city, as they say Then is half the world suffering the same fate?

Every river, big and small, has a story to tell This one's just mine But I am not a philosopher, or a poet, or even a very skilled storyteller at that I am an engineer, a scientist, and engineers are in constant search of answers, of solutions

Where are we? Where do we want to go? How do we get there?

Well the answer to that, my friends, can no longer be "I don't know" Because what happens if one day we no longer have the features that inspire our poems, our stories, and our next generation of poets, philosophers, and engineers, alike? What happens if we no longer have the rivers that give life?

I speak to you about the river in my famous city today because I worry about its fate I worry that the day may come when the world has not heard of that river that is no longer there But this is not a unique fate

It is a familiar story, in fact, but one that must be shared and one that must be heard For our life bearing rivers are disappearing in silence while we are arguing over methodologies and data

Our life bearing rivers are more than just lines on a map or parameters in a model Every single one has a story to tell – now it is our job to listen and learn

Climate, water, management, policies, science, engineering They are inextricably linked, just ask anyone that you run into in the streets of Esfahan, in my country of Iran

For more information about any of the programmes referenced in this document or to get in touch with any of the speakers, please do not hesitate to reach out to Maggie White, Sr. Manager, International Policies, Stockholm International Water Institute (SIWI): maggie.white@siwi.org, or Ingrid Timboe, Policy Associate, Alliance for Global Water Adaptation (AGWA): policy@alliance4water.org.