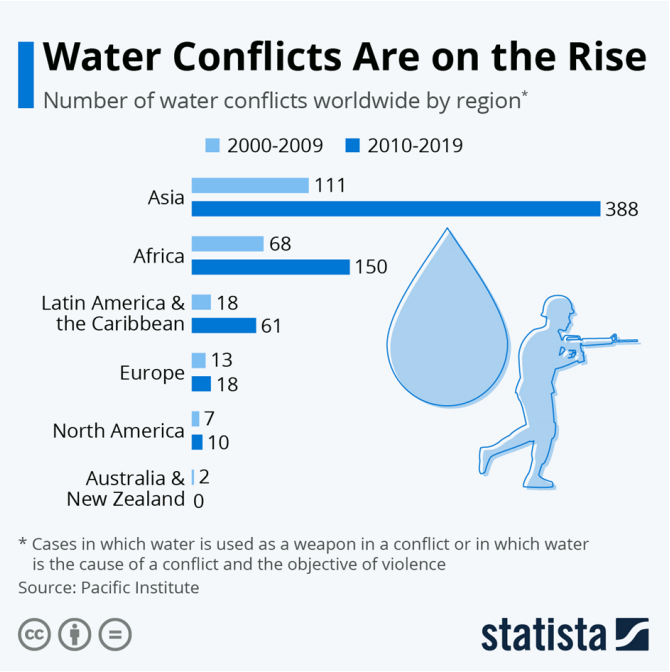
Hydro Politics Newsletter
by Hydropolitics Association
April 2022 Issue:35

Water Conflicts Are on the Rise

Apr 20, 2022

The number of water conflicts is increasing in most regions of the world, as shown in this infographic based on data from the Pacific Institute. The hotspot is Asia, which has the highest number of conflicts in absolute terms and the strongest recent growth in conflicts.
Only last year, at least 41 people were killed and more than 200 injured in a violent border conflict over access to water resources in the region between the two ex-Soviet republics of Tajikistan and Kyrgyzstan. There are also many water conflicts in other regions of Asia. For example, the largest and most important rivers in Asia are controlled by China - which is why unrest is growing in India and Bangladesh. Experts believe that the fight for water could become even more intense here in the coming years.



The world's second-largest water conflict region is Africa. A gigantic dam that Ethiopia plans to build at a cost of more than five billion dollars to dam up the Blue Nile flowing through its territory has recently caused a great deal of trouble here - a project that is causing particular consternation in downstream Egypt, where the Nile water has been the country's livelihood for centuries.

The source distinguishes the following different types of conflict:

- Trigger: Conflicts over control of water; economic or physical access to water or even water scarcity trigger violence.

- Weapon: Water resources or water systems are used as an instrument or weapon in a violent conflict.

- Casualty: Loss of water resources or water systems due to becoming intentional or incidental targets of violence.

Martin Armstrong
Data Journalist
martin.armstrong@statista.com

The world needs a new water agenda

by Mark Smith | @DMSmifffy |

International Water Management Institute (IWMI)
22 March 2022

From major floods in Germany and China last year and eastern Australia this year, to ongoing and prolonged droughts across North and East Africa, the world is confronting a new climate change-induced water reality.

As the Intergovernmental Panel on Climate Change recently reported, the world is not doing nearly enough to bolster defences to risks and stresses caused by floods, droughts, sea level rises and glacial melt – and the window for action will close if warming beyond 1.5C outstrips capacities to adapt

Yet, governments are still not putting water security at the centre of the climate crisis despite the profound implications of worsening water insecurity. From failing agriculture and food security, and disasters and disease, to heightened inequality, fragility and instability, ultimately, the poorest communities will be impacted the most.

As climate change continues adding more energy to the global water cycle, the impacts of water insecurity will not stop there. Failing infrastructure and critical risks to business – caused by water scarcity, floods and extreme events – will weigh on the economy, and wash through the world's financial system.Governments and businesses have made ambitious commitments to the global energy transition, with the goal of rapidly cutting greenhouse gas emissions. Now, they must replicate this momentum for adapting to the inevitable impact of climate change by building the same sense of urgency and commitment to a transition to a water-secure world.

In doing so, however, it is vital to recognize that achieving water security is a radically different challenge than it was in the past. Before global heating began disrupting the climate, water management could rely on historical experience and data as a guide to future water risks. With droughts, floods and shifting monsoons now becoming less and less predictable because of climate change, this no longer holds true.

As a consequence, the world needs a new scientific agenda for water that is capable of helping governments, the financial sector, communities and companies navigate the uncertain waters brought about by rapid changes in climate.

This means new data to account for the growing unpredictability of water, and scientific innovation to develop new ways to measure and respond to unexpected changes in rainfall, rivers and reservoirs.

For example, instead of basing policy and planning decisions on historical patterns of drought or monsoon seasons, or the likelihood of floods, governments and business need more flexible approaches guided by satellite-based early warning systems and scenario modelling that helps them identify robust options for water management and infrastructure. Better monitoring and accounting for water resources and patterns in real-time can ensure that policymakers, businesses, financiers, city leaders and farmers alike are not blinded to the risks of increasingly unpredictable water resources, offering – amidst all the uncertainty – the means to transition to a water-secure world.

Such innovations need to be developed and deployed as rapidly as possible, through new partnerships that bring together the policy, development, business and science communities, and reinforced by evidence-based action to ensure inclusion and women's equality in water security, and that the resilience of the most vulnerable people is put first.

To achieve this, governments, businesses and philanthropy will need to learn to see water science as an investment, not a cost, towards a more water-secure and resilient world in which we all benefit. Global economic losses connected to water are estimated at $260 billion per year and are only likely to grow as the impact of rising temperatures and an intensifying water cycle becomes more apparent.

With greater recognition of the cost of inaction, the public and private sectors will have to release more investment into water research in key areas such as ways to recycle, harvest and store water, as well as techniques and infrastructure to reduce the risk of flooding and pollution.

Faced with unprecedented challenges created by climate change, the world needs a greater understanding of how water science can be mobilized to deal with them. Generating the science needed for a water-secure world will help the world win the race to withstand climate change and achieve the ambitions of the UN's 2030 Agenda for sustainable development with no one left behind.

Mark Smith is director general of the International Water Management Institute (IWMI).

Source:https://news.trust.org/item/20220321114401-ui73l/

What Is a Water Utility in a Digital World?

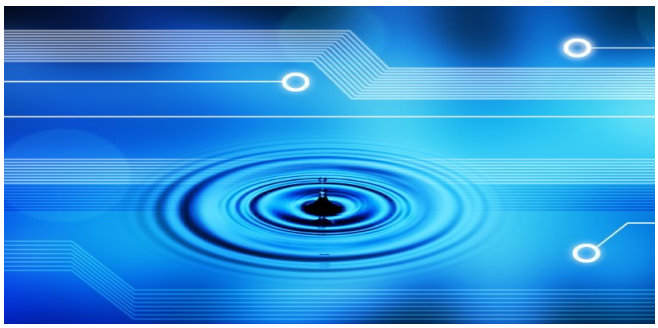
Gigi Karmous-Edwards
Digital Business Lead Director | Amane Advisors

Will Sarni Founder and CEO | Water Foundry

Imagine a blended or hybrid utility that incorporates the positive attributes of centralized water systems with those of off-grid and localized systems "powered" with digital solutions to optimize performance with improved customer engagement. Imagine customers and utilities monitoring water quality at the tap on a real-time basis with the ability to intervene to prevent health impacts.

Digital technologies have transformed the energy sector with a move toward micro-grids and the adoption of renewables. The water sector will benefit from the experience of other sectors in adopting new solutions as it works to ensure universal access to safe drinking water, water for business growth and economic development.

Imagine water taking the front and center role in smart cities – that is, utilities expanding their reach for data and insights beyond the borders of their operation. Utilities can better accomplish this by having a fundamental understanding of the current and future status of the water supply sources (ground water, lakes, rivers, neighboring cities, etc.) that service end customers and needs for better supply management and customized customer service. Also imagine the majority of water will not only be recycled, but beneficial resources (nutrients, microorganisms) will be harvested including the conversion to energy. Nutrients harvested can then be used to enrich



depleted soils for agriculture, helping to solve the water-energy-food nexus. Digital technologies are the fundamental agent of change for this reality.

What needs to change to make this happen?

Innovation in public policy, technology, financing and business models. Perhaps the most challenging is acceptance by civil society that water is a valuable and strategic resource. As a result, we need to reinvent how we deliver water in a reliable and equitable manner.

Source:https://waterfm.com/water-utility-digital-world/

UNEP warns of climate adaptation gap

UNEP has released the sixth edition of its Adaptation gap report and, in a report subtitled 'The gathering storm', sets out how the world is adapting to the impacts of climate change alongside continuing to ramp up its efforts to cut greenhouse gas emissions.

Among its findings, the report concludes that there is an urgent need to increase climate adaptation finance, given that adaptation costs in developing countries in particular are five to 10 times greater than public adaptation finance flows. This gap is widening, with developing countries potentially facing adaptation costs of US$ 280-500 billion per year by 2050. International public adaptation finance has increased by more than 50% over 2017-2018 and 2019–2020, but is still far too low, it adds.

The report also finds that COVID-19 recovery stimulus packages are becoming a lost opportunity to finance climate adaptation. Less than one third of the 66 countries investigated in the report explicitly funded COVID-19 measures to address climate risks up to June 2021. Furthermore, the increased cost of servicing debt, in association with reduced government revenue, could potentially hamper future government spending on adaptation.

However, there is a positive trend generally with regard to adequacy and effectiveness in adaptation planning, compared with 2020. Climate change adaptation is increasingly being integrated into policy and planning, with around 79% of countries adopting at least one national-level adaptation planning mechanism, representing an increase in such measures of 7% since 2020. Implementation of adaptation measures is also growing slowly, with the top 10 donors funding more than 2,600 projects with a principal focus on adaptation between 2010 and 2019.

More generally though, the report finds that further ambition is needed to advance national-level adaptation planning, finance and implementation around the world, including overcoming barriers facing private sector engagement. Even if greenhouse gas emissions ceased immediately, the world would still face decades of impacts from the climate change that has already occurred, it adds.

Source :https://www.thesourcemagazine.org/unep-warns-of-climate-adaptation-gap/

April 2022

News Coordinator: Assoc Prof. Dr. Nuran YILDIZ
Assoc. Prof.Dr. Doğan YILDIZ
Content : HPA Technical Unit – www.hidropolitikakademi.org
Editor: Dursun Yıldız
Design : ada Strateji Turkey

We need to built a future,
Where people live in harmony with nature

HPA

Think Forward , Lead Forward

http://hidropolitikakademi.org