



"When the well is dry, we will know the value of water" ~ Benjamin Franklin



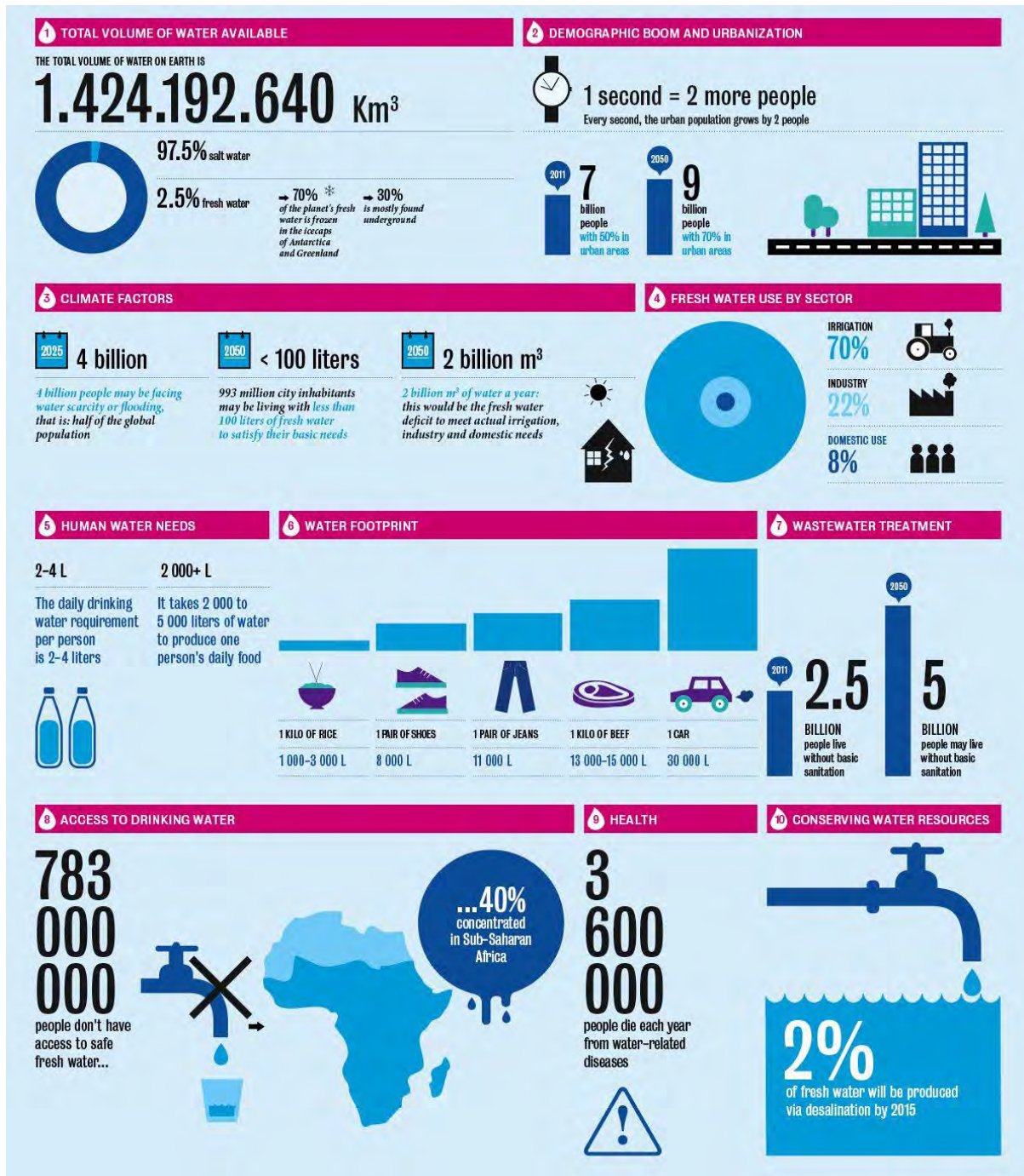
BRIEFING PAPER

February 2020 CONFERENCE

WHO ARE UN WATER?

UN Water is an interagency mechanism, to coordinate the efforts of UN entities and international organizations, such as WHO and UNICEF, working on water and sanitation issues.

Water issues run through all of the UN's main focus areas - over 30 UN organisations carry out water and sanitation programmes. UN Water's role is to coordinate so that the UN family 'delivers as one' in response to water related challenges.



The overarching focus of UN Water members and partners is to support UN Member States to sustainably manage water and sanitation, through: Informing Policies, Monitoring and Reporting and Inspiring Action

WATER AS A HUMAN RIGHT

The Human Right to Water and Sanitation (HRWS) was recognised as a human right by the United Nations General Assembly on 28 July 2010, there was no Article in the Universal Declaration of Human Rights proclaimed by the UN in December 1948 **that explicitly addressed or recognised a person's right to water and sanitation.**

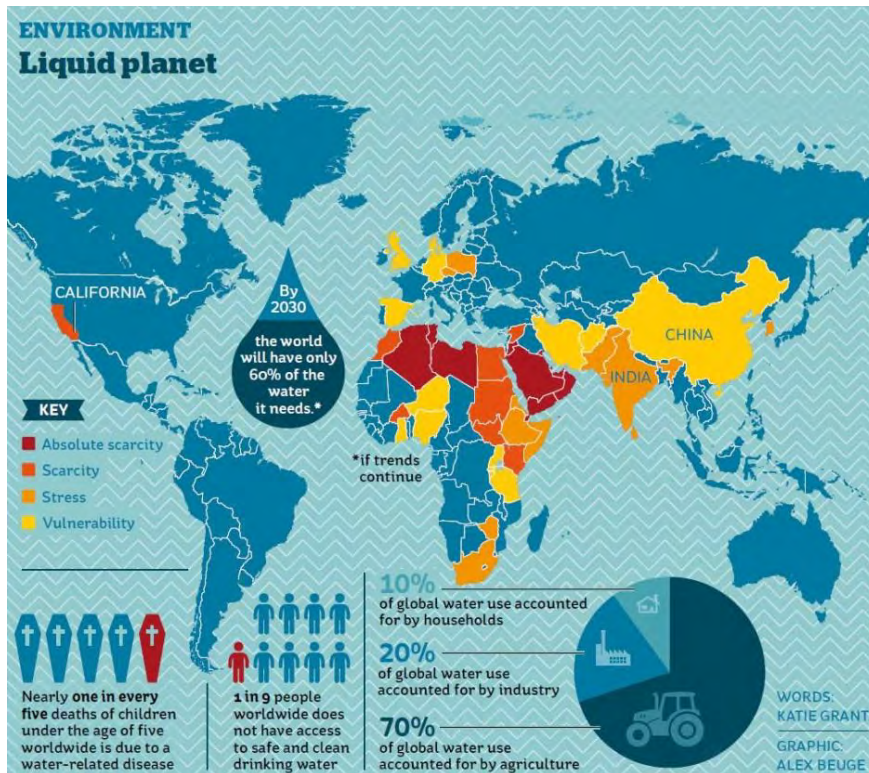
The first resolutions about the HRWS were passed by the UN General Assembly and the UN Human Rights Council in 2010. They acknowledged that there was a human right to sanitation connected to the human right to water, since the lack of sanitation reduces the quality of water downstream, so subsequent discussions have continued emphasizing both rights together. In July 2010, United Nations (UN) General Assembly Resolution 64/292 acknowledged the rights to human water - rights to receive safe, affordable, and clean accessible water and sanitation services. During that General Assembly, it accepted that for the comprehension of enjoyment in life and all human rights, safe and clean drinking water as well as sanitation are acknowledged as human right. The acceptance that access to safe and clean drinking water and sanitation as a free human right in the General **Assembly's Resolution (64/292) brings an important world-wide** governmental control of it. The fulfilment of a productive and healthy life will transpire by recognizing broadly the significance of accessing dependable and clean water and sanitation services. A revised UN resolution in 2015 highlighted that the two rights were separate but equal.

The HRWS obliges governments to ensure that people can enjoy clean, available, acceptable, accessible, and affordable water and sanitation.



THE ISSUE

Water is at the core of sustainable development and is critical for socio-economic development, healthy ecosystems and for human survival itself. It is vital for reducing the global burden of disease and improving the health, welfare and productivity of populations. Water is also at the heart of adaptation to climate change, serving as the crucial link between the climate system, human society and the environment.



Water is a finite and irreplaceable resource that is fundamental to human well-being. It is only renewable if well managed. Today, more than 1.7 billion people live in river basins where depletion through use exceeds natural recharge, a trend that will see **two-thirds of the world's population** living in water-stressed

countries by 2025. Global population is predicted to be 9.1 billion by 2050 and with this water demand is increasing twice as fast. For manufacturing alone, global water demand is predicted to increase by 400% between 2000 and 2050. This illustrates how more needs to be done to change patterns of unsustainable consumption of water as human over-abstraction, agricultural water contamination and industrial water pollution damages our ecosystems and threatens our scarce water supply.

Water can pose a serious challenge to sustainable development but managed efficiently and equitably, water can play a key enabling role in strengthening the resilience of social, economic and environmental systems in the light of rapid and unpredictable changes.

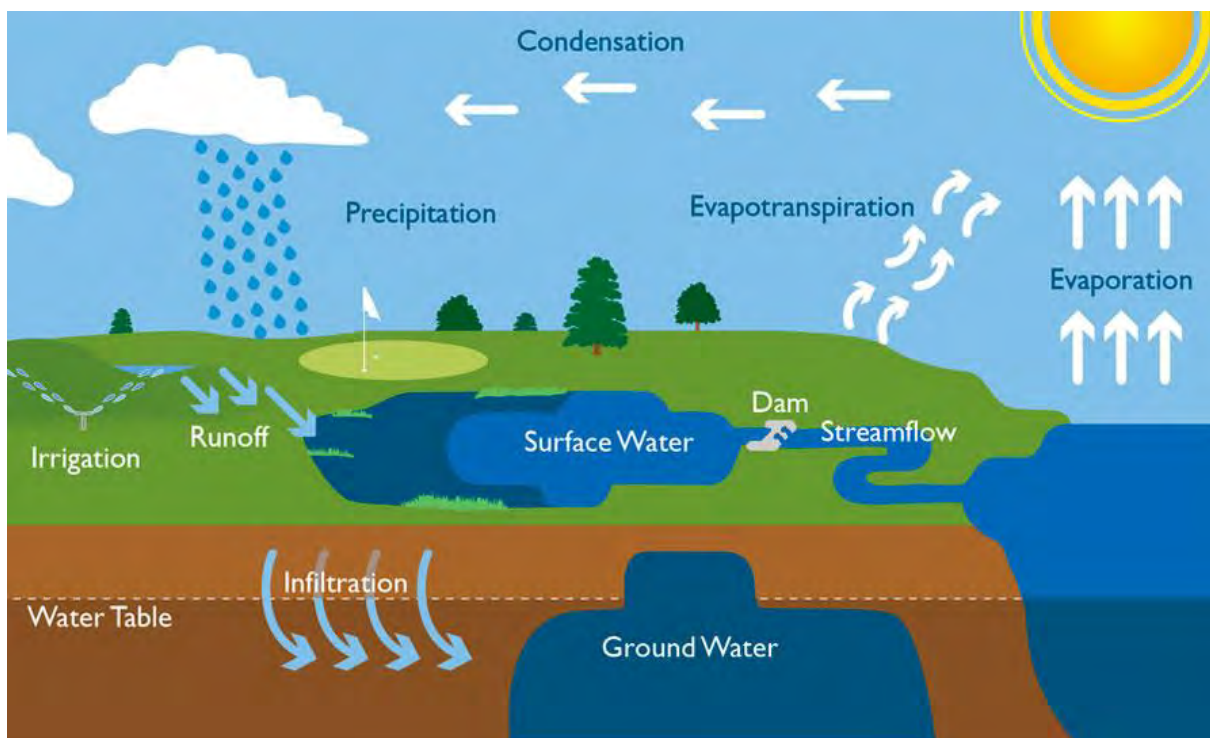
UN WATER AND THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)

UN-Water has helped place water and sanitation at the heart of recent milestone agreements such as the 2030 Agenda for Sustainable Development. UN-Water brought together technical advice from UN entities and external organisations and helped shape **Sustainable Development Goal 6 (SDG 6)** to “**Ensure availability and sustainable management of water and sanitation for all**”. As a result, **SDG 6** and its various targets take the entire water and sanitation cycle into account.

SDG 6.1 pleads of safe drinking water for all however differential water prices worldwide means that people in developing nations with low-income have limited access to safe water due to price. For example, a British person earning the minimum wage spends 0.1% of a day's pay on 50 litres of water from an official piped supply whereas in Papua New Guinea it costs 54% of daily earnings and comes from a delivery service. Moreover, in Ethiopia it costs middles class households who have utility provided water twenty times less than those on low incomes who buy water from a delivery service.



EFFECTS ON THE WATER CYCLE



The water cycle is the continuous movement of water on, above and below the surface of the Earth. Global warming is already having a measurable effect on this cycle, changing the amount, distribution, timing, and quality of available water. As sea levels rise and sea surface temperatures increase the likelihood and severity of tropical storms also do. This is because warmer air can hold more water, thus with increased evaporation the intensity of precipitation in storms and areas of low pressure also rises.

Global warming exaggerates extremes in the water cycle hence creating areas of especial drought as well as flooding. This immensely heightens the vulnerability of communities to hydrometeorological hazards. In California, drought has caused **water levels in Lake Cachuma (that supplies Southern California's water) to fall to 9% of the historical average.** In such areas, constant high temperatures cause soils to become baked. Therefore, in the unlikely probability of rain the ground is **impermeable therefore groundwater, lakes and rivers aren't recharged.**

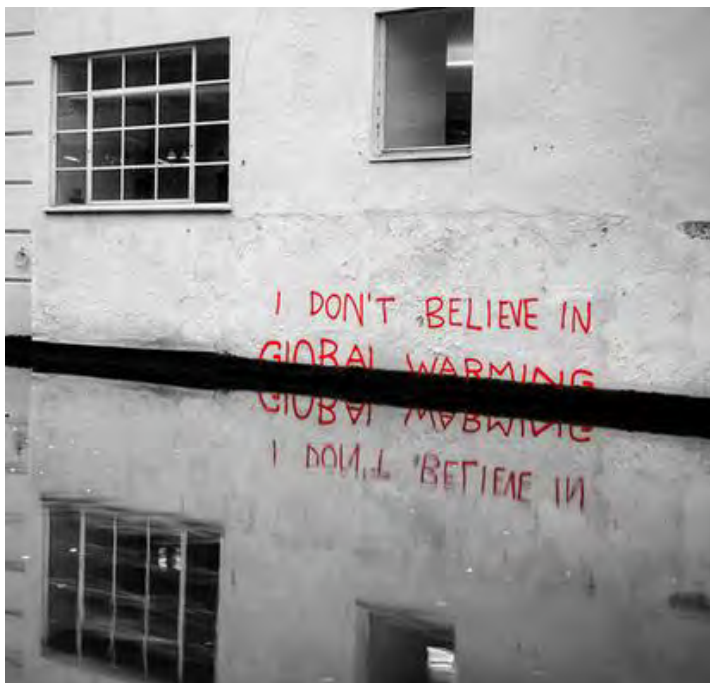
With sea levels rising saltwater encroachment contaminates more scarce stores of freshwater making it unpotable. This has occurred in Tuvalu where salt water has not only contaminated water supplies but destroyed crop. Therefore, the majority water demanded must be imported.

WATER QUALITY AND WASTEWATER

Good water quality is essential to human health, social and economic development, and the ecosystem. However, as populations grow and natural environments become degraded, ensuring there are sufficient and safe water supplies for everyone is becoming increasingly challenging.

Globally, 80% of wastewater flows back into the ecosystem without being treated or reused, contributing to a situation where around 1.8 billion people use a source of drinking water contaminated with faeces, putting them at risk of contracting cholera, dysentery, typhoid and polio. This is particularly damaging in low-income countries where impoverished populations rely heavily on contaminated rivers for a water supply due to industrial and agricultural waste.

Far from being something to discard or ignore, wastewater will play a major role in meeting the growing water demand in rapidly expanding cities, enhancing energy production and industrial development, and supporting sustainable agriculture. For example: in Israel 65% of crops are produced using recycled sewage water.



A piece by street artist Banksy near the Oval bridge in Camden, north London in view of the UN Climate Summit in Copenhagen in

The availability of safe and sufficient water supplies is closely linked to how wastewater is managed. Increased amounts of untreated sewage, combined with agricultural runoff and industrial discharge, have degraded water quality and contaminated water resources around the world. Water must be carefully managed during every part of the water cycle: from freshwater abstraction, pre-treatment, distribution, use, collection and post-treatment, to the use of treated wastewater and its ultimate return to the

environment, ready to be abstracted to start the cycle again. Due to population growth, accelerated urbanisation and economic development, the quantity of wastewater generated, and its overall pollution load are increasing globally. A major part of the solution is to produce less pollution and improve the way we manage wastewater.

THE PARIS CLIMATE AGREEMENT

What is the Paris climate Agreement?

The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change, dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, signed in 2016.

What was agreed as part of the Paris climate deal?

The deal unites all the world's nations in a single agreement on tackling climate change for the first time in history. Coming to a consensus among nearly 200 countries on the need to cut greenhouse gas emissions is regarded by many observers as an achievement in itself and has been hailed as "historic".

The Kyoto Protocol of 1997 set emission cutting targets for a handful of developed countries, but the US pulled out and others failed to comply. However, scientists point out that the Paris accord must be stepped up if it is to have any chance of curbing dangerous climate change.

Pledges thus far could see global temperatures rise by as much as 2.7C, but the agreement lays out a roadmap for speeding up progress.

What are the key elements?

- To keep global temperatures "well below" 2.0C (3.6F) above pre-industrial times and "endeavour to limit" them even more, to 1.5C
- To limit the amount of greenhouse gases emitted by human activity to the same levels that trees, soil and oceans can absorb naturally, beginning at some point between 2050 and 2100
- To review each country's contribution to cutting emissions every five years so they scale up to the challenge
- For rich countries to help poorer nations by providing "climate finance" to adapt to climate change and switch to renewable energy.

What has been included or omitted?

The goal of preventing what scientists regard as dangerous and irreversible levels of climate change - judged to be reached at around 2C of warming above pre-industrial times - is central to the agreement.

The world is already nearly halfway there at almost 1C and many countries argued for a tougher target of 1.5C - including leaders of low-lying countries that face unsustainable sea levels rises in a warming world.

The desire for a more ambitious goal has been kept in the agreement - with the promise to "endeavour to limit" global temperatures even more, to 1.5C.



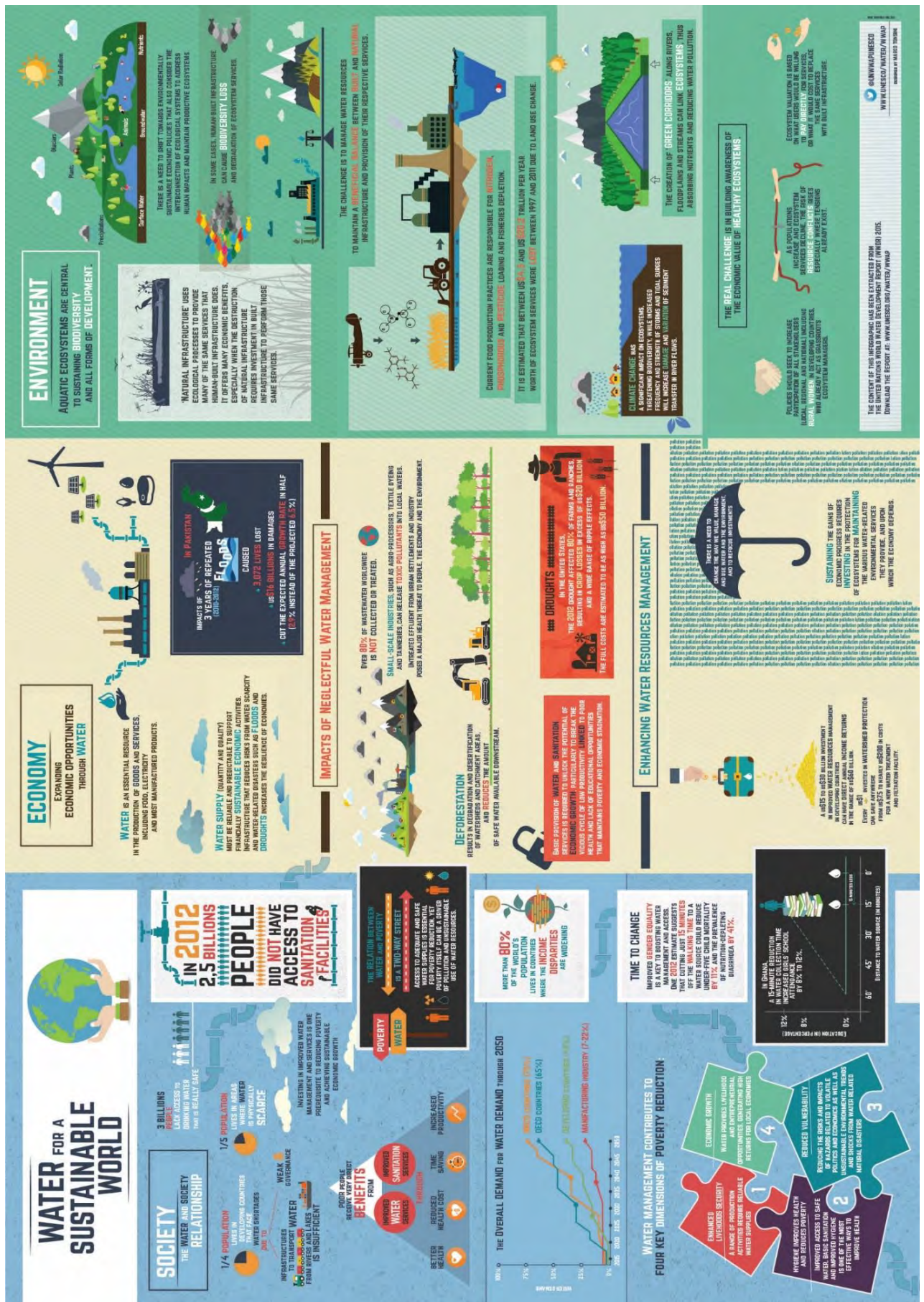
WHAT DOES THE PARIS CLIMATE AGREEMENT MEAN FOR WATER POLICY?

The vital importance of water and water-related trade-offs with climate policy has largely been ignored to date. At first glance, water plays no role in the Paris agreement. Upon closer examination, however, we see that climate policy will have far-reaching implications for the availability of water and vice versa. This affects efforts to adapt to climate change as well as activities to reduce greenhouse gas emissions.

The Paris climate agreement has for the first time made the enhancement of adaptive capacities and the strengthening of climate change resilience a global goal. As a result, climate change adaptation is now given the same priority as climate change mitigation. However, climate and water policy often disregard the importance of water as the medium through which climate change exerts its clearest and most direct impact on our livelihoods and on numerous economic sectors (e.g. agriculture, energy and tourism). This impact is felt in a number of ways, including through climate-related increases in droughts and flooding, seasonal changes in rainfall, the growing scarcity of local water resources (e.g. as a result of glacial melt) and deterioration in water quality (e.g. the salinization of freshwater as a consequence of rising sea levels). If climate change causes people to migrate, then it will be because of increased drought and flooding.

Consequently, we must gear water policy towards addressing the rise in extreme weather events, the scarcity of resources and the deteriorating quality of water resources as a result of climate change. Key climate change adaptation measures in the water sector include the retention of water by forests, wetland and artificial storage facilities, improved soil and water management in rain-fed agriculture, and flood protection. At the same time, other adaptation measures, such as the expansion of irrigation farming, may even reduce the availability and quality of water resources.





Questions to consider

- **Has your country's water been impacted by what appears to be the result of climate change - flooding, drought, extreme weather patterns.**
- What has been the impact of this on people and the economy?
- What action has been taken, or planned, to address the issues your country is facing?
- Is your country in an area of risk from changes in water availability?

Useful websites

<http://www.fao.org/aquastat/en/countries-and-basins/country-profiles/>

<https://www.unwater.org/water-facts/climate-change/>

