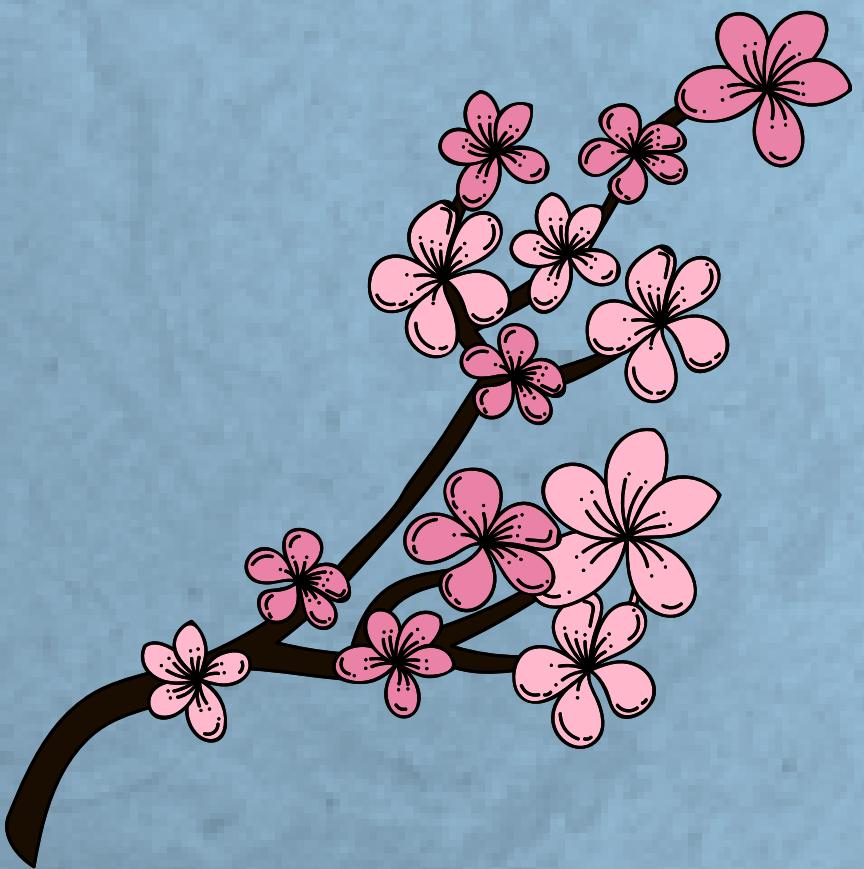


An aerial photograph of a waterfall cascading down a rocky cliff into a pool of water. The water is white and turbulent at the top, transitioning to a darker greenish-blue at the bottom. A small patch of green vegetation is visible on the left side of the cliff.

WATER 💧
Gold of 21st
Century

submitted to,

Prof. Tazeen Siddiqui



Submitted by,

Saiqa Khan-

3118029

Samruddhi Patil -

3118037

Mujtaba Shaikh -

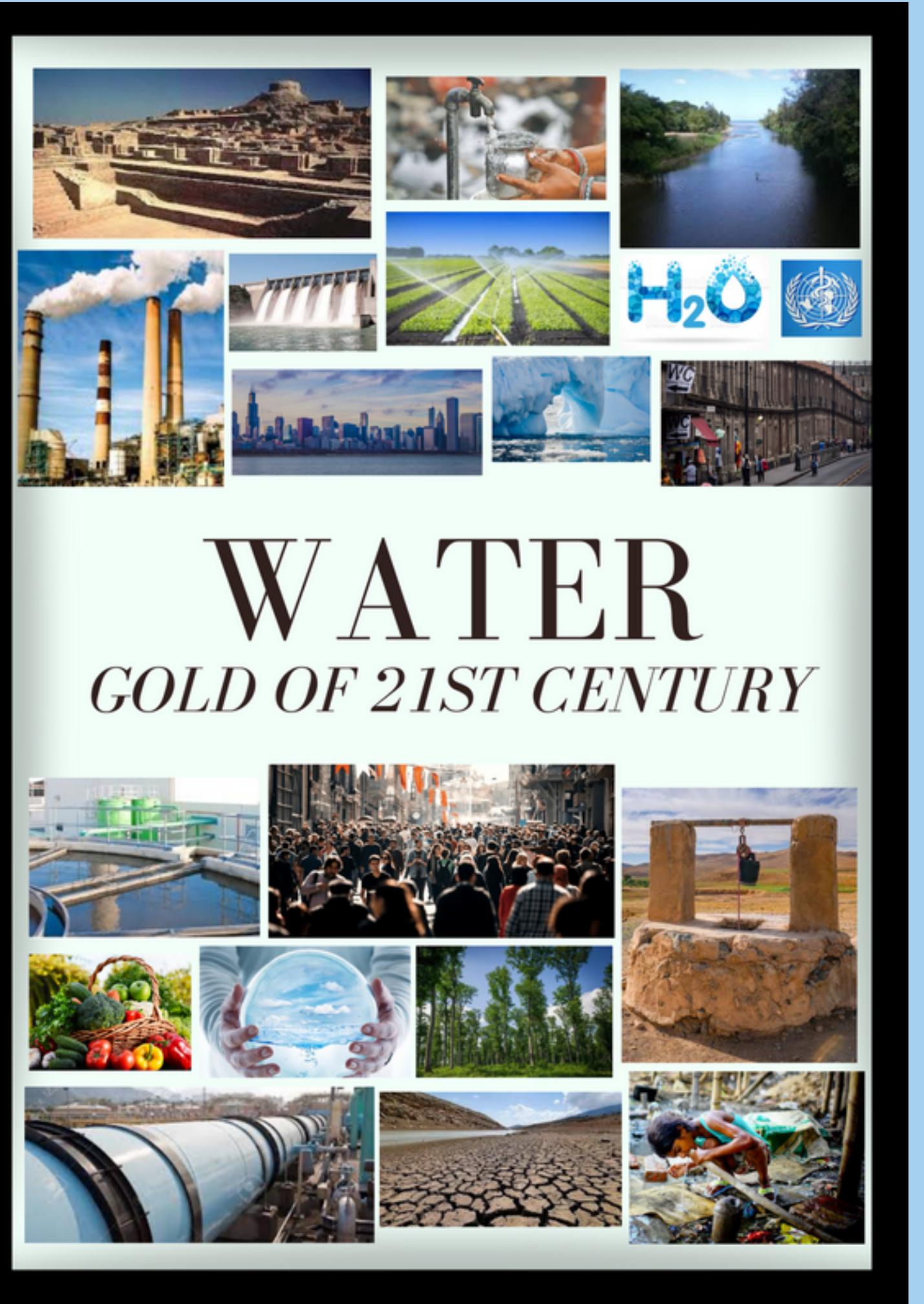
3118050

Muskaan Shaikh -

3118052

Sanurhannan Shaikh -

3118053



WATER

GOLD OF 21ST CENTURY

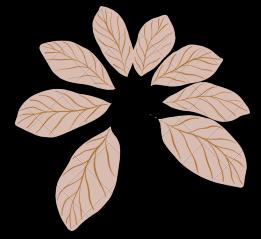
The following presentation is curated from the report named "Water: The gold of 21st Century" which was created by us.
Click on the ICON to read the report.





History

“ Water is the driving force of all nature ”



Mohenjodaro

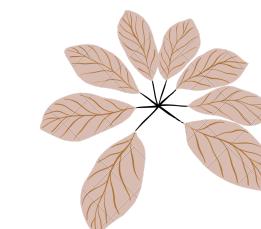
The Early Bronze Age city of Mohenjo-Daro, located in modern Pakistan, archaeologists have found hundreds of ancient wells, water pipes and toilets.

Great bath of Mohenjodaro





The Pantheon and the Coliseum may have brought Rome fame but the city owed its existence to the water running beneath it. Impressive aqueducts, both above ground and underground, transported water from outside the city to its very center, and made Rome possible.

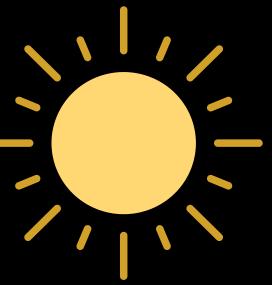


Rome

"If there is magic on the planet it is contained in water"

The Chinese have an age-old saying that nicely sums up the long but unending story of man-water relations:

"Man always aspires higher but water flows to the lowest point."



DRINKING WATER

Drinking Water

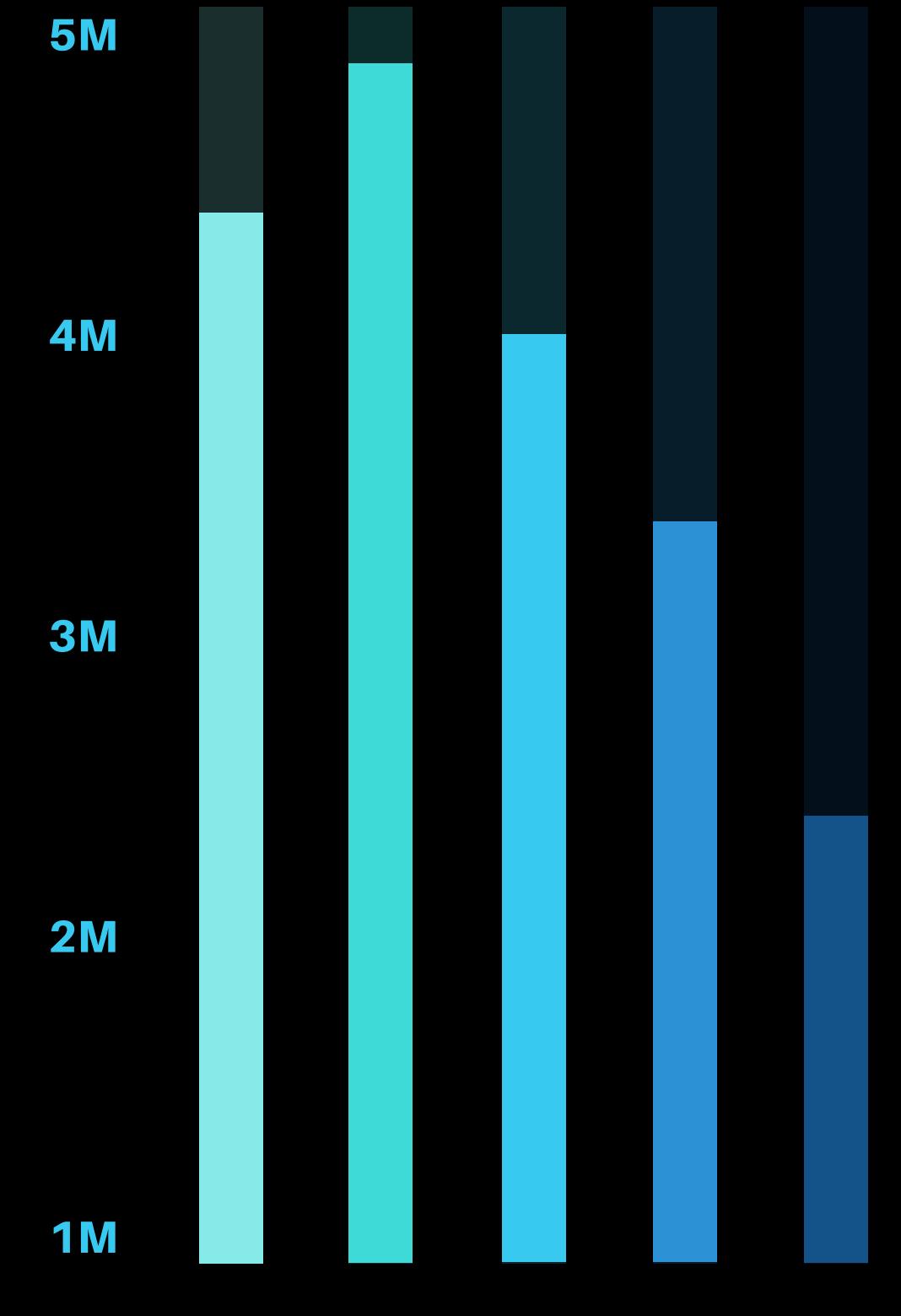


While nearly 70 percent of the world is covered by water, only 2.5 percent of it is fresh. The rest is saline and ocean-based. Even then, just 1 percent of our freshwater is easily accessible, with much of it trapped in glaciers and snowfields. In essence, only 0.007 percent of the planet's water is available to fuel and feed its 6.8 billion people.

WATER DISTRIBUTION



WORLD OF WATER



AVAILABILITY OF WATER
OVER THE YEARS

ENERGY AND INDUSTRY



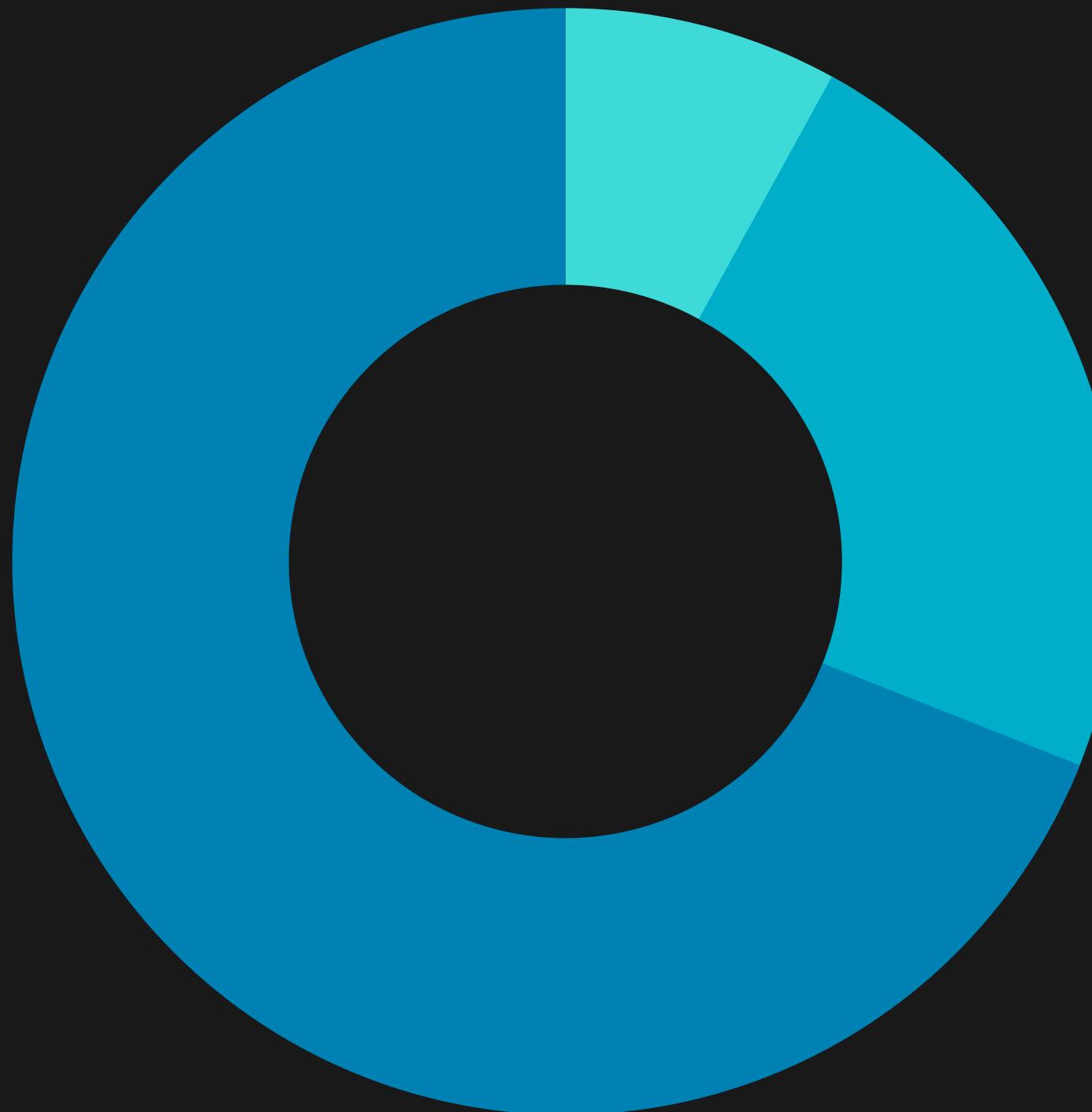
WATER USAGE

What is the world's water used for



Agriculture

69%



WATER USAGE

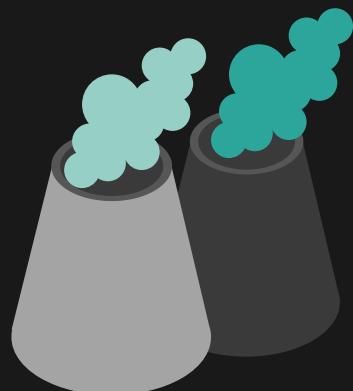
Household

8%

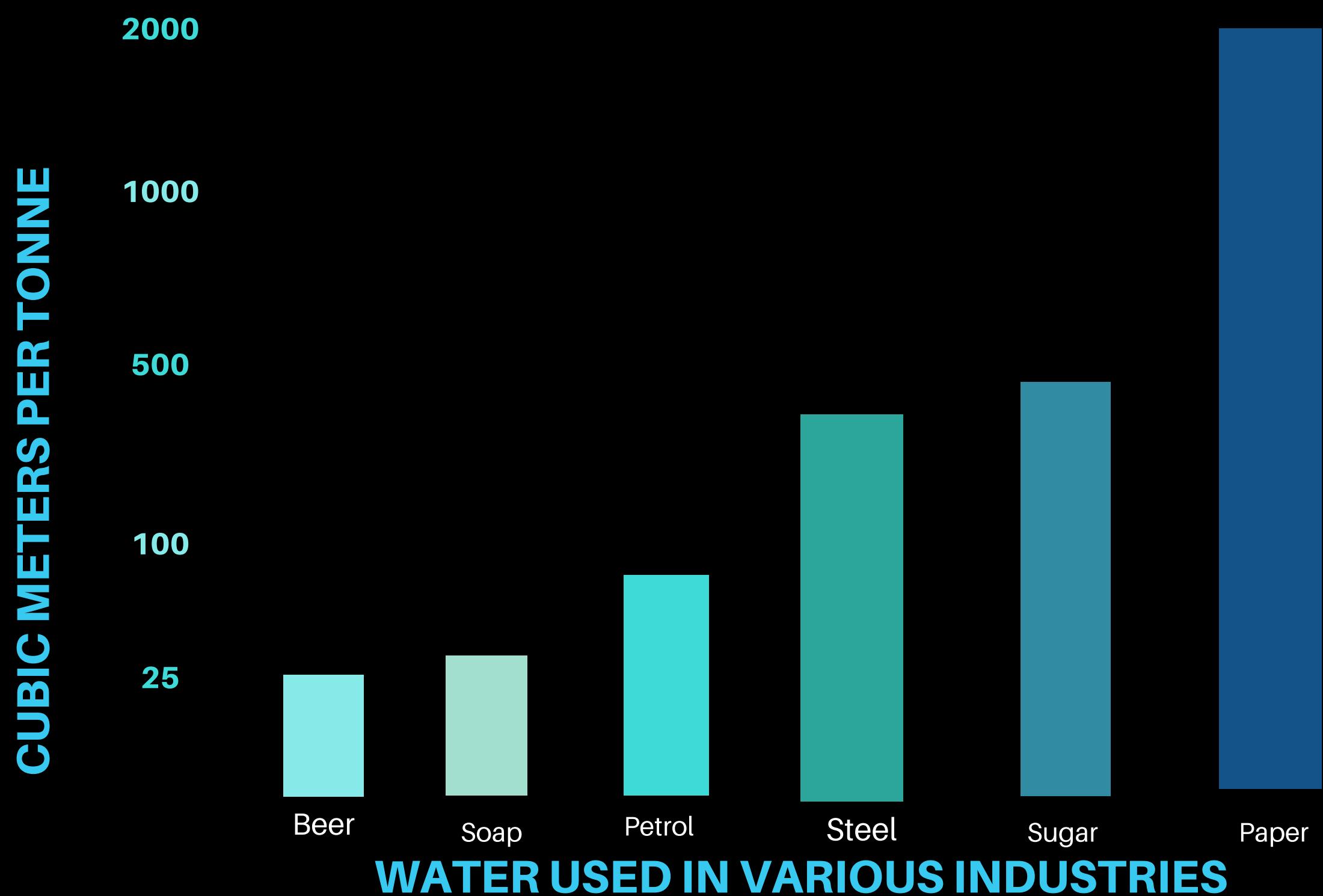


Industry

23%



Water used in various Industries.
This shows how much water is used and consumed in the making of different products.



did you know?



A cup of Coffee requires 122 liters of water right from cultivation of the beans to the processing and packaging.

A T-shirt requires 2500 liters of water to make, right from cotton cultivation to making of threads then making them into T-shirts.

Transport cost, cleaning and dyeing cost also add up as well as the water usage too adds up.



Human Settlements





Human settlement conditions in many parts of the world, particularly the developing countries, are deteriorating mainly as a result of the low levels of investment in the sector attributable to the overall resource constraints in these countries.

**IT DEPENDS ON QUANTITY AND
QUALITY OF WATER , WHERE PEOPLE
SETTLES.**



GROUND WATER DEPLETION

Due to rise in population, water is excessively used which results into groundwater depletion.

Negative effects : drying up of wells, reduction of water in streams and lakes, deterioration of water quality, affecting human settlements as the ground level is sinking with compression of soil.

STOP GROUNDS FROM SINKING ! SAVE WATER !



REGIONAL PERSPECTIVE



Cape Town Water Crisis



The Cape Town water crisis in South Africa was a period of severe water shortage in the Western Cape region, most notably affecting the City of Cape Town.



While dam water levels had been declining since 2015, the Cape Town water crisis peaked during mid-2017 to mid-2018 .



When water levels hovered between 15 and 30 percent of total dam capacity. In late 2017, there were first mentions of plans for "Day Zero".



"Day Zero" would herald the start of Level 7 water restrictions, when municipal water supplies would largely be switched off

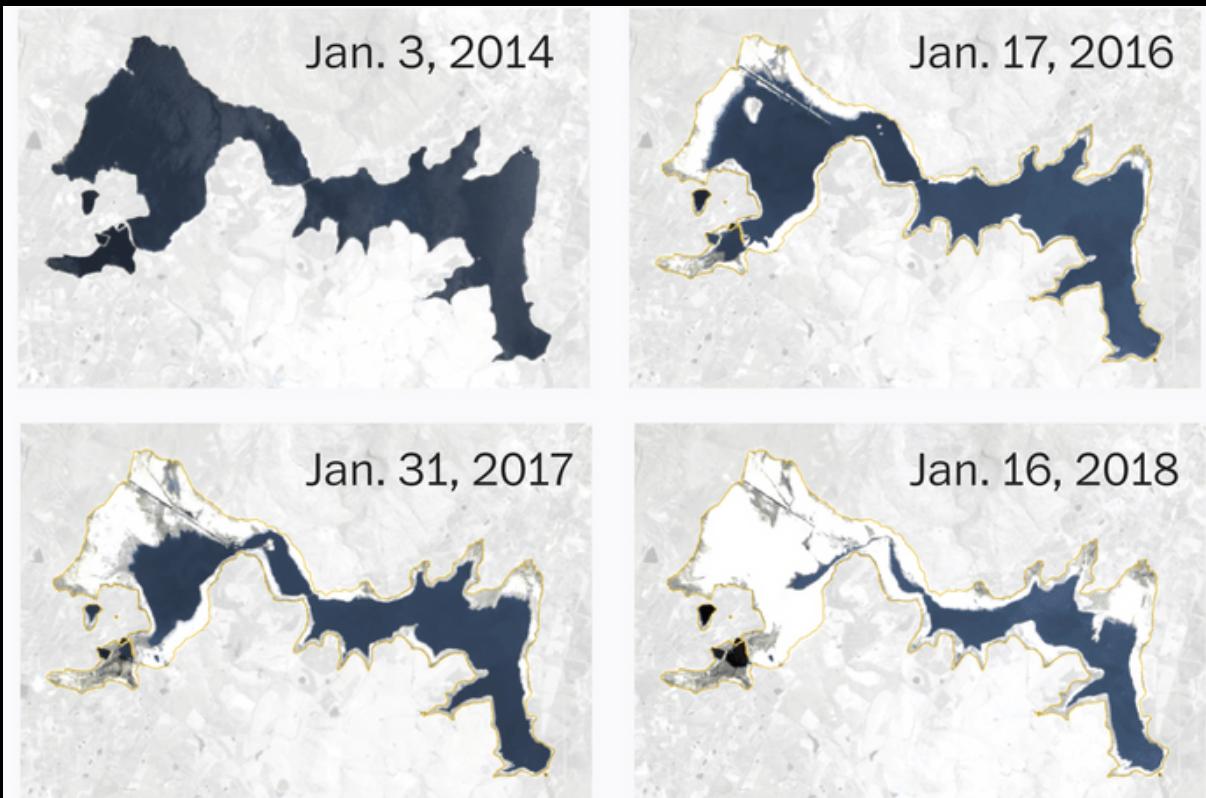


Making the City of Cape Town the first major city in the world to potentially run out of water.



The City of Cape Town implemented significant water restrictions in a bid to curb water usage, and succeeded in reducing its daily water usage by more than half to around 500 million litres per day in March 2018.

LAKES RUNNING DRY!



The following image shows us how the water in the main lake of Cape Town has been shrinking over the years.

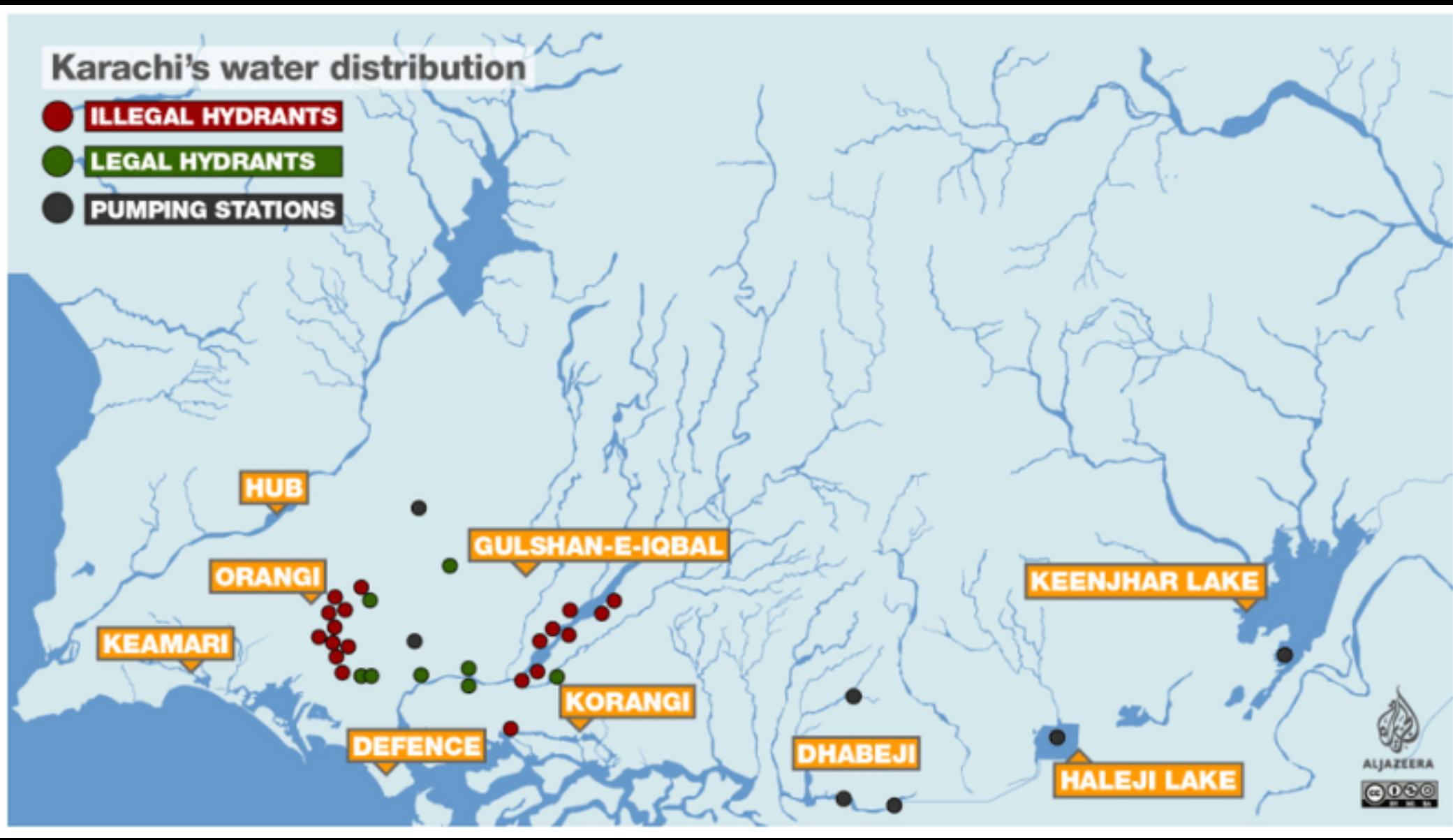
It is the result of less rainfall and also mismanagement by the government. Cape Town had been stressed when it comes to water for decades but nothing was done.

Now desalination plants are being installed around the coast but it is only for temporary basis.

Karachi Water Crisis



Karachi only gets upto 60% of the total water it needs. The rest is either stolen or lost

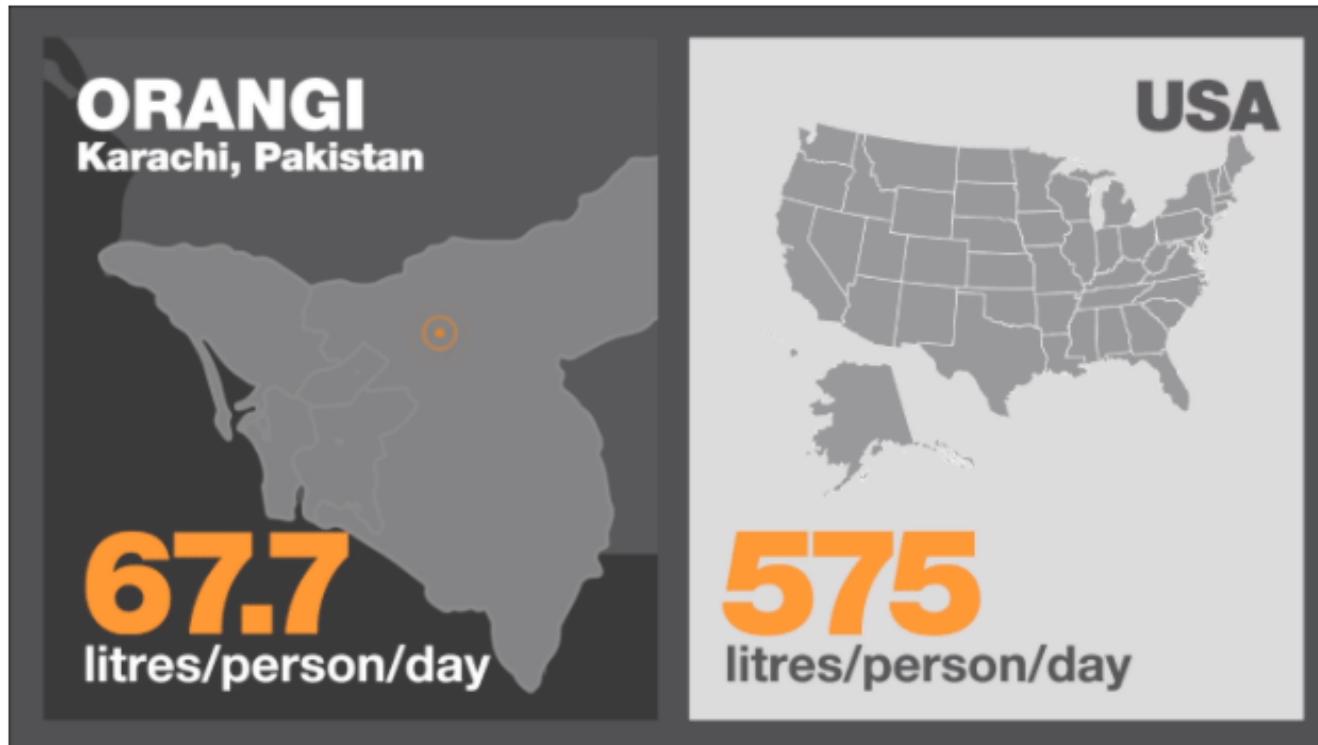


KARACHI WATER DISTRIBUTION

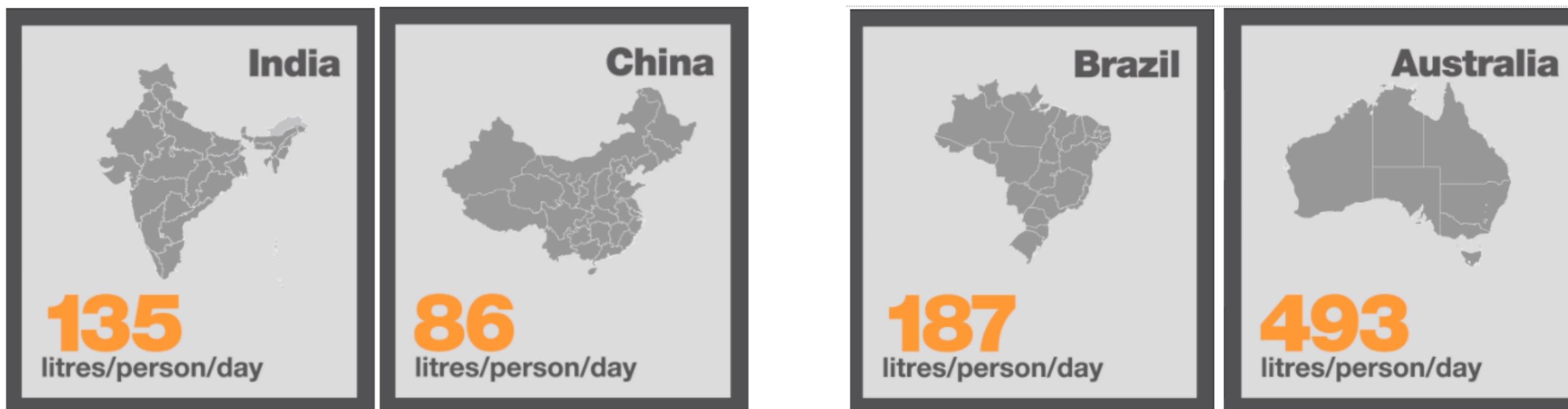
A TYPICAL 1,000-GALLON WATER TANKER COSTS ANYWHERE BETWEEN \$12 AND \$16, DEPENDING ON WHERE YOU ARE IN THE CITY, WHAT TIME OF YEAR IT IS, AND HOW DESPERATE YOU MIGHT BE.

WATER TANKERS HAVE BEEN A PART OF KARACHI'S WATER SUPPLY LANDSCAPE FOR DECADES. INITIALLY INTRODUCED AS A STOP-GAP MEASURE WHILE THE KWSB WAS MEANT TO BE EXPANDING THE CITY'S WATER SUPPLY INFRASTRUCTURE, THEY HAVE GROWN TO DOMINATE THE SECTOR.

WATER USAGE COUNTRYWISE



THE FOLLOWING IMAGES SHOW HOW WATER IS SO SCARCE IN KARACHI. NEIGHBOURING COUNTRIES LIKE CHINA AND INDIA ARE BETTER OFF THAN THE ORANGI DISTRICT. THIS SHOWS US HOW MUCH OF A SCARCITY THERE IS AS UNDERPREDICATED COMMUNITIES HAVE BEEN GIVEN LIMITED ACCESS TO WATER. IT IS NEARLY IMPOSSIBLE FOR HUMANS TO SURVIVE AND THE POOR WHO CANNOT AFFORD THE TANKERS HAVE TO ADAPT.



WATER SCARCITY





Water scarcity is the lack of sufficient available water resources to meet the demands of water usage within a region.



It already affects every continent and around 2.8 billion people around the world at least one month out of every year.



More than 1.2 billion people lack access to clean drinking water. Another 1.6 billion people, or almost one quarter of the world's population, face economic water shortage.



Water scarcity involves water stress, water shortage or deficits, and water crisis.

Did you know?



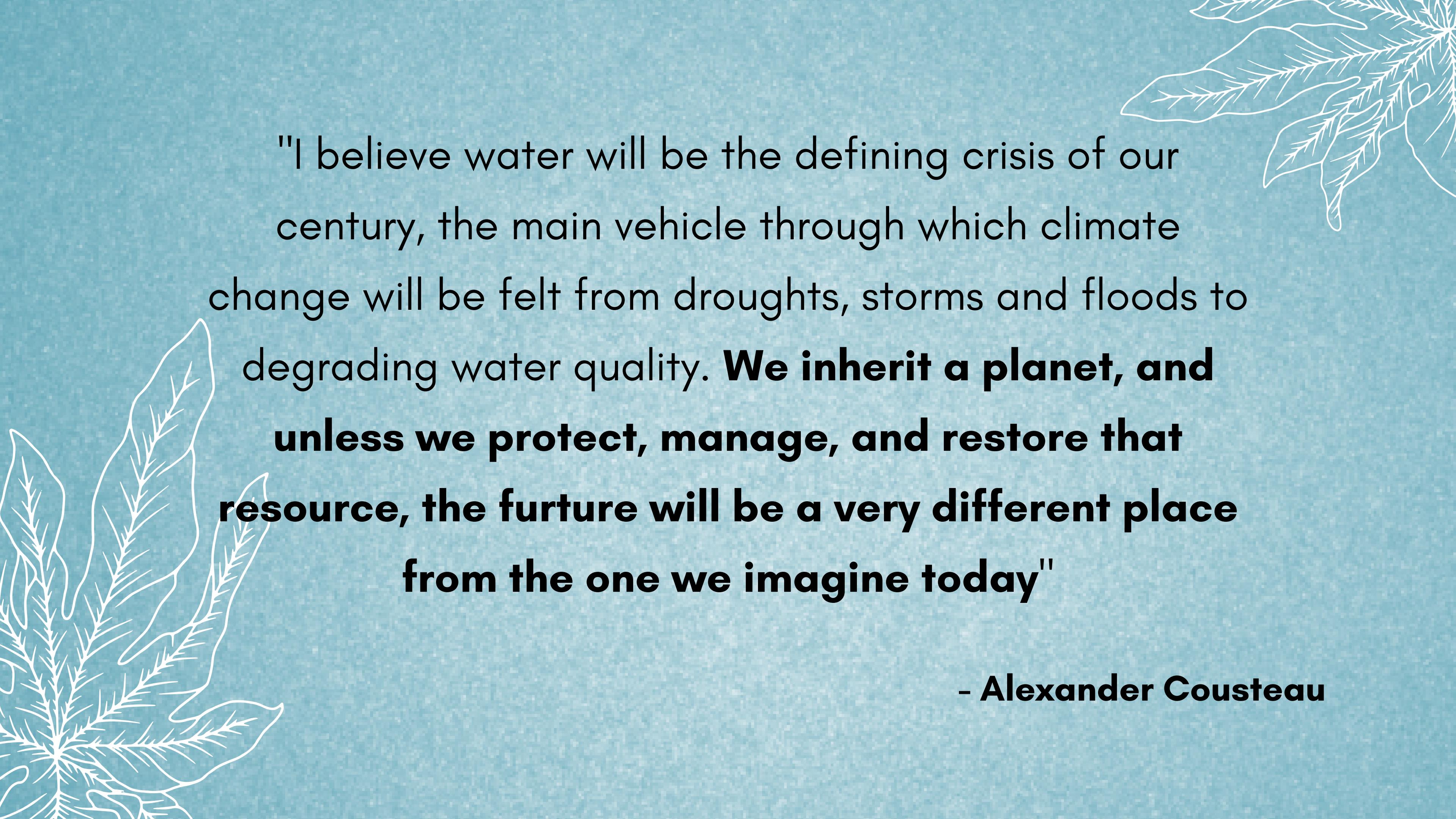
By 2025, an estimated 1.8 billion people will live in areas plagued by water scarcity, with two-thirds of the world's population living in water-stressed regions.

Water demand is projected to grow by 55 percent by 2050 (including a 400-percent rise in manufacturing water demand).

According to the U.S. Intelligence Community Assessment of Global Water Security, by 2030 humanity's "annual global water requirements" will exceed "current sustainable water supplies" by 40%.



GEOPOLITICS



"I believe water will be the defining crisis of our century, the main vehicle through which climate change will be felt from droughts, storms and floods to degrading water quality. **We inherit a planet, and unless we protect, manage, and restore that resource, the future will be a very different place from the one we imagine today"**

- Alexander Cousteau

Nile Water Crisis

WATER GEOPOLITICS, SOMETIMES CALLED HYDROPOLITICS, IS POLITICS AFFECTED BY THE AVAILABILITY OF WATER AND WATER RESOURCES, A NECESSITY FOR ALL LIFE FORMS AND HUMAN DEVELOPMENT. EGYPT, ETHIOPIA AND SUDAN HAVE BEEN FIGHTING OVER THE DISPUTE FOR DECADES. EGYPT AND ETHIOPIA HAVE BEEN BUILDING DAMS AND HYDROELECTRIC PLANTS ACROSS THE ENTIRE STRECH OF THE RIVER WITHIN THEIR BOUNDARIES. THIS HAS RESULTED TO SCARCITY IN SUDAN WHERE THINGS WEREN'T GOOD.



PRIVATIZATION OF WATER

A large, dense stack of numerous blue plastic water bottles, likely 1.5-liter jugs, is piled high. The bottles are arranged in several layers, creating a textured, blue-tinted surface. In the background, a portion of a building with a dark roof and some foliage is visible through a blurred window or glass pane.

PRIVATIZATION AFFECTS SUPPLY

Water privatization – when private corporations buy or operate public water utilities – is often suggested as a solution to municipal budget problems and aging water systems. Unfortunately, this more often backfires, leaving communities with higher rates, worse service, job losses, and more.

Privatization limits public accountability. Multinational water corporations are primarily accountable to their stockholders, not to the people they serve.
Loss of transparency. Private operators usually restrict public access to information and do not have the same level of openness as the public sector.

Development achieved by privatization of water:
Improvement in water service quality;
Improvement in water production efficiency;
Diminished water losses;
Strengthening of management of the water sector, and
Enhancement of customer care.



ORGANIZATION



LOVE WATER





“Over 30 UN organizations carry out water and sanitation programmes, reflecting the fact that water issues run through all of the UN’s main focus areas. UN-Water’s role is to coordinate so that the UN family ‘delivers as one’ in response to water related challenges.”

UN WATER

DRIP, DROP,
DRIP, DROP.
THIS KIND
OF CLOCK
MUST BE
STOPPED.



ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL



785 MILLION
PEOPLE REMAIN
WITHOUT EVEN
BASIC
DRINKING
WATER
SERVICES (2017)

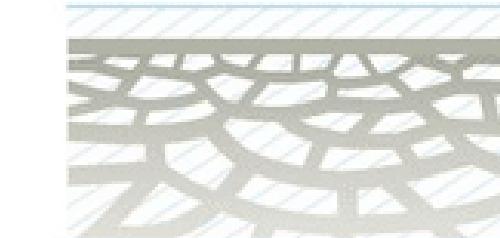


2 OUT OF 5
PEOPLE
WORLDWIDE
DO NOT HAVE
A BASIC
HANDWASHING
FACILITY WITH
SOAP AND WATER
AT HOME (2017)

1 OUT OF 4
HEALTH-CARE FACILITIES
WORLDWIDE LACK BASIC
DRINKING WATER SERVICES
(2016)



BY 2030,
700 MILLION
PEOPLE COULD BE
DISPLACED BY
INTENSE
WATER SCARCITY



2 BILLION PEOPLE LIVE
IN COUNTRIES EXPERIENCING
HIGH WATER STRESS



673 MILLION
PEOPLE (9% OF THE
GLOBAL POPULATION)
STILL PRACTISE
OPEN DEFECATION
(2017)

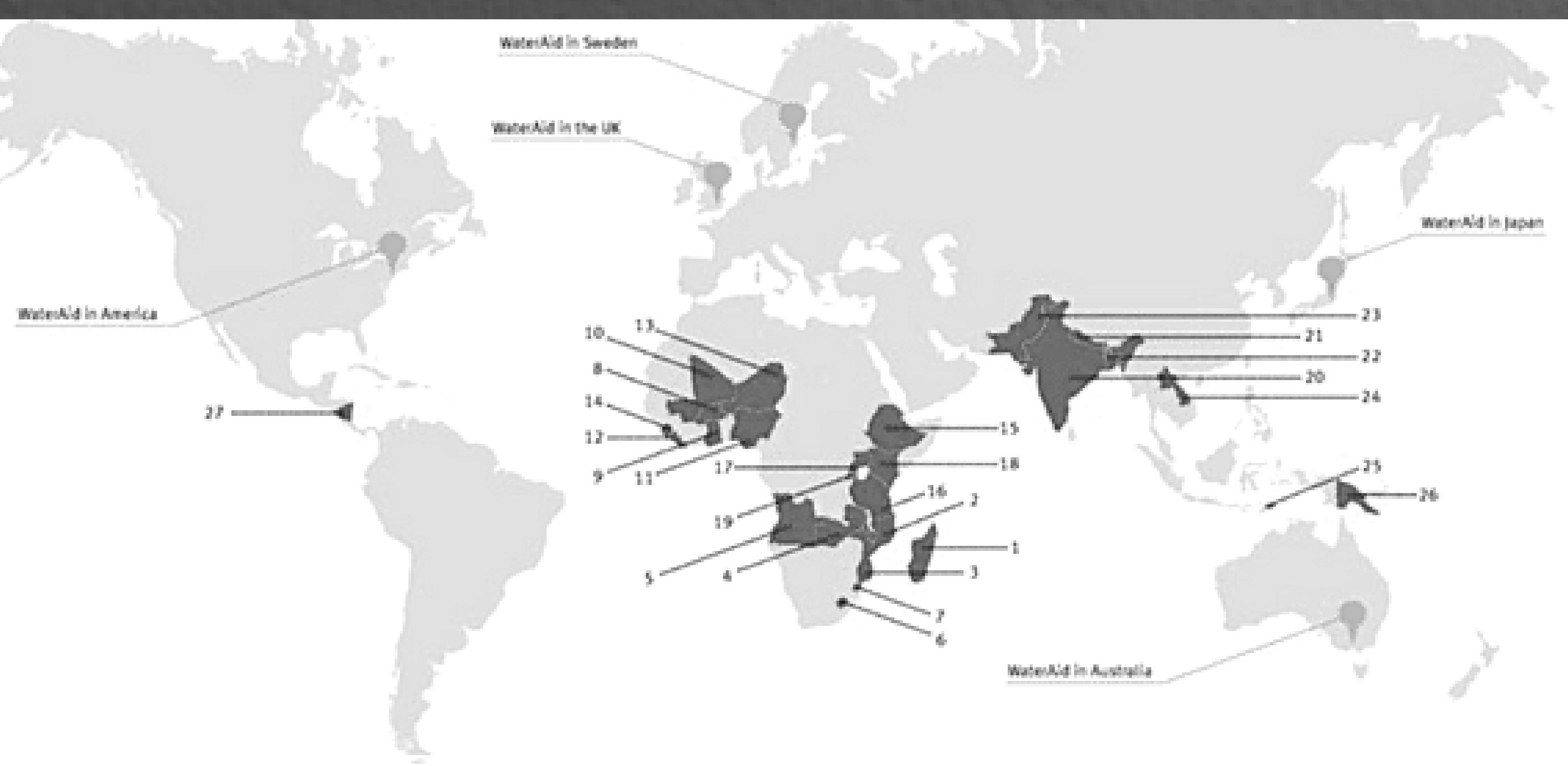
THE MAJORITY OF THEM
ARE IN SOUTHERN ASIA



WaterAid was set up in 1981 as a response to the UN International Drinking Water decade (1981-1990). It operates in 34 countries as of 2018

WATER AID

Places where Water Aid works



Southern Africa

- 1. Madagascar
- 2. Malawi
- 3. Mozambique
- 4. Zambia
- 5. Angola
- 6. Lesotho
- 7. Swaziland

West Africa

- 8. Burkina Faso
- 9. Ghana
- 10. Mali
- 11. Nigeria
- 12. Liberia
- 13. Niger
- 14. Sierra Leone

East Africa

- 15. Ethiopia
- 16. Tanzania
- 17. Uganda
- 18. Kenya
- 19. Rwanda

Asia

- 20. India
- 21. Nepal
- 22. Bangladesh
- 23. Pakistan

Pacific region

- 24. Laos
- 25. Timor-Leste
- 26. Papua New Guinea

Central America

- 27. Nicaragua

solutions





TRAP RAINWATER: AFTER COLLECTION, THE WATER CAN BE USED TO WATER PLANTS, FOR LAUNDRY AND MANY OTHER PURPOSES.



INSTALL A WESTEWATER SYSTEMS: SHOWERS, SINKS AND EVEN RO^S ONLY REQUIRE A SMALL GREY WATER COLLECTION SYSTEM. THE COLLECTED WATER CAN BE USED OUTDOORS FOR CLEANING THE VERANDA, WEARING GRASS, OR EVEN WASHING THE CAR.



SPREAD THE MESSAGE: SHARE YOUR WATER CONSERVATION EFFORTS AND STORIES ON SOCIA MEDIA.



CONSUMING LESS WATER CAN BE MORE EEFECTIVE AND WASTING LESS CAN BE BENEFICIAL.



Any Questions ?

THAI

YOGA