TRAINING

Water, Sanitation and Hygiene (WASH) Interventions for EU Cooperation.

54, Rue Joseph II (J54 building) – Brussels,

13h30 – 17h00, 10 January 2025

INTPA.F.2, Water Team, and EU Water Facility

SESSION 1: The Why, And What, of WASH

INTPA.F.2 Water Team and EU Water Facility

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OBJECTIVES

Enhance' knowledge and capacities to design EU supported interventions in provision of, and access to, Water, Sanitation and Hygiene services

- Identify WASH within the EU policy landscape
- Work on Intervention Design based on practical examples
- Understand Finance and Management aspects of WASH interventions

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WHY WASH?

WHERE ARE WE WITH WATER AND WASH? DOES IT MATTER?

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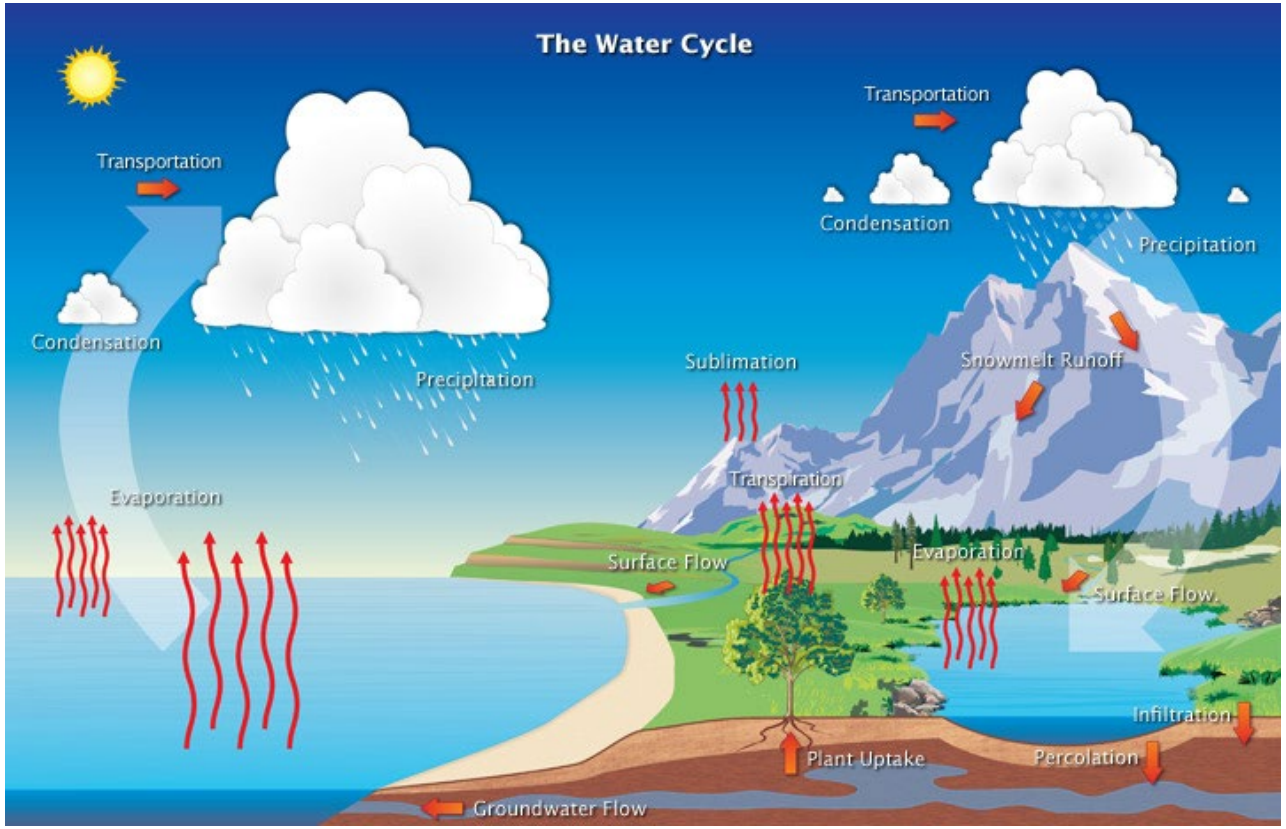
THE WATER CYCLE

Once upon a time, there was the… **The Water Cycle!**

If you are not familiar with that, please **leave this room, now**!



The **water cycle,** also known as the hydrologic cycle or the hydrological cycle, describes the continuous movement of water on, above and below the surface of the Earth.

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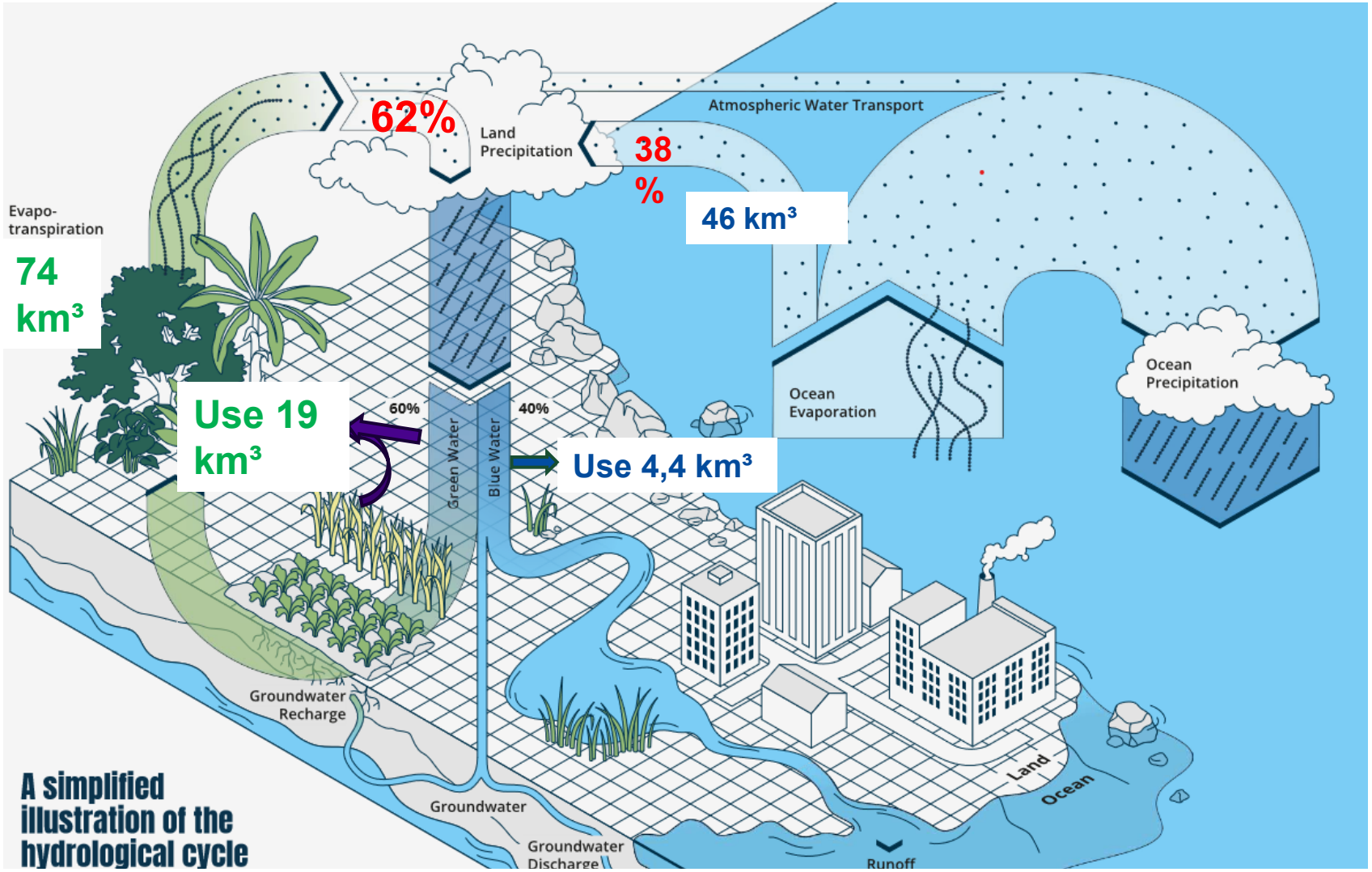

Figure 4.2 | The water cycle, including direct human interventions. Water fluxes on land precipitation, land evaporation, river discharge, groundwater recharge and groundwater discharge to the ocean from Douville et al. (2021). Human water withdrawals for various sectors are shown from Hanasaki et al. (2018), Sutanudjaja et al. (2018), Burek et al. (2020), Droppers et al. (2020) and Müller Schmied et al. (2021). Green water use (Abbott et al., 2019) refers to the use of soil moisture for agriculture and forestry. Irrigation water use (called blue water) is not included in green water use.

Sources: Global Commission on the Economics of water 2024 and IPCC report 2022 Chapter 4

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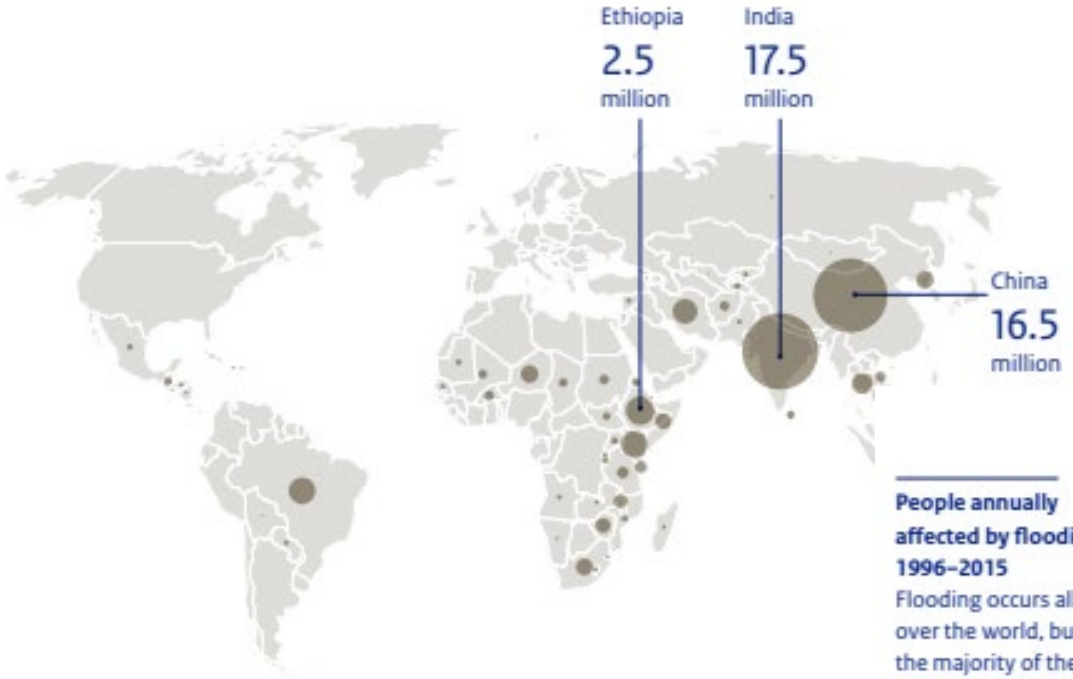
Too little water vs Too Much water

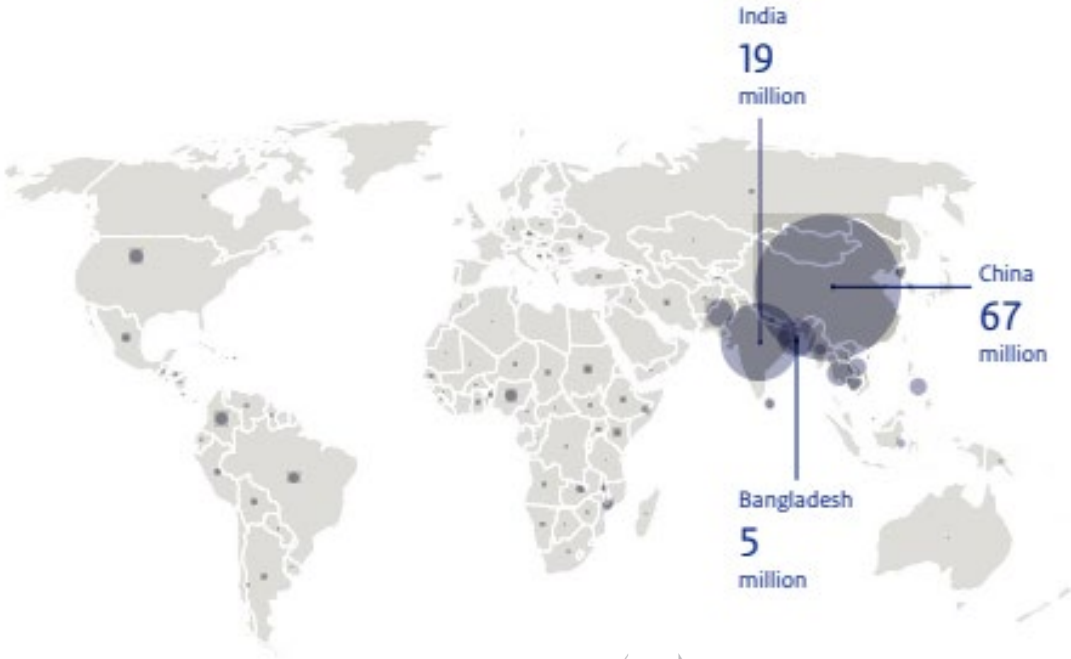


People annually affected by drought 1996–2015
Droughts lead to water scarcity for people, severe agri-cultural production loss, local food shortages, and wildfires.

Number of people affected, annually

10 million

Source: CRED



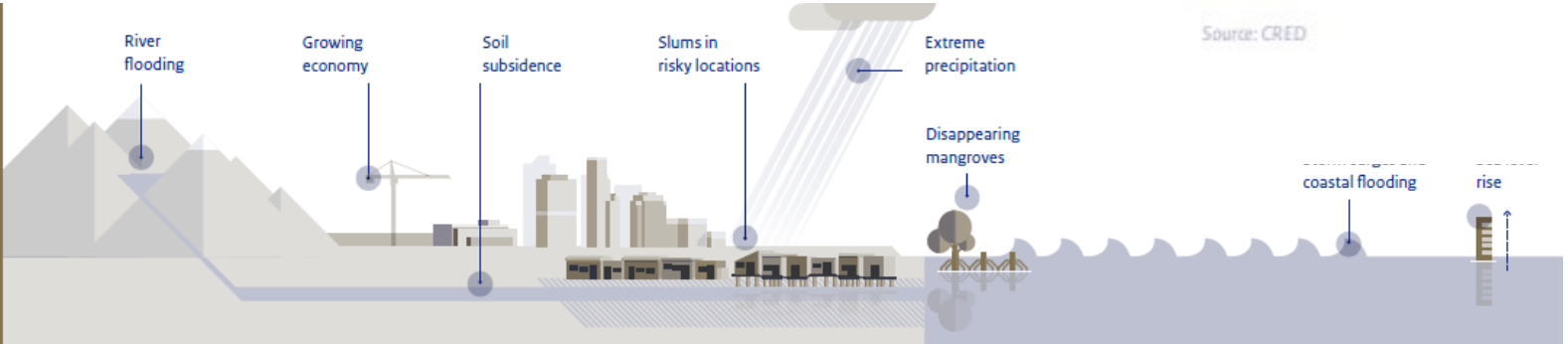
People annually affected by flooding 1996–2015
Flooding occurs all over the world, but the majority of the people affected live in Southeast Asia.

Number of people affected, annually

35 million

Source: CRED

Water is to Adaptation what Energy is to Mitigation



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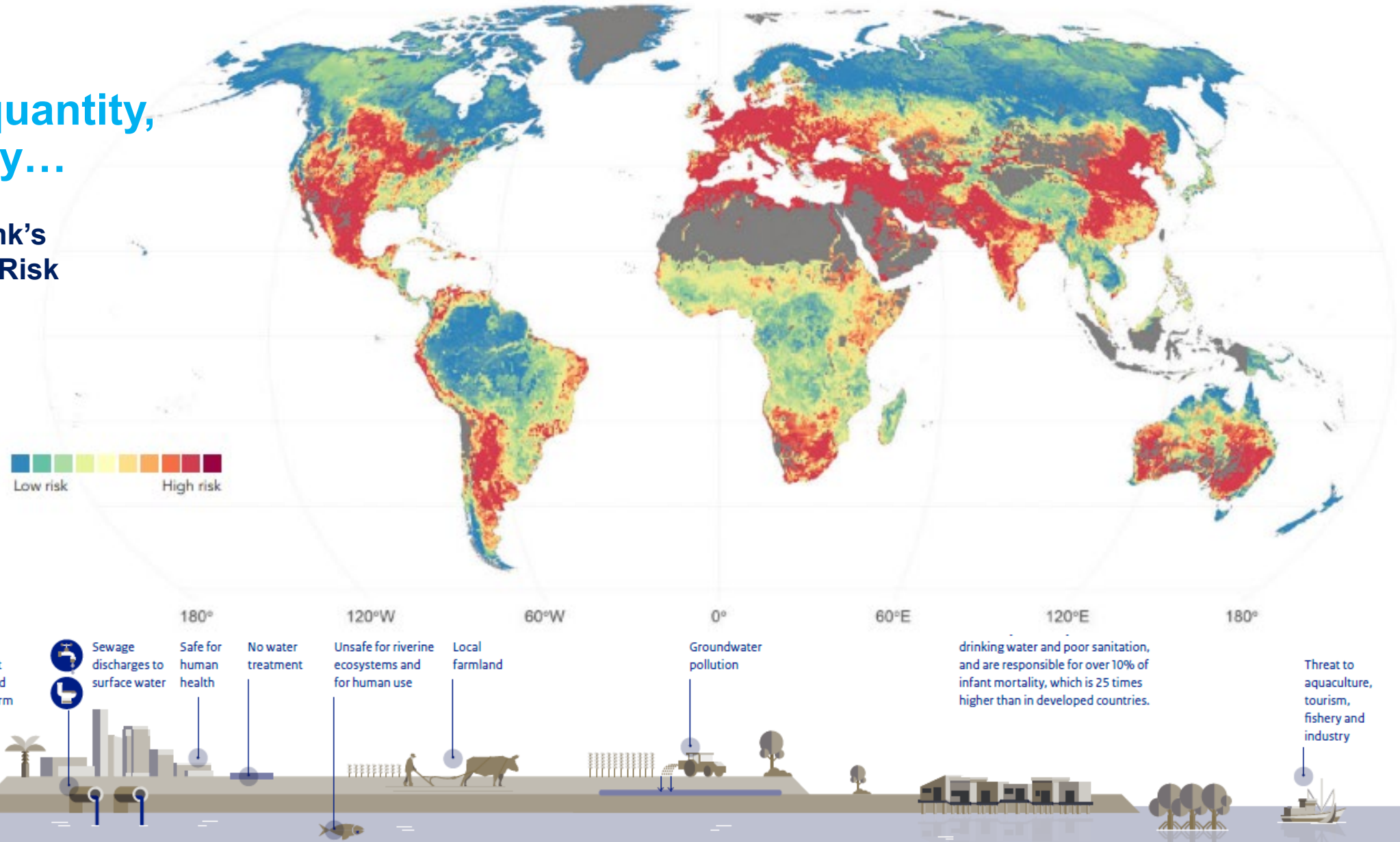
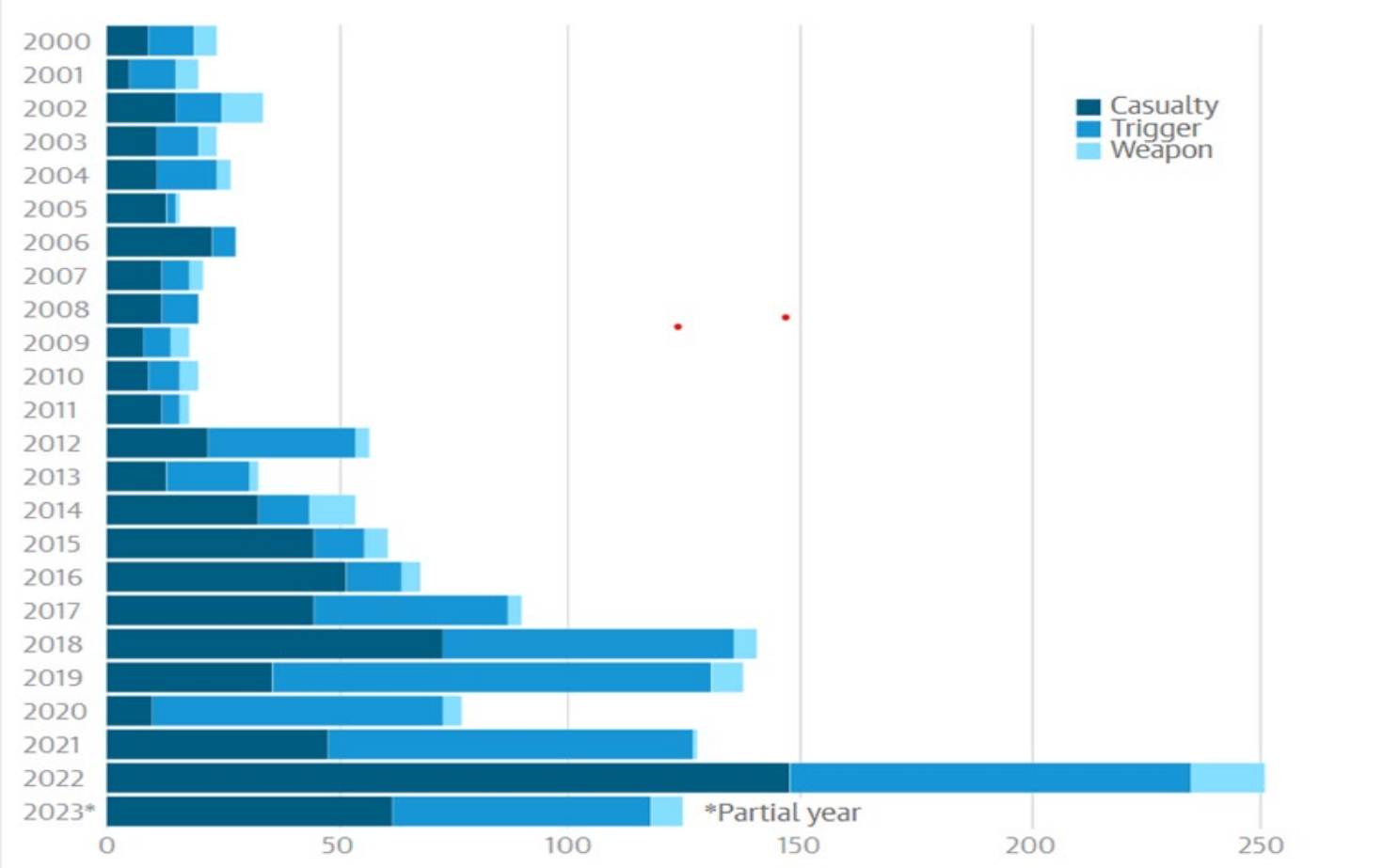
Not just quantity, but quality…

The World Bank's Water Quality Risk Index:



THE TREND ON WATER CONFLICTS, 2000-2023



Source: Pacific Institute, Water Conflict Chronology 2020-2024, Water Conflict Chronology - Pacific Institute (pacinst.org) / secondary data processing

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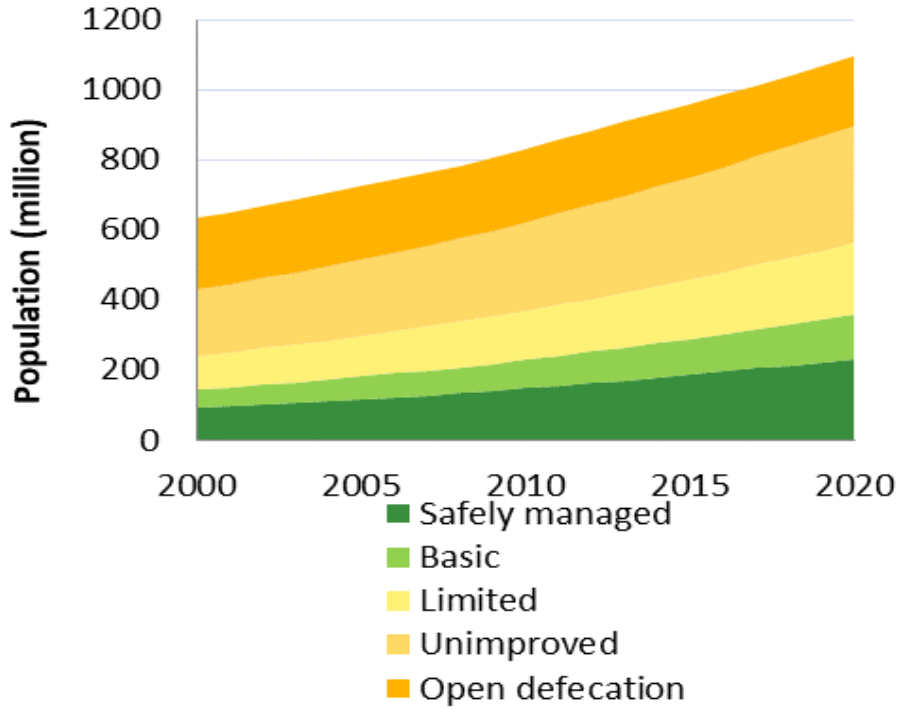
ACCESS - AN EQUALIZER AT RISK

- Access to water is not well distributed within quantiles
- Poors pay more for water
- Poors are in risks areas for floods
- Poors risk their lifes when they drink unsafe water and go to catch it
- Sanitation workers are often mistreated/outcasted
- Impact on women lifes: less economic opportunities, mensutrual hygiene, access to school, access to health, but also in culture, prisons,…

Population by sanitation service level, 2000-2020 – LDCs



Source: WHO/UNICEF JMP (2021)

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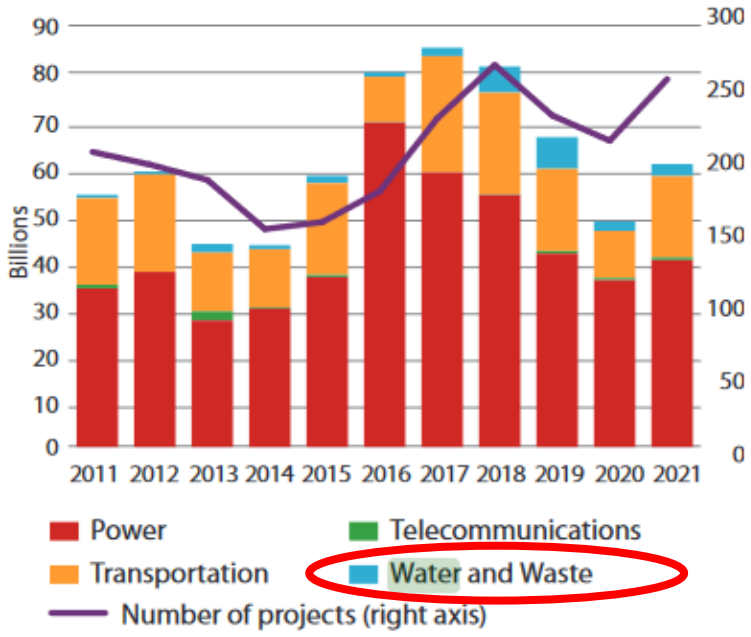
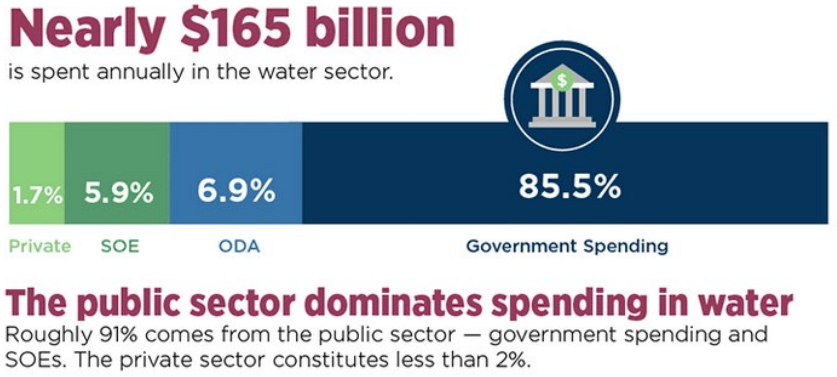
WATER FINANCE: SIGNIFICANT GAPS

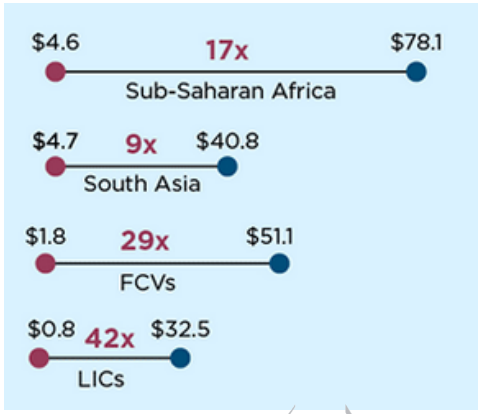
Figure III.B.2
International project finance: financed infrastructure deals in developing countries
(Billions of United States dollars, number of projects)



Source: Refinitiv – Infrastructure 360 database.



How much more is needed to achieve to achieve SDG 6.1 &6.2 ?



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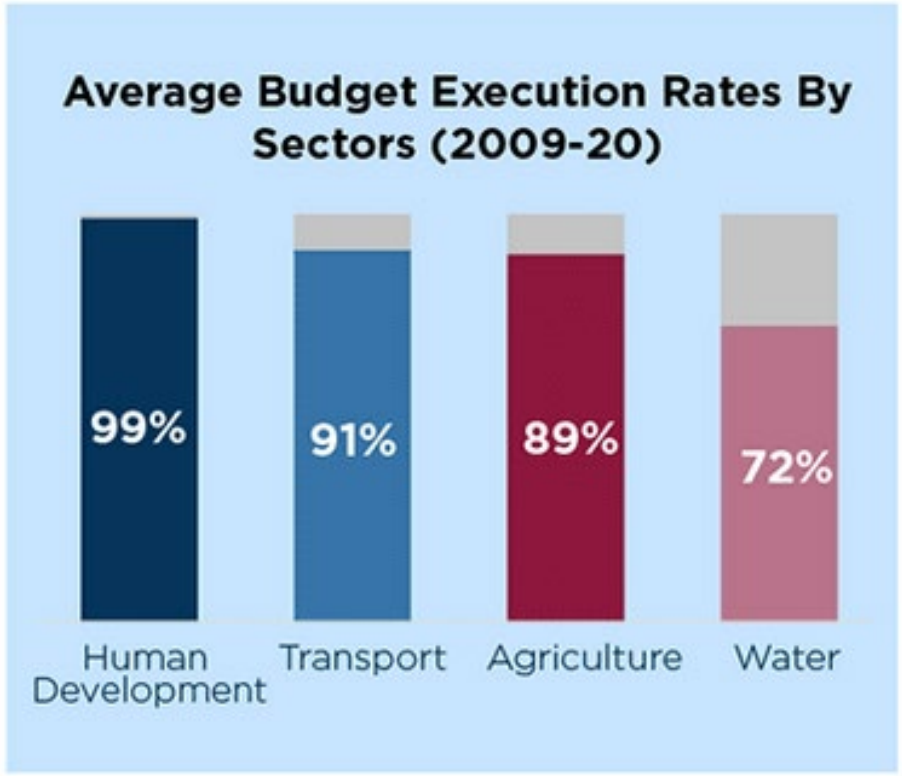
A SECTOR IN NEED OF TRANSFORMATION AND REFORMS



$21.38 million

is lost annually due to cost inefficiencies by a typical water utility

Hidden Losses: Water service provider inefficiencies lead to significant "hidden" losses, averaging about $21 million annually per utility.

Source: Funding a water secure future - WB (2024)

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A GROWING GLOBAL WATER AGENDA YOU CAN BUILD ON

- Globalisation of the UN Water Convention (significant progresses notably in Africa, Central America)
- UN System Wide Strategy on Water
- FAO biannual theme on water – G7 Water Coalition launched by Italy – G20 work on WASH with Brazil and South Africa
- UN Water conferences in 2026 and 2028
  Follow up of the Water Action Agenda of more than 700 commitments
- WB fast track on Water Security and Climate adaptation

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GROWING ALSO IN EU

Water Resilience Strategy at EC level – Communication in 2025

Own Initiative Report in prepartion by the Parliament, Blue Deal by the EESC

Nov. 2021 Council Conclusions on Water in EU external action

- Strenghtening UN system
- Closing the Funding gap
- Link adaptation finance and water investments more
- Mobilising EU knowledge and expertise

→ Last but not Least: Water is part of the Global Gateway

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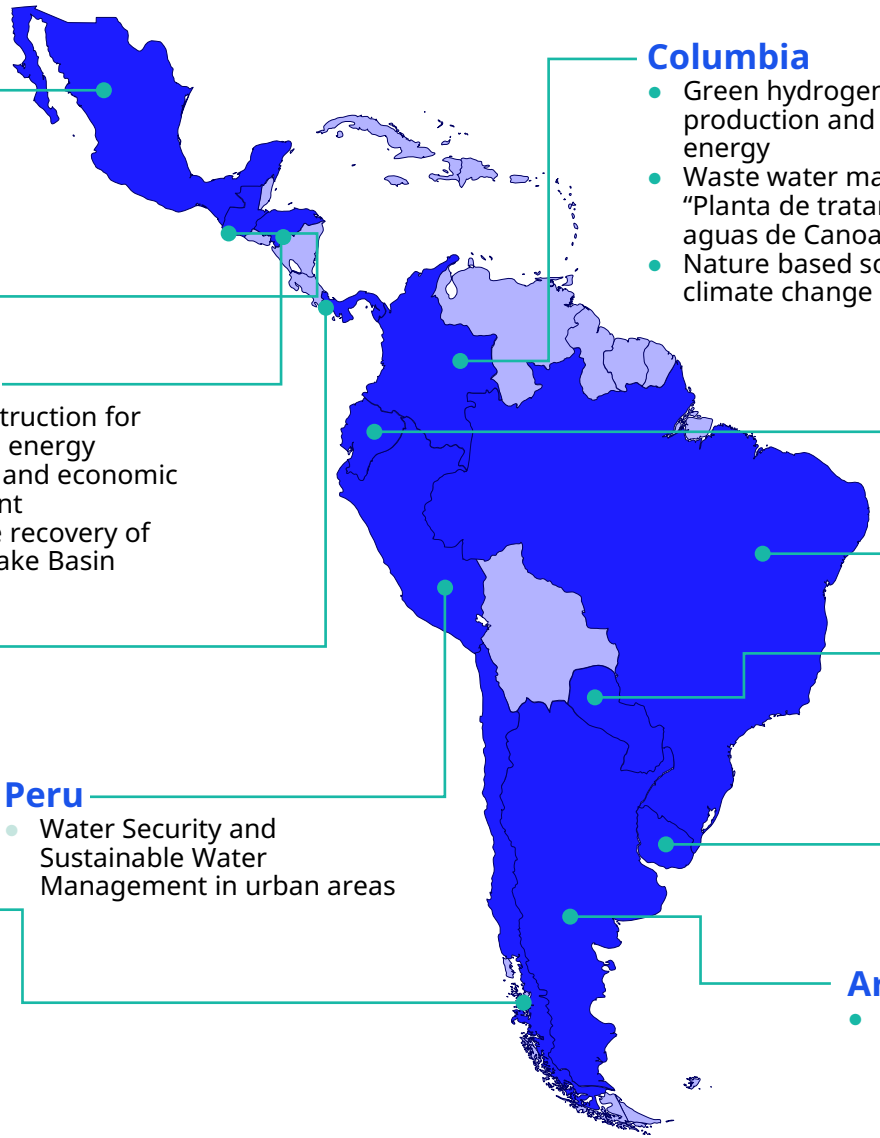
Flagship projects Latin America

Partnerships on Climate and Energy, and Health focusing on **Water and Waste Management**

- Climate and Energy
- Health

2023 – 2024 Flagships



Mexico
- Integrated water resource management

Guatemala
- Comprehensive Intervention Strategy for the Motagua River Basin to fight contamination
- Drinking water supply to Guatemala City
- **Construction of a sanitary landfill**, 4 sewage networks and wastewater treatment plants in Peten

Honduras
- Dams' construction for sustainable energy production and economic development
- Sustainable recovery of the Yojoa Lake Basin

Panama
- Energy Transition: power generation, universal access, energy efficiency and sustainable mobility, green hydrogen

Peru
- Water Security and Sustainable Water Management in urban areas

Chile
- Development of renewable hydrogen, Global Gateway Renewable Hydrogen Fund

Columbia
- Green hydrogen production and renewable energy
- Waste water management "Planta de tratamiento de aguas de Canoas"
- Nature based solutions for climate change adaptation

Ecuador
- Expansion and improvement of the drinking water and sanitation systems in Quito and Portoviejo Municipality
- Water management projects in areas with highest prevalence of chronic childhood malnutrition

Brazil
- Financing of projects in the areas of renewable energy and energy efficiency and promotion of green hydrogen
- Modernisation of the water and sewage services of the public water utility provider

Paraguay
- Water and sanitation project in Asuncion

Uruguay
- Infrastructure and management of the water resources in Santa Lucia river basin to make drinking water available

Argentina
- **Waste Management improvement**

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THREE MAIN LINES OF ACTION

1. Access and the Human right for drinking water and sanitation

- Global gateway investments (Blending + Guarantees for public and private sector)
- EU HR guidelines
- Nature Based Solution

2. Water cooperation, notably at transboundary level (Team Europe Initiatives, UNECE water Convention)

3. Support to multilatelarism and Country engagement

- Support to UN Water and UNICEF/SWA – Mobilise more actively the UN (notably on the policy level)

WHAT IS WASH?

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DRINKING WATER

- **‘W(A)’** in **WA**SH concerns water used by households for drinking, cooking, personal hygiene and other domestic uses
- Multiple service options exist in rural and urban areas (not just boreholes in rural/ pipes in urban)
- Innovations available, e.g. integration of renewable energy, digital technologies and nature-based solutions. But challenges require more than technology to solve: also needs innovations in governance, management, financing, and behaviour change

Rural

Source: Vanessa Guenther, **Aquaya Institute**

Urban

Source: USAID (2023) Technical innovations for rural water supply

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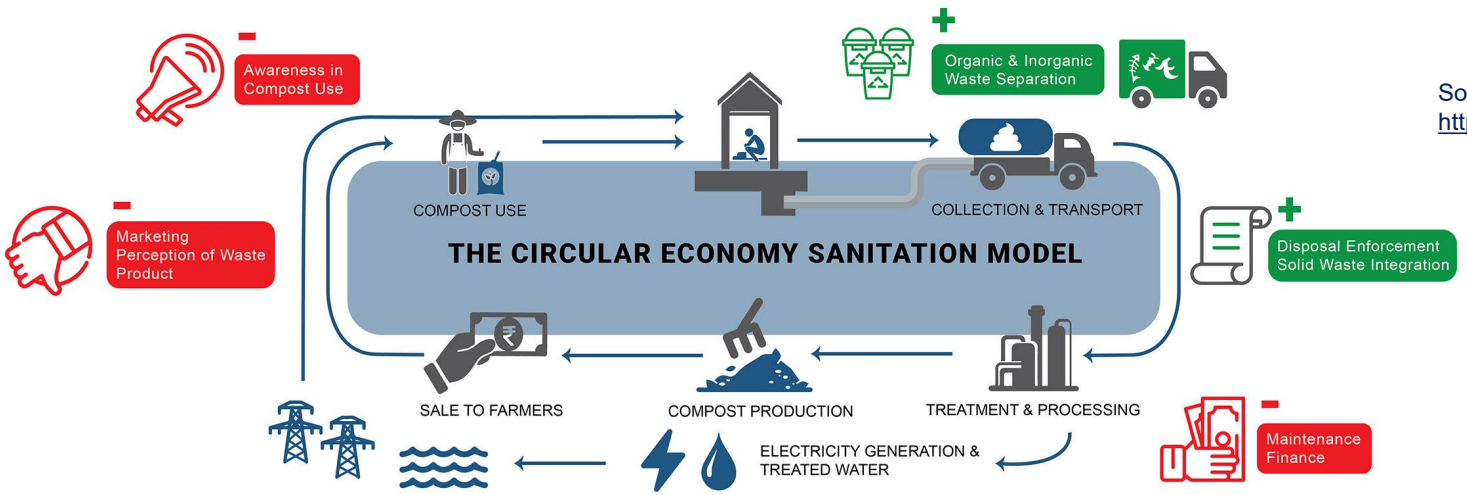
SANITATION

- **‘S’** in WA**S**H concerns management of excreta from the facilities used by individuals
- Globally, more people use on-site sanitation (e.g. latrines, septic tanks) than sewers (46% vs 42%), but sewerage more likely to be safely managed than on-site sanitation (33% vs 24%)
- Similarly, innovations available, going beyond technology, e.g.: designs resilient to increased flooding & drought; community-led and market-based approaches for behaviour change, affordability and sustainability; circular economy models to derive value and improve financial sustainability.



Source: Mallory et al. 2020, https://doi.org/10.1016/j.scitotenv.2020.140871

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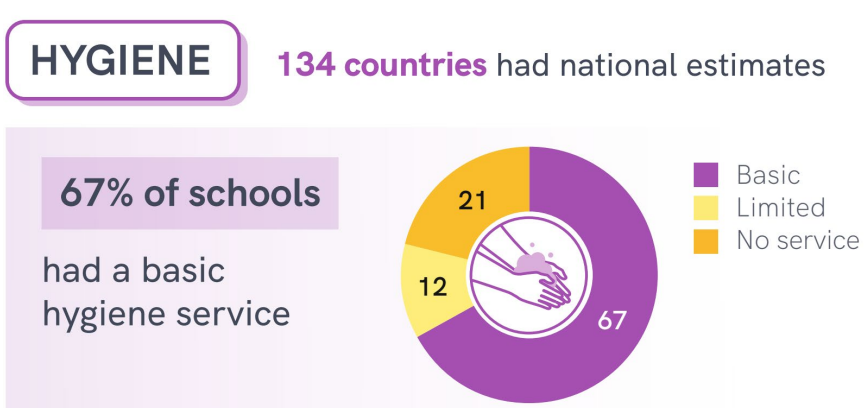
HYGIENE

- **‘H’** in WAS**H** refers to conditions and practices that help maintain health and prevent spread of disease
- Handwashing often the focus, especially with COVID-19. Remains crucial, including for anti-microbial resistant and health-care acquired infections. But menstrual health management (MHM) increasingly recognised as a key component of hygiene and wider WASH.

Hygiene and menstrual health in school settings, 2023 data



Source: JMP (2024) Progress on drinking water, sanitation and hygiene in schools 2015–2023: special focus on menstrual health

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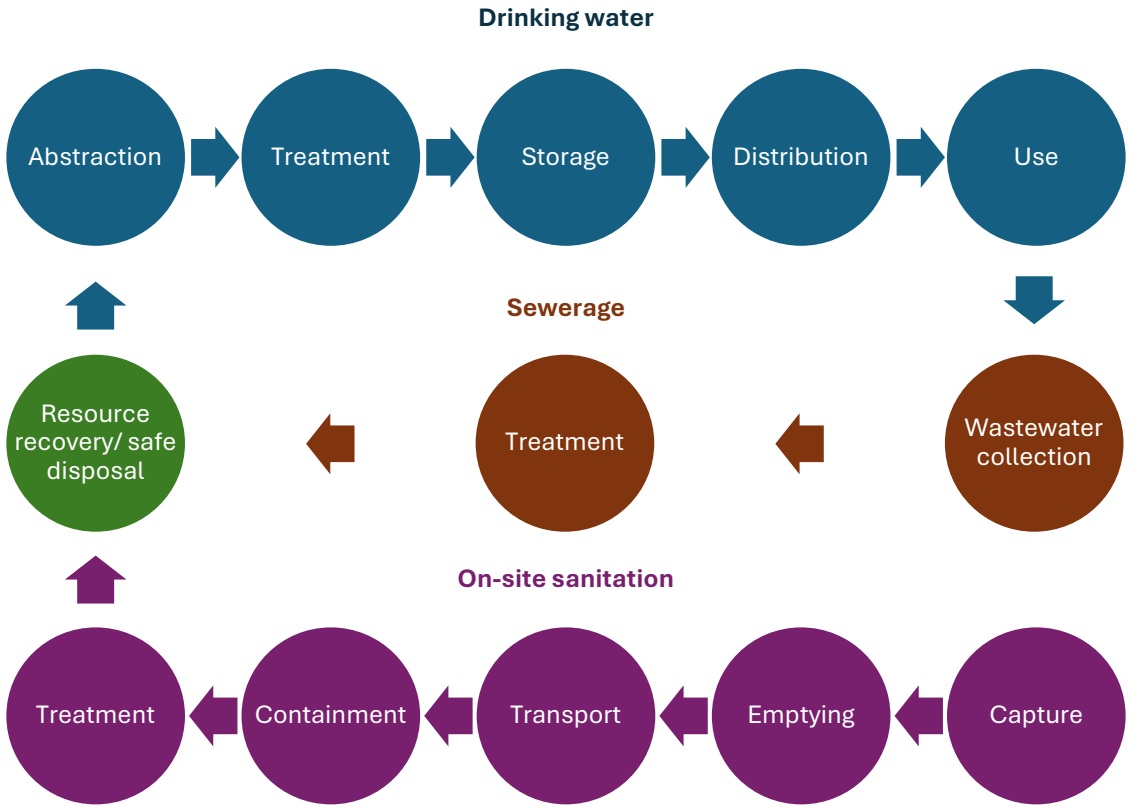
WASH SERVICE DELIVERY CHAINS

- Water, sanitation and hygiene can be seen as **service delivery or value chains** with multiple components.
- **WASH service delivery chains are interconnected**, e.g. poor sanitation can contaminate drinking water; water is a key input for hygiene and sanitation
- **Failure in any one component can jeopardise** safe services as a whole
- Provision of **WASH services extends beyond household settings** e.g. to schools, healthcare facilities, and markets
- **Hygiene** is a service in its **own right** and also a **cross-cutting component**, affecting and being affected by water supply and sanitation.



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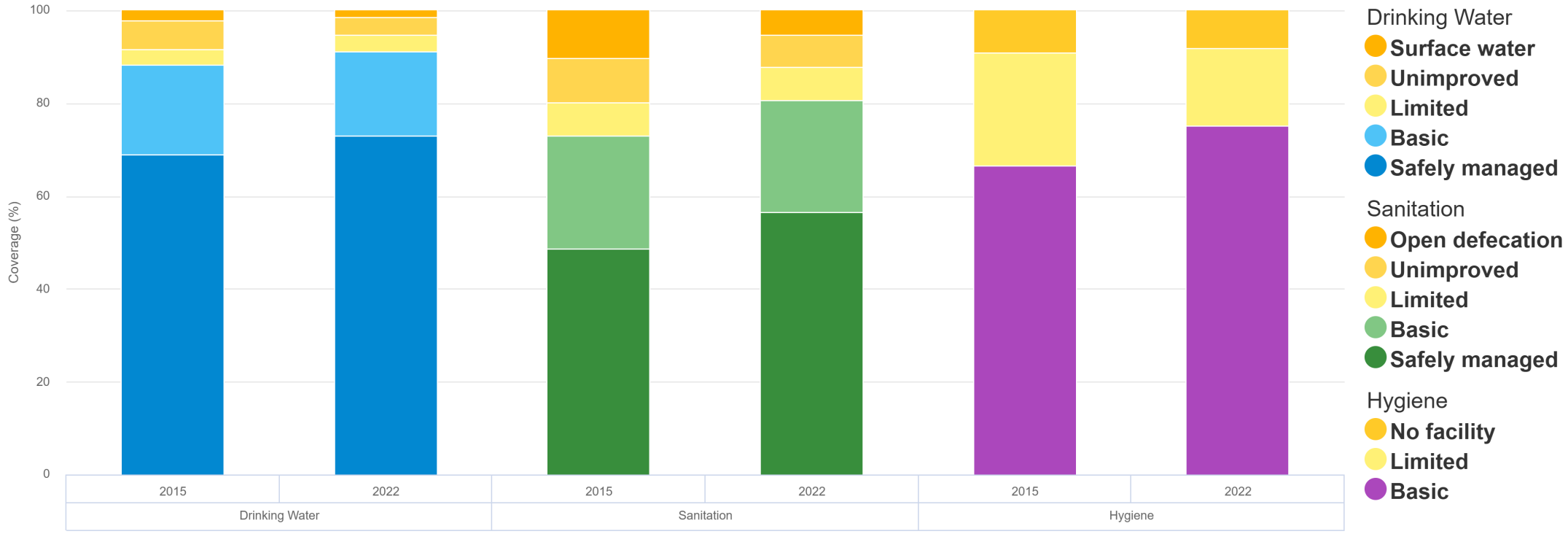
STATE OF WASH, GLOBALLY

Household access to drinking water, sanitation and hygiene, global, 2015 and 2022



Source: JMP (2023) Progress on household drinking water, sanitation and hygiene 2000-2022: special focus on gender

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WASH SERVICE LEVELS

- GERF 2.38: Number of people with access to improved drinking water source and/or sanitation facility with EU support
- Aligns with service 'ladders' for monitoring SDG target 6.1 and 6.2, 'basic' and 'safely managed' services only:

SERVICE LEVEL	DEFINITION
SAFELY MANAGED	Drinking water from an improved water source that is located on premises, available when needed and free from faecal and priority chemical contamination
BASIC	Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing
LIMITED	Drinking water from an improved source for which collection time exceeds 30 minutes for a round trip, including queuing
UNIMPROVED	Drinking water from an unprotected dug well or unprotected spring
SURFACE WATER	Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal

Note: Improved sources include: piped water, boreholes or tubewells, protected dug wells, protected springs, and packaged or delivered water.

SERVICE LEVEL	DEFINITION	
SAFELY MANAGED	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite	✓
BASIC	Use of improved facilities that are not shared with other households	✓
LIMITED	Use of improved facilities shared between two or more households	✗
UNIMPROVED	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines	✗
OPEN DEFECATION	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches or other open spaces, or with solid waste	✗

Note: improved facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs.

WASH AS A HUMAN RIGHT

'AAAAQ' Criteria	What this means	Practical implications
Availability	Continuous and sufficient water for personal and domestic uses; sufficient sanitation facilities	Domestic water prioritized over other water uses
Accessibility	Accessible to everyone without discrimination	Physical security must not be threatened
Affordability	Price of sanitation and water services must be affordable for all	Paying for water should not compromise the recipient's ability to pay for other essential necessities
Acceptability	Culturally acceptable	May require gender-specific facilities, constructed in a way that ensures privacy, safety and dignity
Quality	Safe for direct human consumption and other personal or domestic uses (water) / must ensure privacy and be hygienically and technically safe (sanitation)	Water points should be positioned to enable use for cleansing and handwashing (hygiene)

Source: EU Guidelines on Safe Drinking Water and Sanitation

WASH IN NON-HOUSEHOLD SETTINGS

Example: Health Care Facilities

- **1 in 5 healthcare facilities** lack basic water
- **Almost 4 billion** people access facilities without basic hygiene,
- **Results:** healthcare associated infections (of which over half may be antimicrobial resistant) **& severe economic consequences**, especially for low-income countries (LICs) and lower middle-income countries (LMICs).

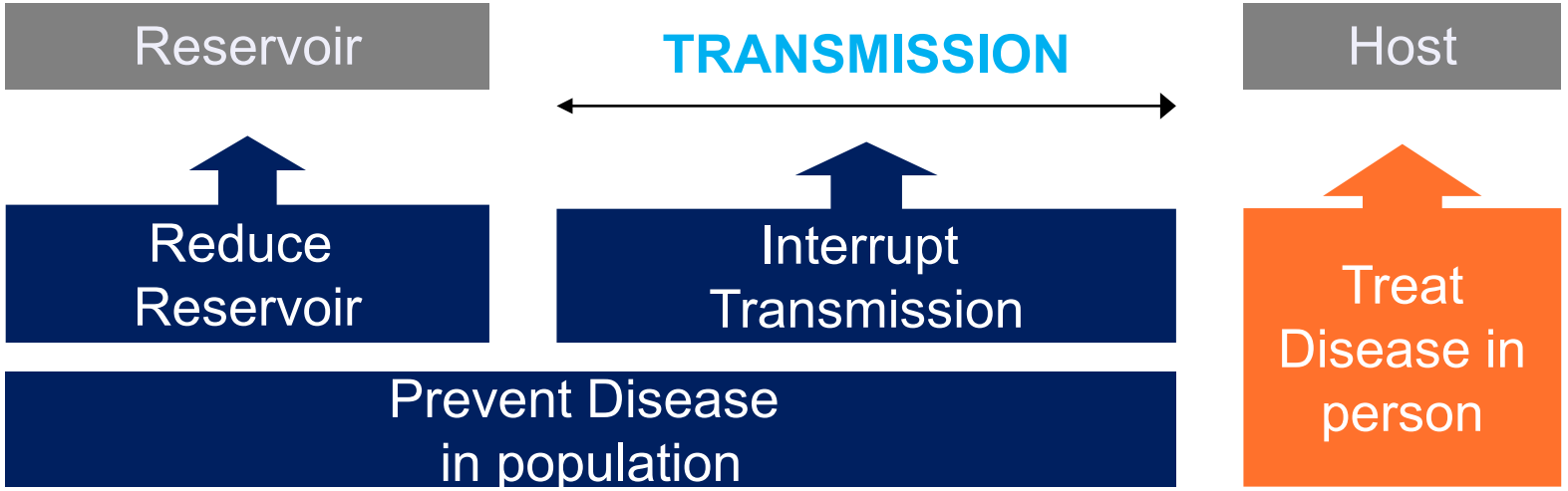
Costs of Healthcare-Associated Infections in sub-Sahara Africa in 2022

Country	Total economic cost of HCAIs (million)	Cost of HCAI as a percentage of GDP*	Cost of treating HCAIs as a proportion of total health expenditure
Ethiopia	US$ 762	0.68%	4.8%
Ghana	US$ 1,570	1.98%	4.6%
Malawi	US$ 246	2.92%	10.9%
Mali	US$ 73	0.39%	2.5%
Nigeria	US$ 4,500	0.94%	3.8%
Uganda	US$ 580	1.43%	7.9%
Zambia	US$ 674	2.3%	6.9%
	Total: US$ 8,405	**Weighted average: 1.1%**	**Weighted average: 4.55%**

Source: WaterAid (2024) Healthcare-acquired infections and the costs of inadequate water, sanitation and hygiene in healthcare facilities: Experience from 7 African countries

WASH AND ENVIRONMENTAL HEALTH

Faecal-oral,
Water-washed
and Water-related
diseases (vectors IN
and NEAR water)



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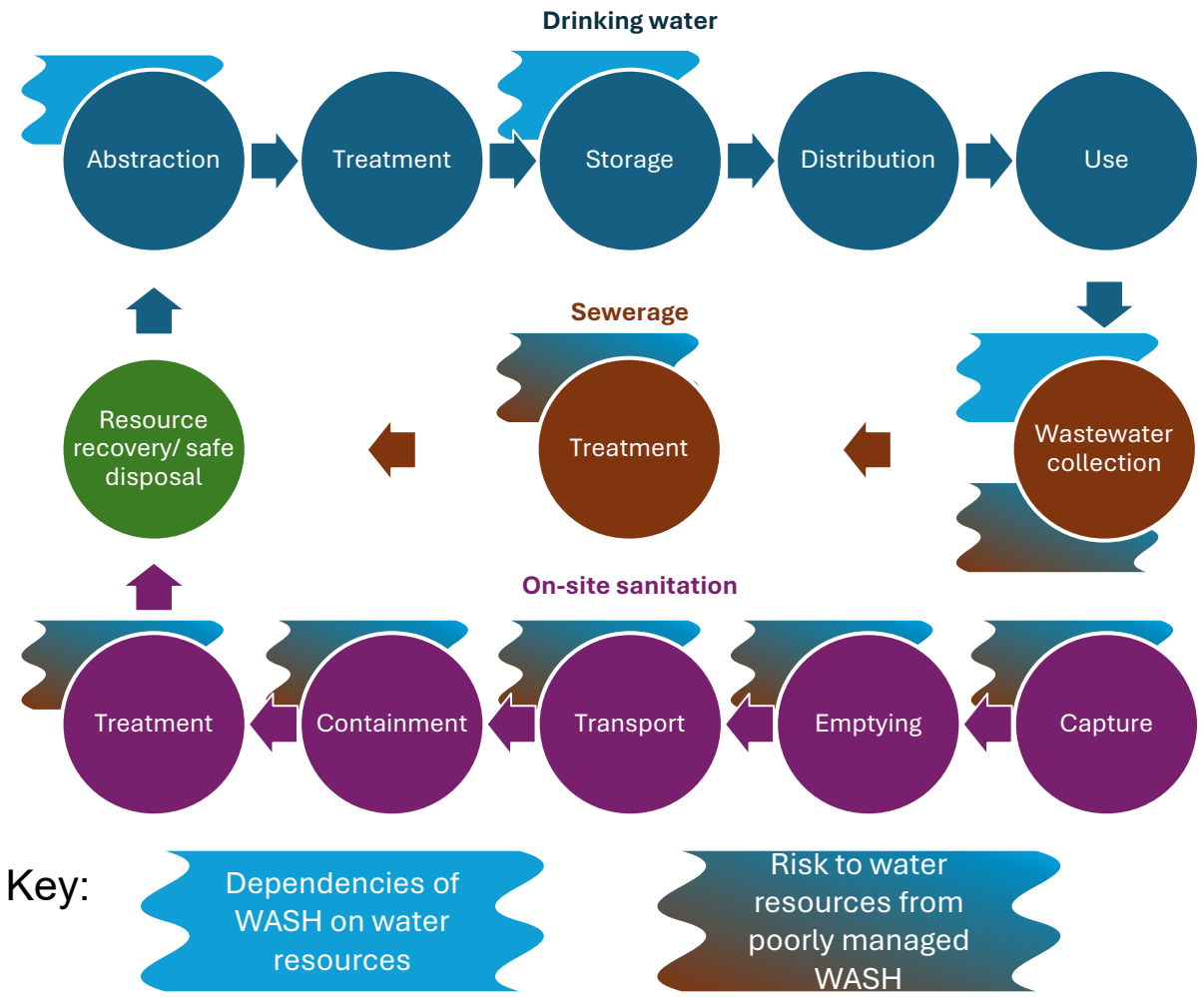
WASH IN THE WATER CYCLE

- WASH is **part of the wider water cycle**.
- Safely managed services require **reducing water pollution**, **allocating water appropriately**, **managing land-use change** and **mainstreaming climate resilience and disaster risk reduction**
- But the relationship is two-way:
  - WASH depends on **healthy water ecosystems** (freshwater/ marine) and **water resource availability**
  - AND water ecosystems and resources depend on good WASH



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FURTHER INFORMATION

- EU (2019) EU guidelines on safe drinking water and sanitation (and associated Council Conclusions)
- UNECE and WHO Europe (2009) The Protocol on Water and Health https://unece.org/environment-policy/water/protocol-on-water-and-health/about-the-protocol/introduction
- UNICEF and WHO Joint Monitoring Programme (WASH access data), https://washdata.org/ UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) (WASH policy and finance data) https://glaas.who.int/
- IRC WASH (WASH focused think-tank) https://www.ircwash.org/
- WaterAid (WASH focused INGO) https://washmatters.wateraid.org/