



United Nations
Educational, Scientific and
Cultural Organization



World Water
Assessment
Programme



The critical role of SDG 6 on Water and Sanitation to achieve the 2030 Agenda for Sustainable Development - *State of Affairs and Knowledge Gaps*

Stefan Uhlenbrook, prof. dr.

UNESCO World Water Assessment Programme (WWAP), Perugia, Italy

GROW – Water as a Global Resource, Mid-term Conference, 20-21 Feb 2019, Frankfurt am Main, Germany

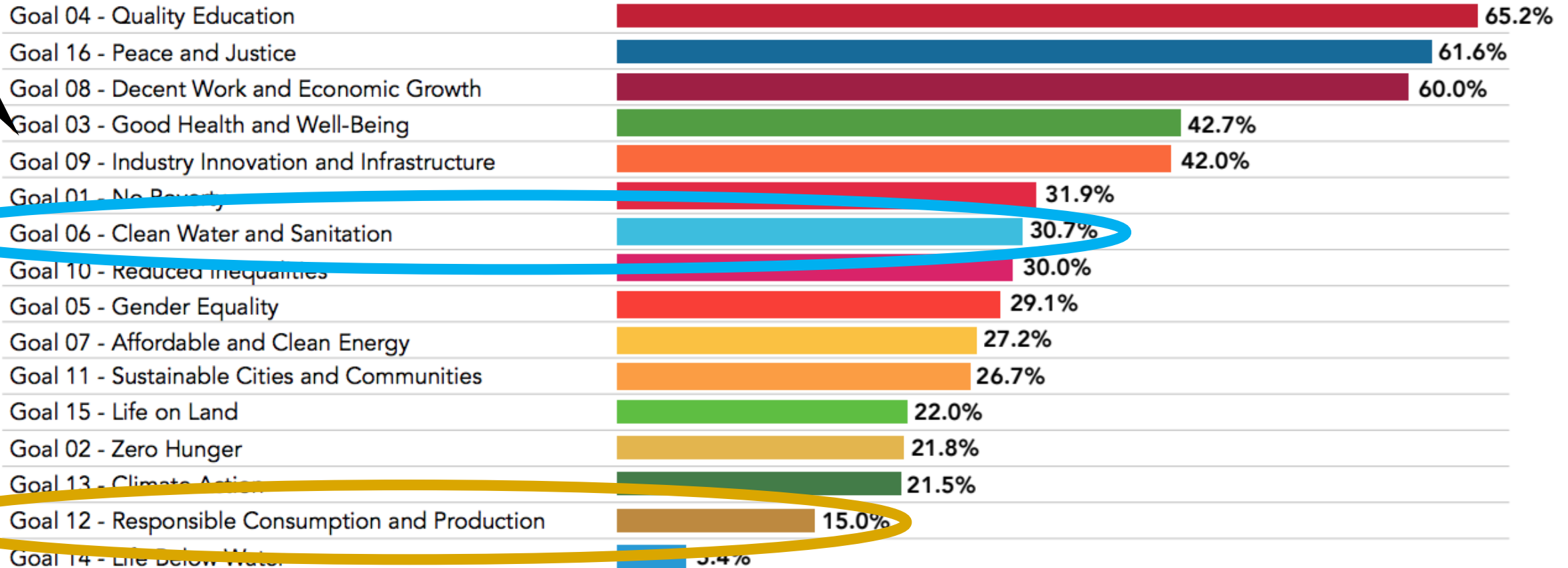
Agenda 2030 for Sustainable Development with 17 SDG



Capturing 360 Feedback from Leaders

Priorities: *What do leaders consider development priorities?*

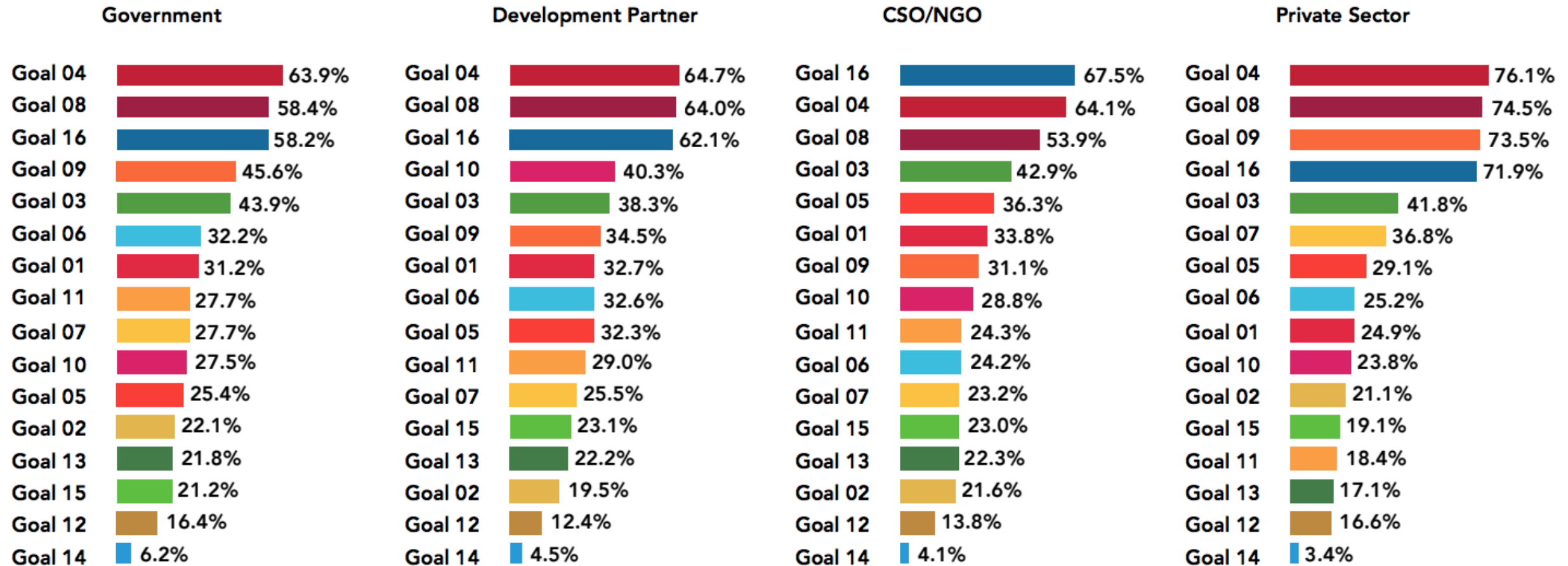
Sustainable Development Goal



Source: World Bank, Listening to Leaders Survey, in preparation

PRIORITIES

STRONG CONVERGENCE IN THE TOP PRIORITIES ACROSS ALL STAKEHOLDER GROUPS: GOALS 4, 8, 16 AND 9 (I.E., PRIVATE SECTOR)



Source: World Bank, Listening to Leaders Survey, in preparation

Agenda 2030 for Sustainable Development with 17 SDG

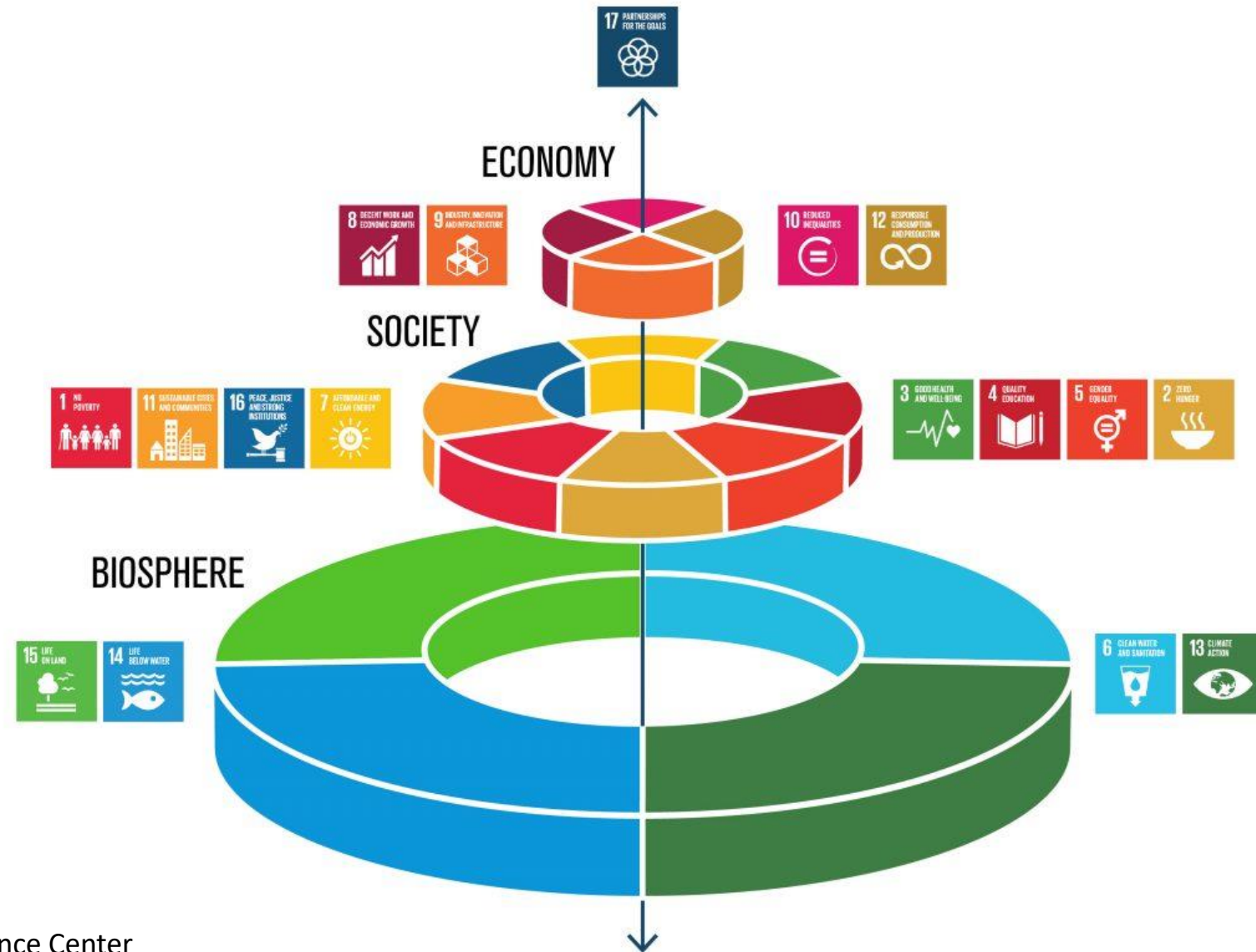


Illustration: Azote Images for Stockholm Resilience Center

<https://www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html>

Graphics by Jerker Lokrantz/Azote



HLPF TIMELINE

2013

Building the future we want: from Rio+20 to the post-2015 development agenda

2015

Strengthening integration, implementation and review - the HLPF after 2015

2017

Eradicating poverty and promoting prosperity in a changing world



2019

Empowering people and ensuring inclusiveness and equality

2014

Achieving the MDGs and charting the way for an ambitious post-2015 agenda

2016

Ensuring that no one is left behind



2018

Transformation towards sustainable and resilient societies



{ The set of goals to be reviewed in depth will be the following, including Goal 17. }

6 CLEAN WATER AND SANITATION



ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

ACCESS TO SAFE WATER AND SANITATION AND SOUND MANAGEMENT OF FRESHWATER ECOSYSTEMS ARE ESSENTIAL TO HUMAN HEALTH AND TO ENVIRONMENTAL SUSTAINABILITY AND ECONOMIC PROSPERITY



WATER and SANITATION

Focus during the **MDGs** phase
(2000-2015)



Source: UN-Water, 2016

SDG 6

“Ensure availability and sustainable management of water and sanitation for all” (2016-2030)

6 CLEAN WATER AND SANITATION



6.4
Water use
and scarcity

6.5
Water
manage-
ment

6.6
Eco-
systems

6.a and 6.b
Cooperation
and
participation

6.3
Waste-
water and
water
quality

6.2
Sanitation
and
hygiene

6.1
Drinking
water

Game changer!

Source: UN-Water, 2016

HIGHLIGHTS



The Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation reviews the global progress made towards achieving Sustainable Development Goal 6 (SDG 6) of the 2030 Agenda for Sustainable Development. It builds on the latest data available for the 11 SDG 6 global indicators and will inform the High-level Political Forum for Sustainable Development during its in-depth review of SDG 6 in July 2018. The report represents a joint position from the United Nations family.

The world is not on track

- **Billions of people still lack safe water, sanitation and handwashing facilities:** 844 million lack basic water ser-
- **Agriculture places enormous stress on water, but could be part of a water-saving solution:** The agriculture

A T E R

Spanish

SUMMARY

Sustainable Development Goal 6
Report 2018 on
Water and Sanitation

WATER
SANITATION

7

United Nations Security Force and
Peacekeeping include:

CEO Water Mandate, FAO, ILO, UNDP, UNECE, UNEP, UNESCO (WWAP, coordinator),
UN-HABITAT, UNICEF, UNU, UN-Water TAU, WHO, WMO and World Bank

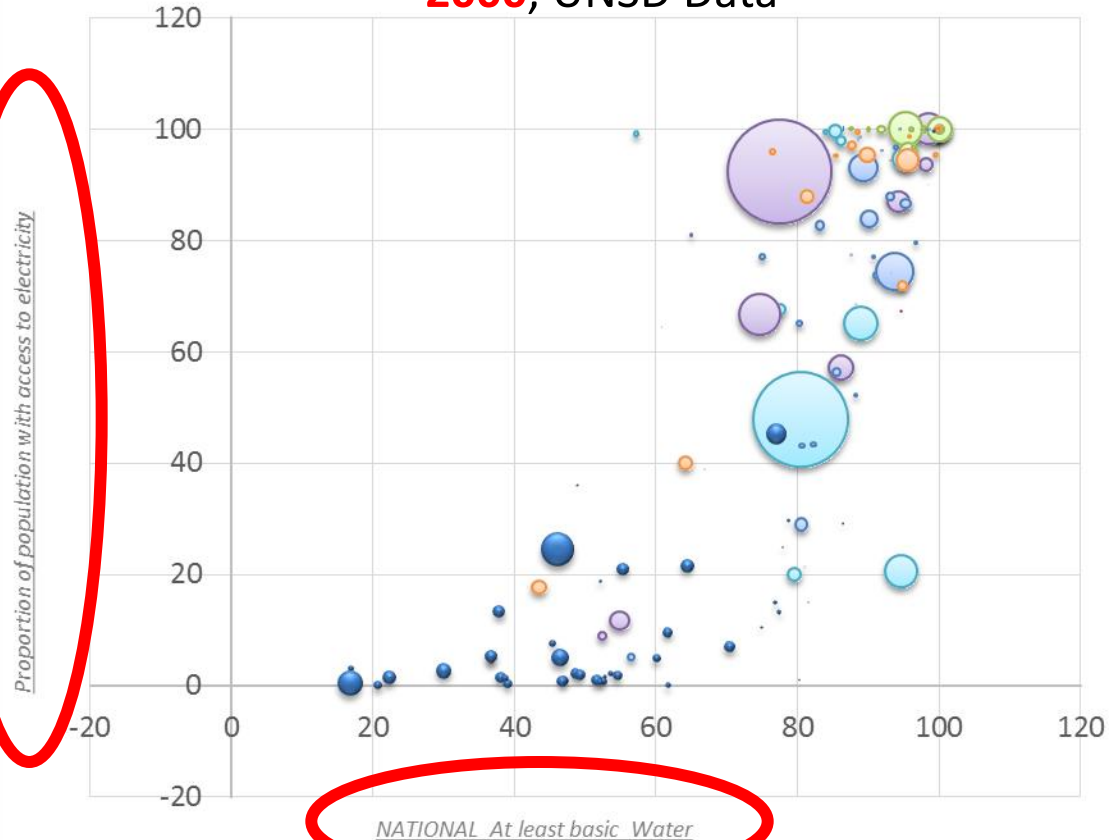
Main Message 1

Achieving SDG 6 is essential for progress on all other SDGs, and vice versa



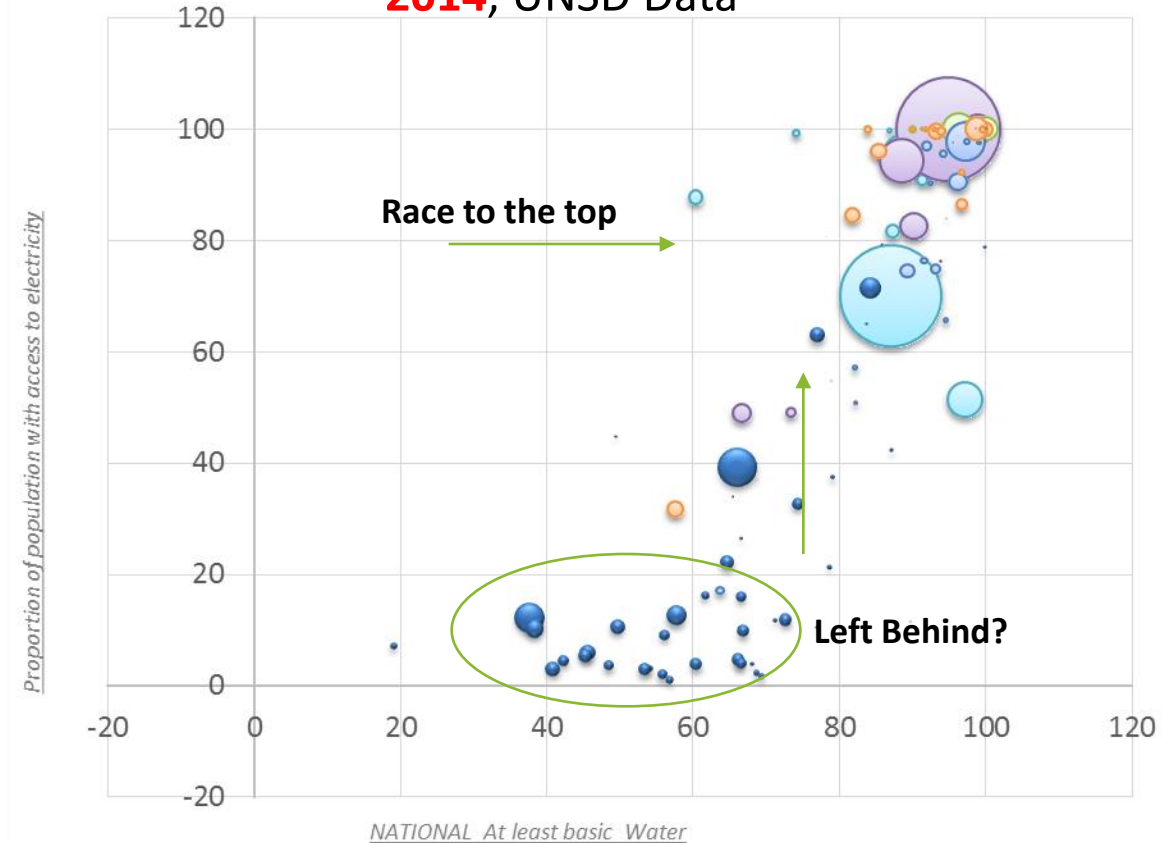
WATER, ENERGY and SOCIAL EQUITY

2000, UNSD Data



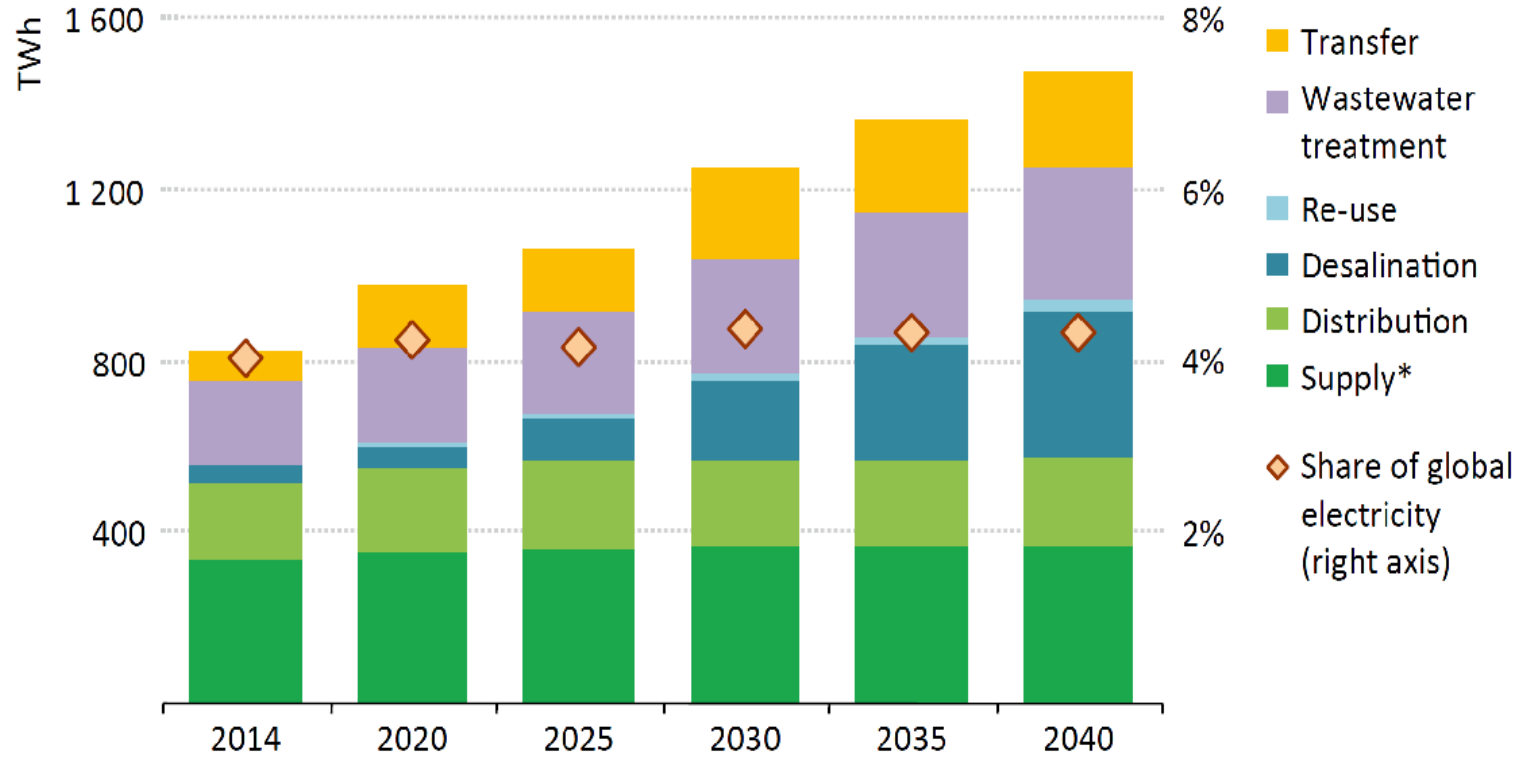
- Australia and New Zealand
- Europe and Northern America
- Oceania
- None
- Central and Southern Asia
- Latin America and the Caribbean
- Sub-Saharan Africa
- None
- Eastern and South-Eastern Asia
- Northern Africa and Western Asia
- None

2014, UNSD Data



- Australia and New Zealand
- Europe and Northern America
- Oceania
- None
- Central and Southern Asia
- Latin America and the Caribbean
- Sub-Saharan Africa
- None
- Eastern and South-Eastern Asia
- Northern Africa and Western Asia
- None

WATER and ENERGY



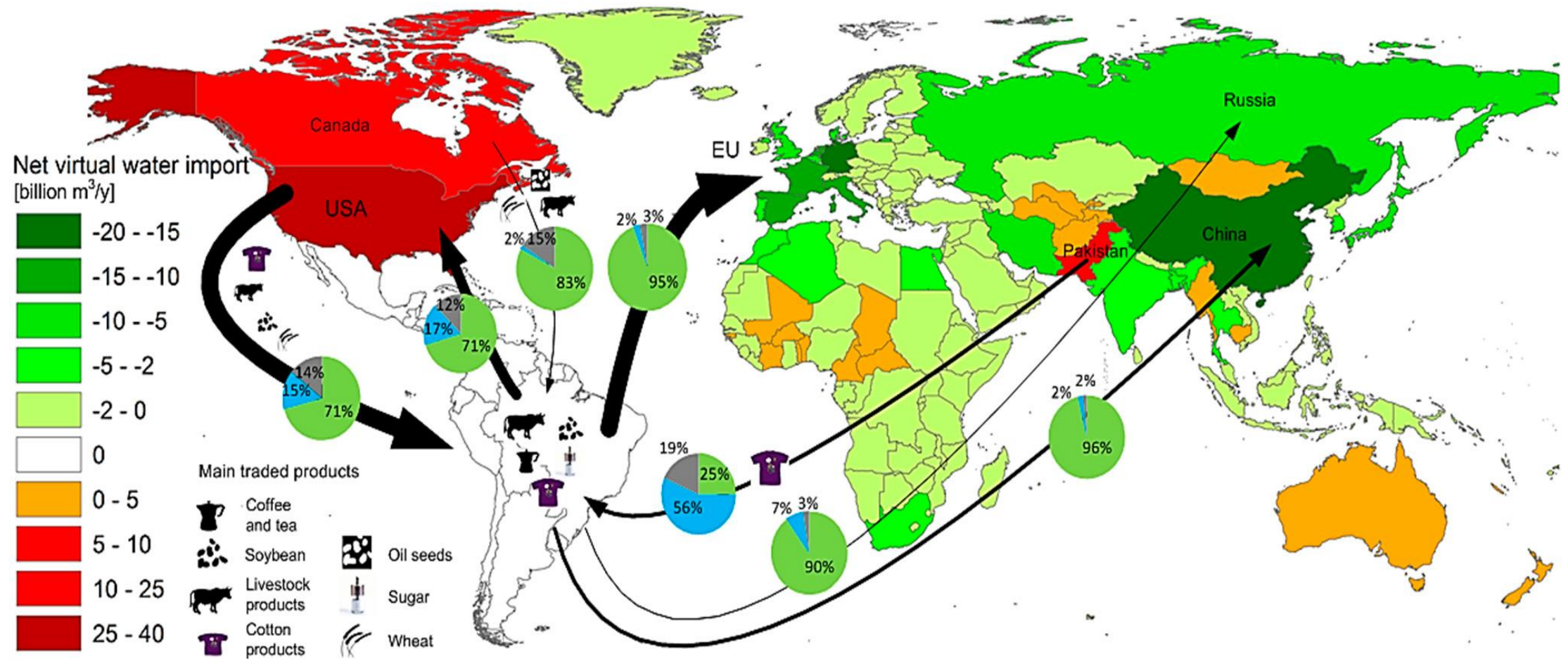
Electricity consumption in the water sector increases by 80% over the next 25 years

* Supply includes groundwater and surface water treatment.

Sources: Luck, et al. (2015); Bijl, et al. (2016); Wada, et al. (2016); IEA analysis.



Virtual water' trade in Latin America and Caribbean (LAC)



Source: Mekonnen et al., 2015

Main Message 1

Achieving SDG 6 is essential for progress on all other SDGs, and vice versa

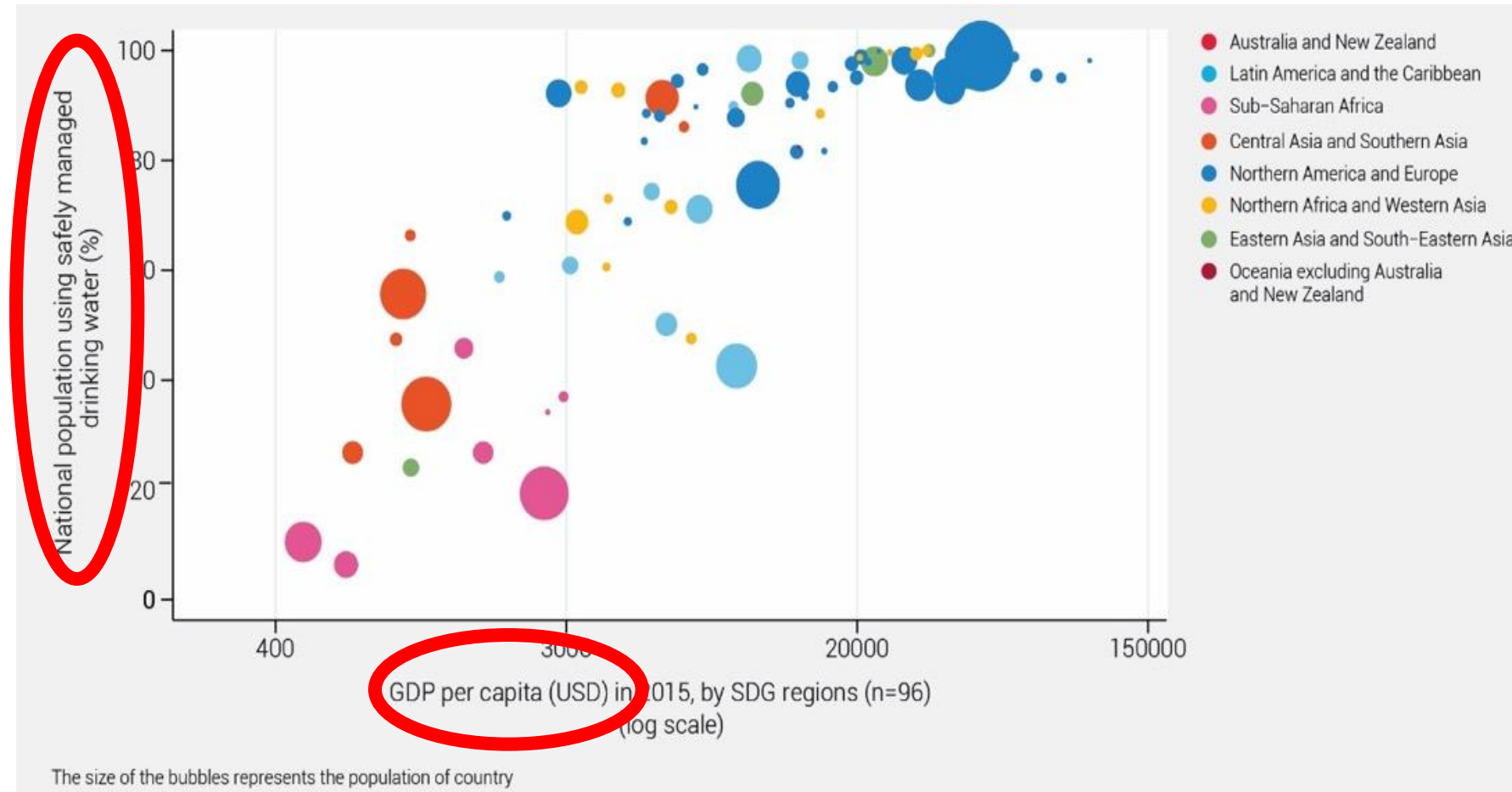


- *What does that mean for implementing SDG 6, and the whole 2030 Agenda?*
- *How to value water right?*
- *Revenue feedback for further investments (create a 'virtuous circle')?*

Main Message 2

Eliminating inequalities is essential:

Effective policies, strategies and subsidies must be developed to ensure no one is left behind.



6.1 SAFE DRINKING WATER FOR ALL



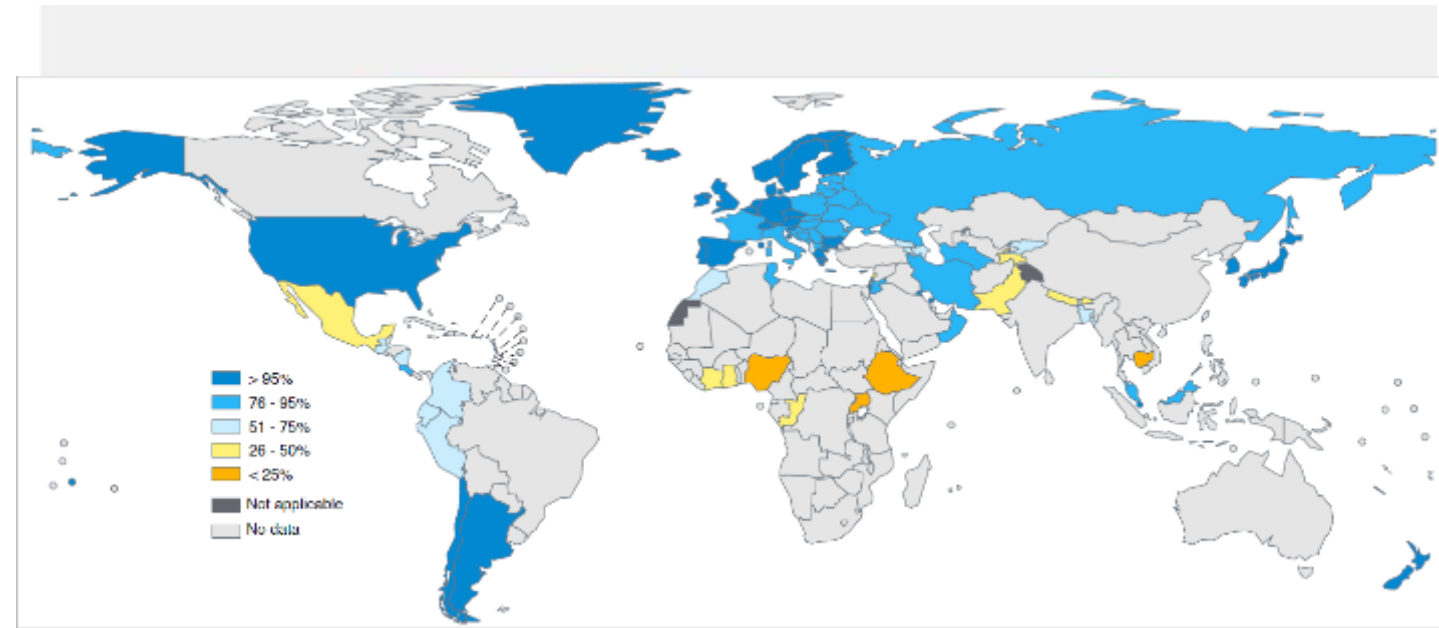
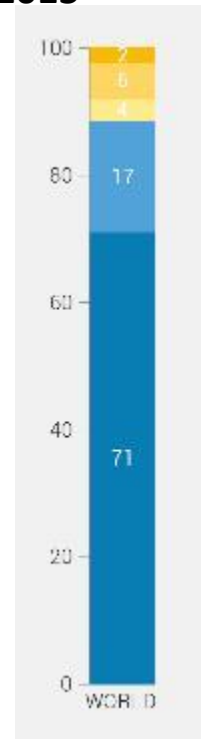
Example: SDG 6.1 Safely managed drinking water

2.1 billion lacked safely managed drinking water
844 million still lacked a basic service
263 million used a limited service
159 million used surface water sources

Global drinking water coverage (%) in 2015

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.



Over 5 billion people (7 out of 10) used safely managed drinking water in 2015

Proportion of population using safely managed drinking water services in 2015

WATER and INEQUALITY (GENDER)



In most countries, the burden of water collection falls mainly on women

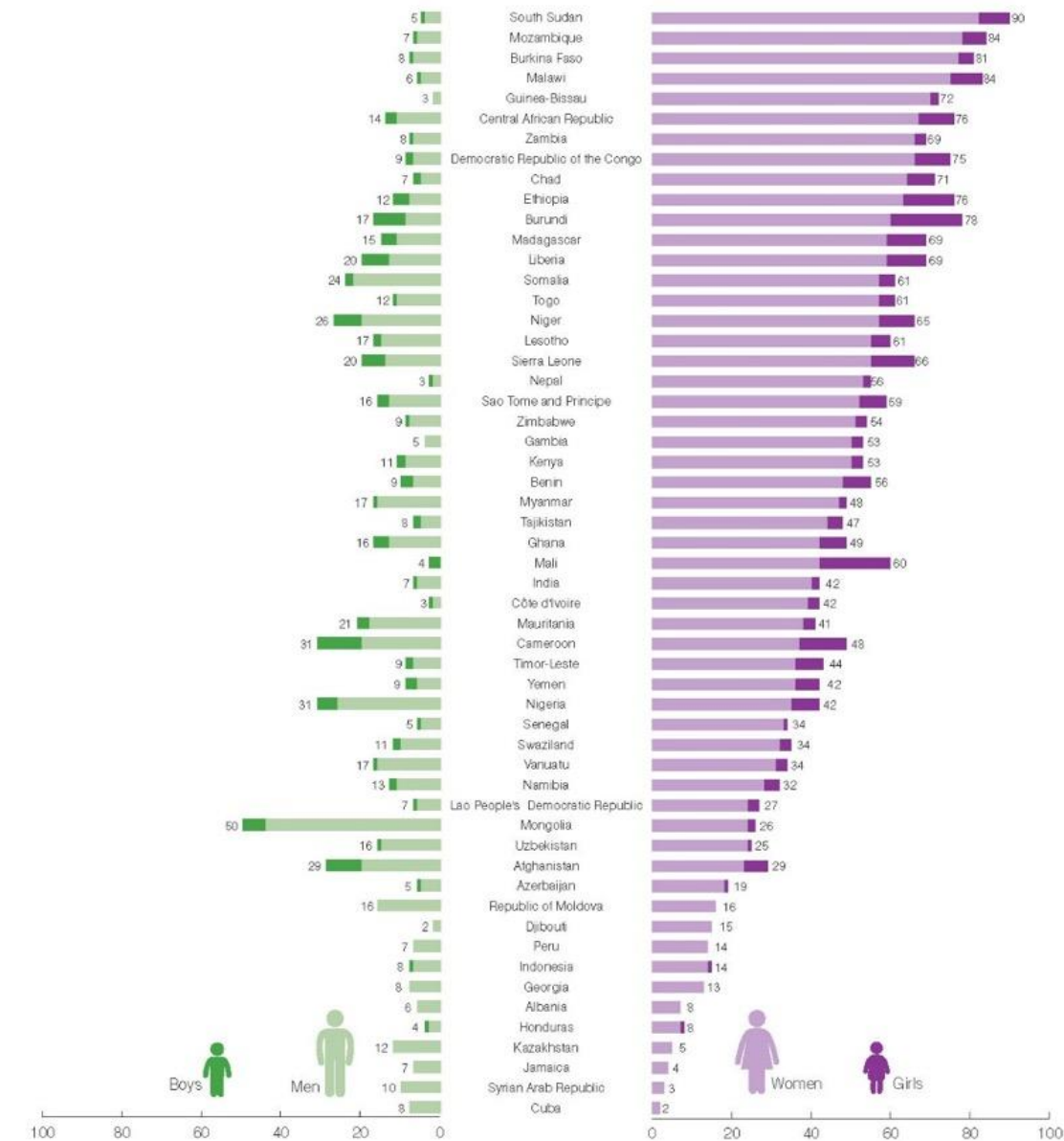
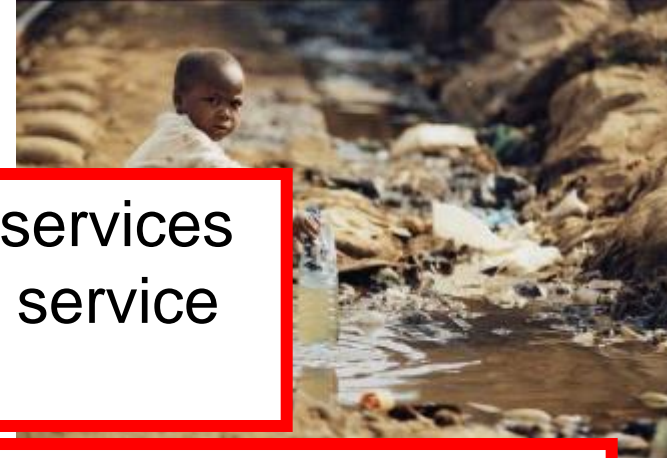
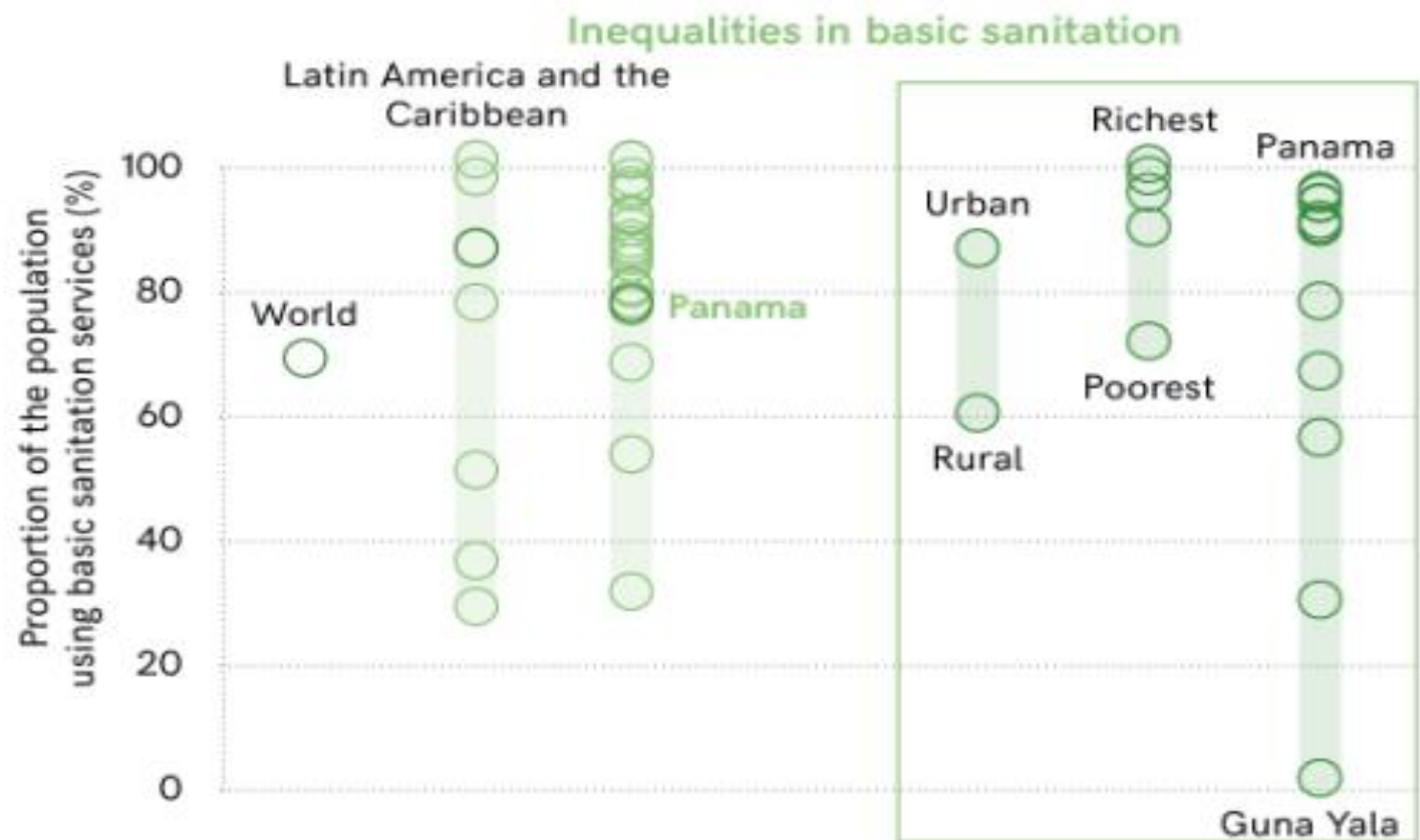
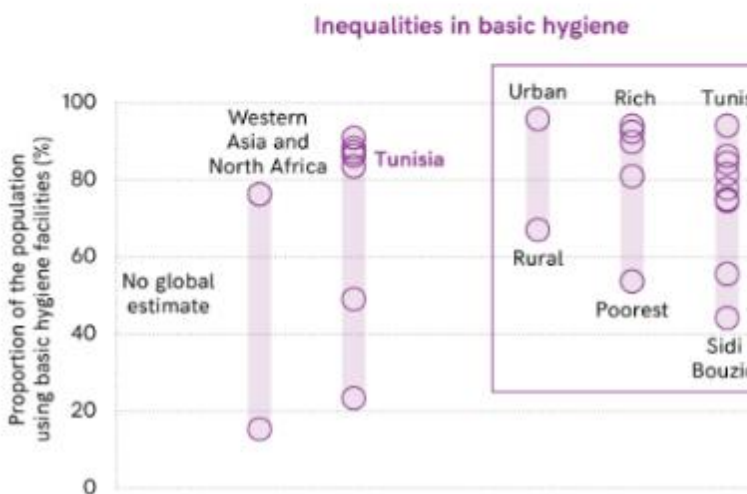
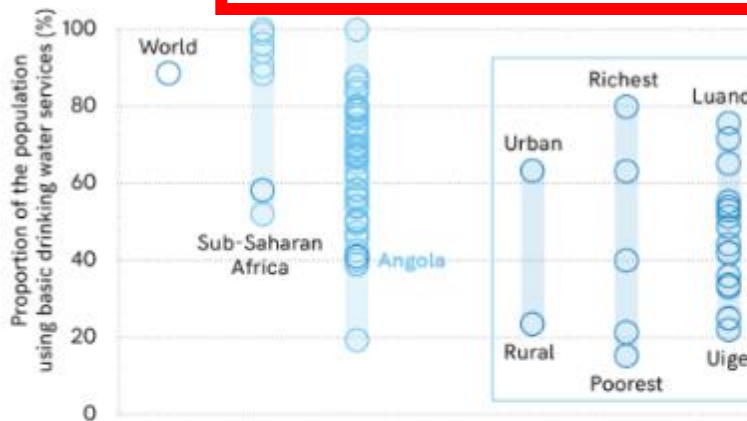


FIGURE 20 Primary responsibility for water collection in rural areas, by gender and age (%)

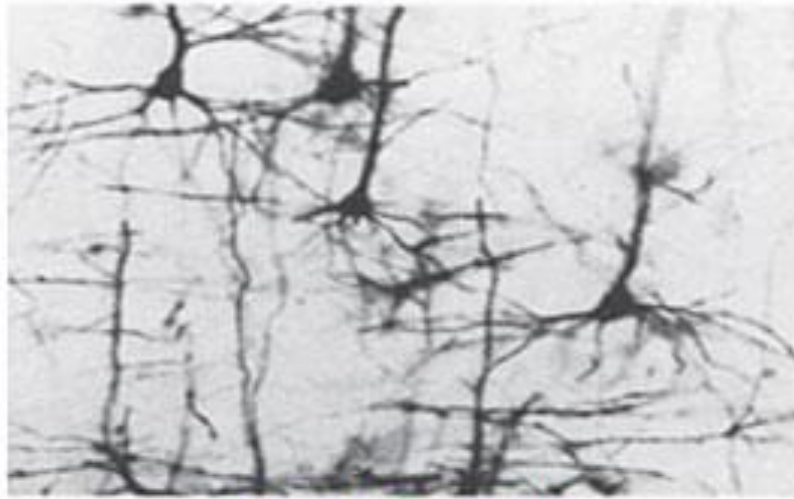
Note: Restricted to countries where at least 1 in 10 households have water off premises

WaSH and INEQUALITY

4.5 billion people lacked safely managed sanitation services
2.3 billion people still lacked even a basic sanitation service
892 million people still practised open defecation

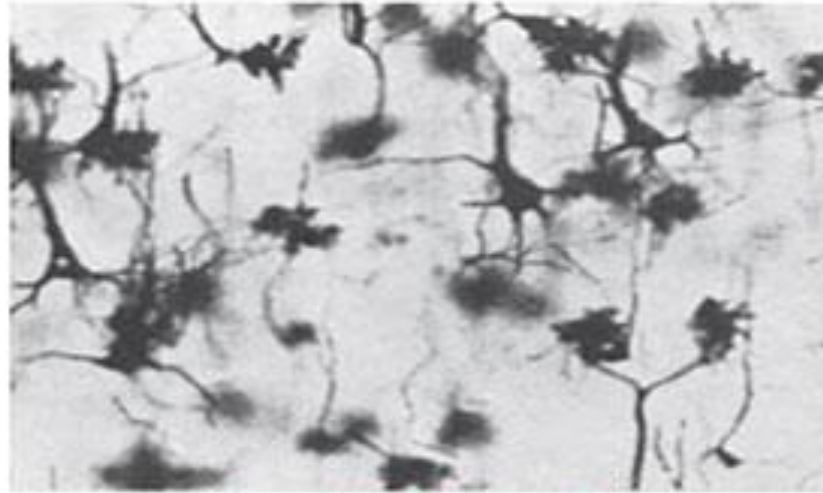


Normal



Typical brain cells
Extensive branching

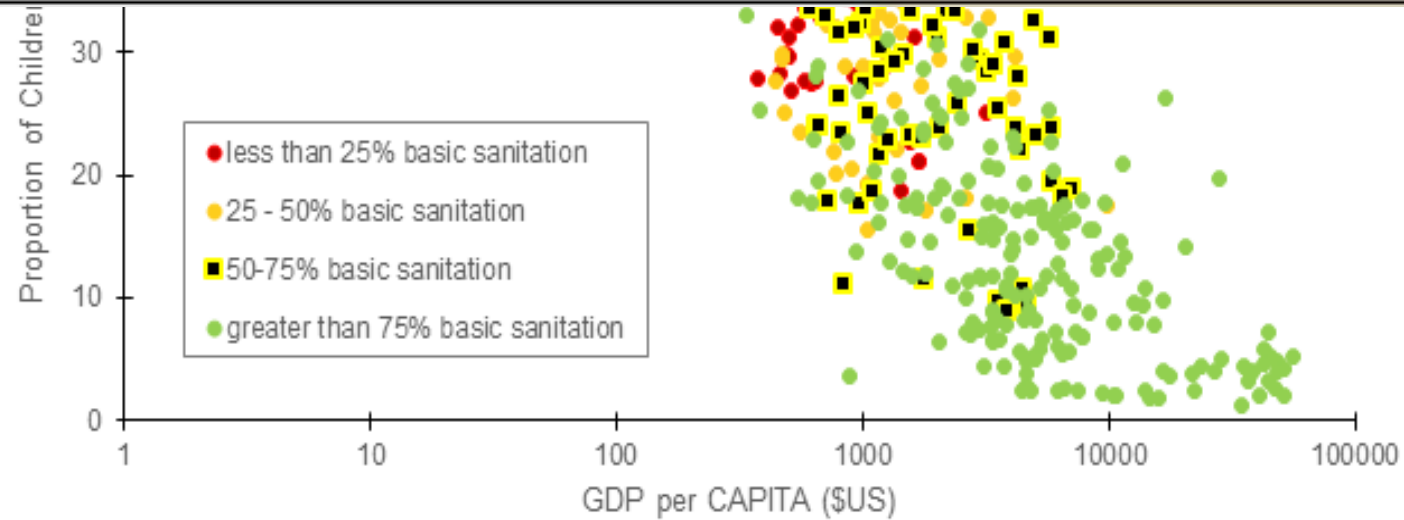
Stunted



Impaired brain cells
Limited branching
Abnormal, shorter branches



Source: Cordero E et al, 1993



16

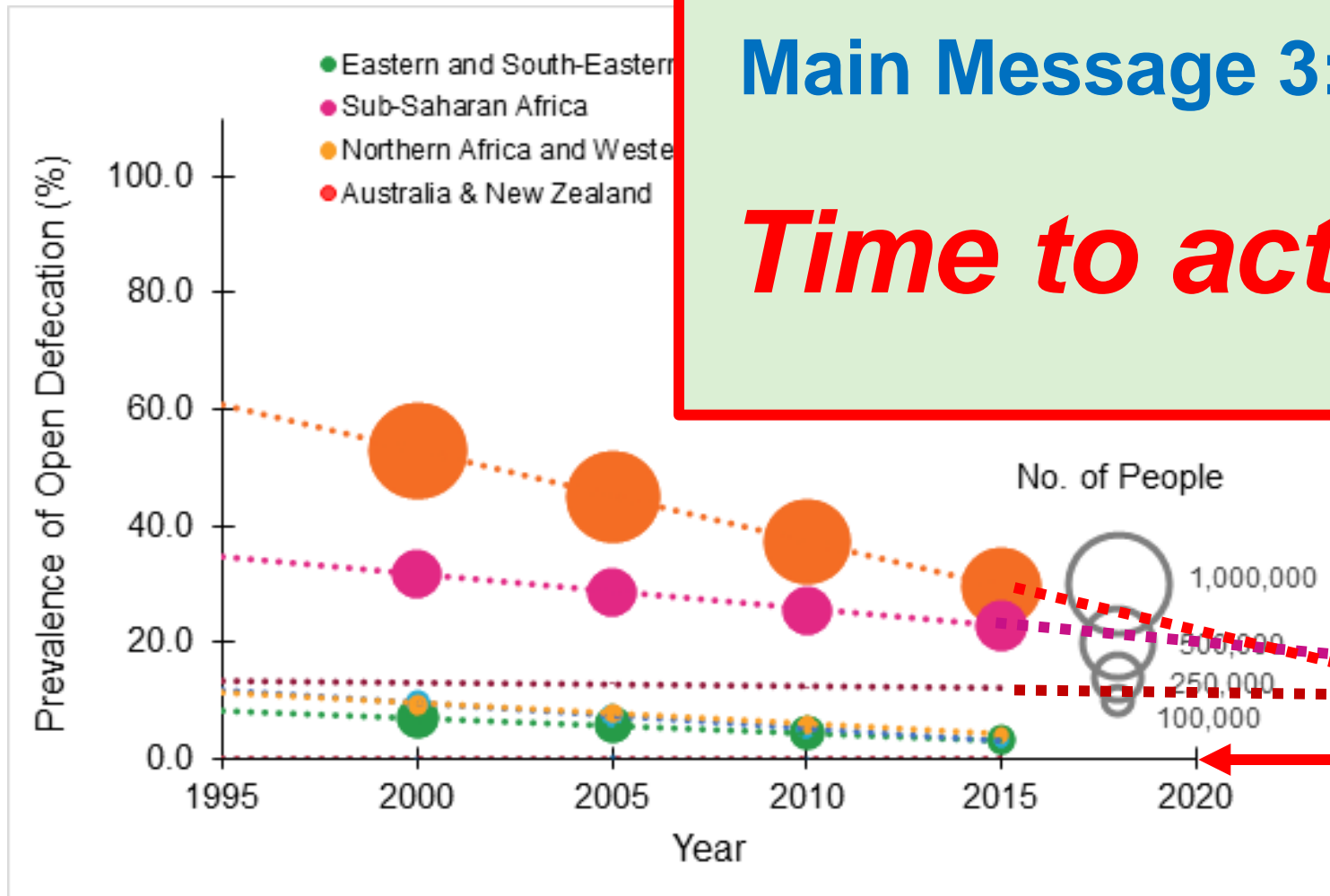


SANITATION and HYGIENE: End open defecation



Main Message 3:

Time to act now!

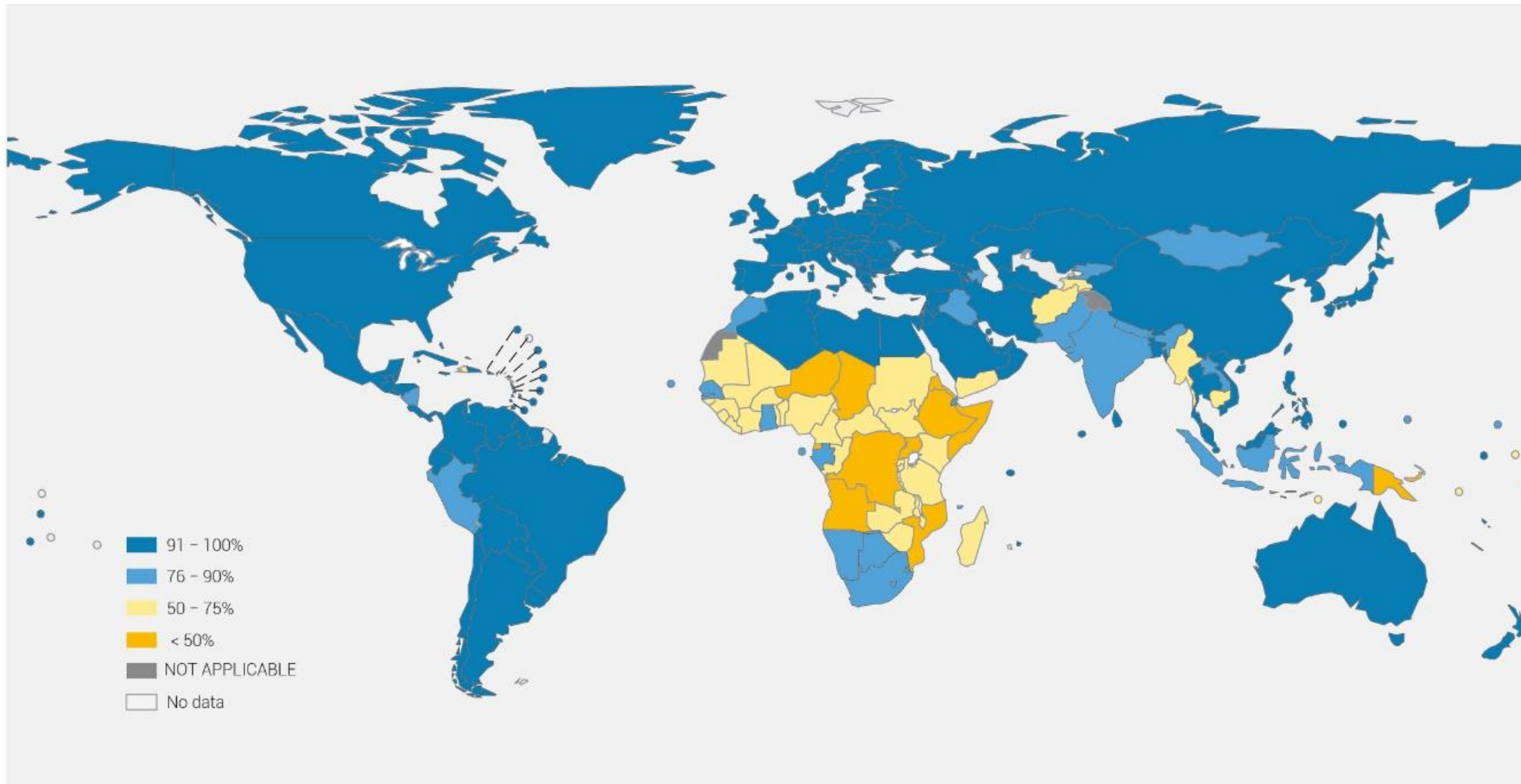


Faster progress is required to end open defecation by 2030, especially in rural areas

Not zero!

Main Messages 3:

The time to act on SDG 6 is now



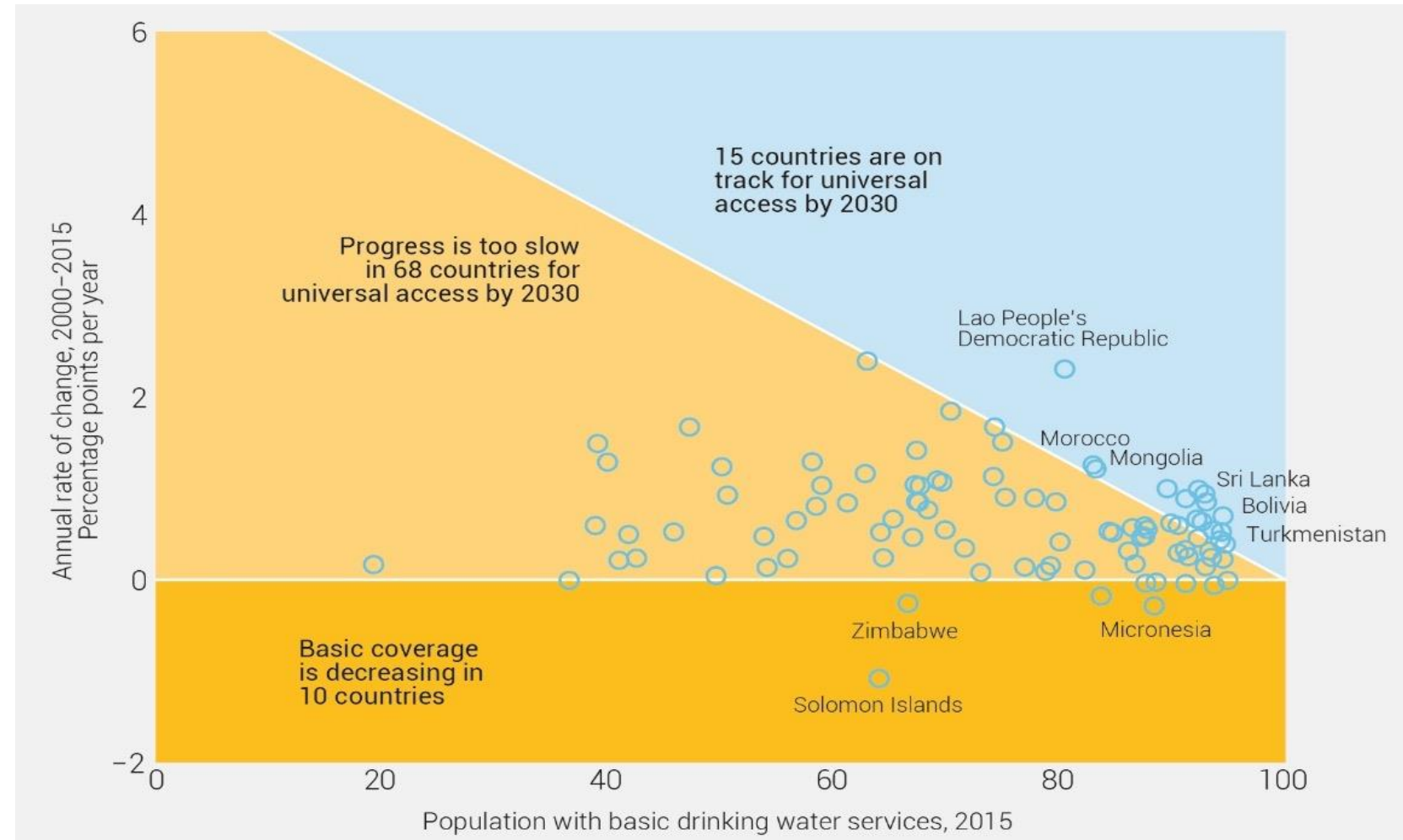
**Example:
Basic Water
Supply**



Main Messages 3:

The time to act on SDG 6 is now

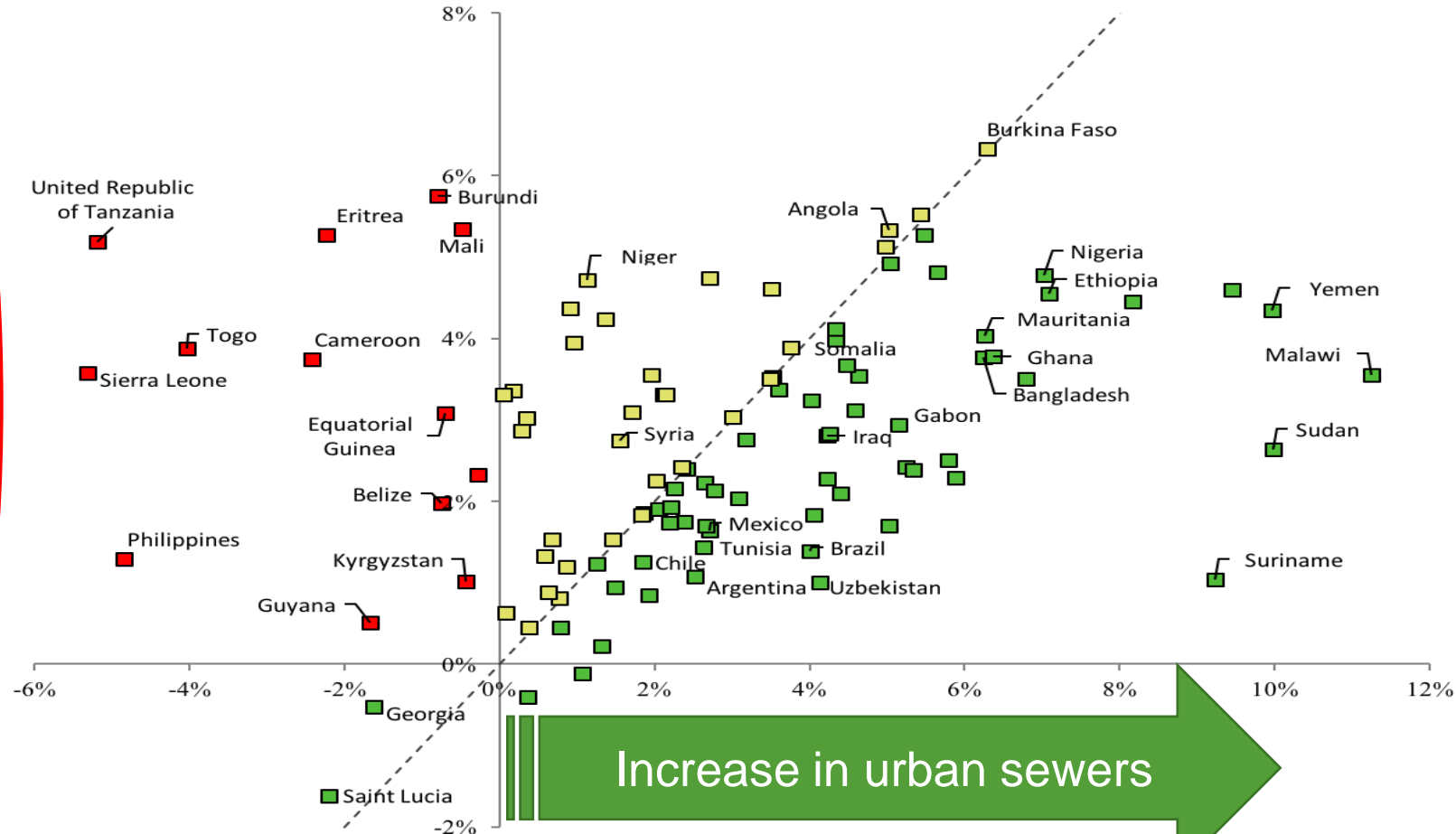
Between 2000 and 2015, the global population using at least a basic drinking water service increased from 81% to 89%. **Only one in five countries** with less than 95% coverage of basic service in 2015 is **on track** to achieve universal basic water services by 2030.



WATER and URBANISATION

Increase in urban population

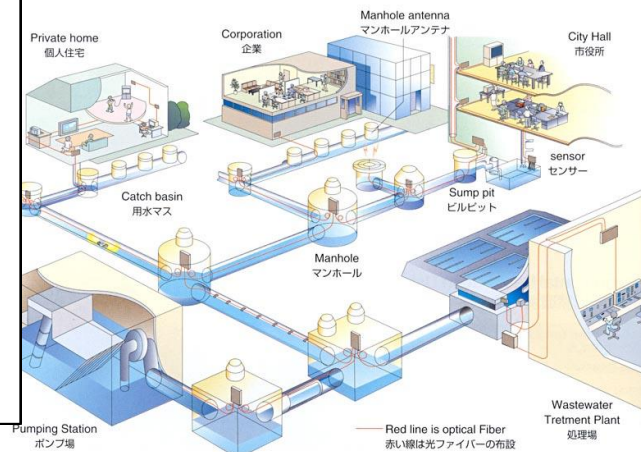
Annual percentage change in urban population (2000-2015)



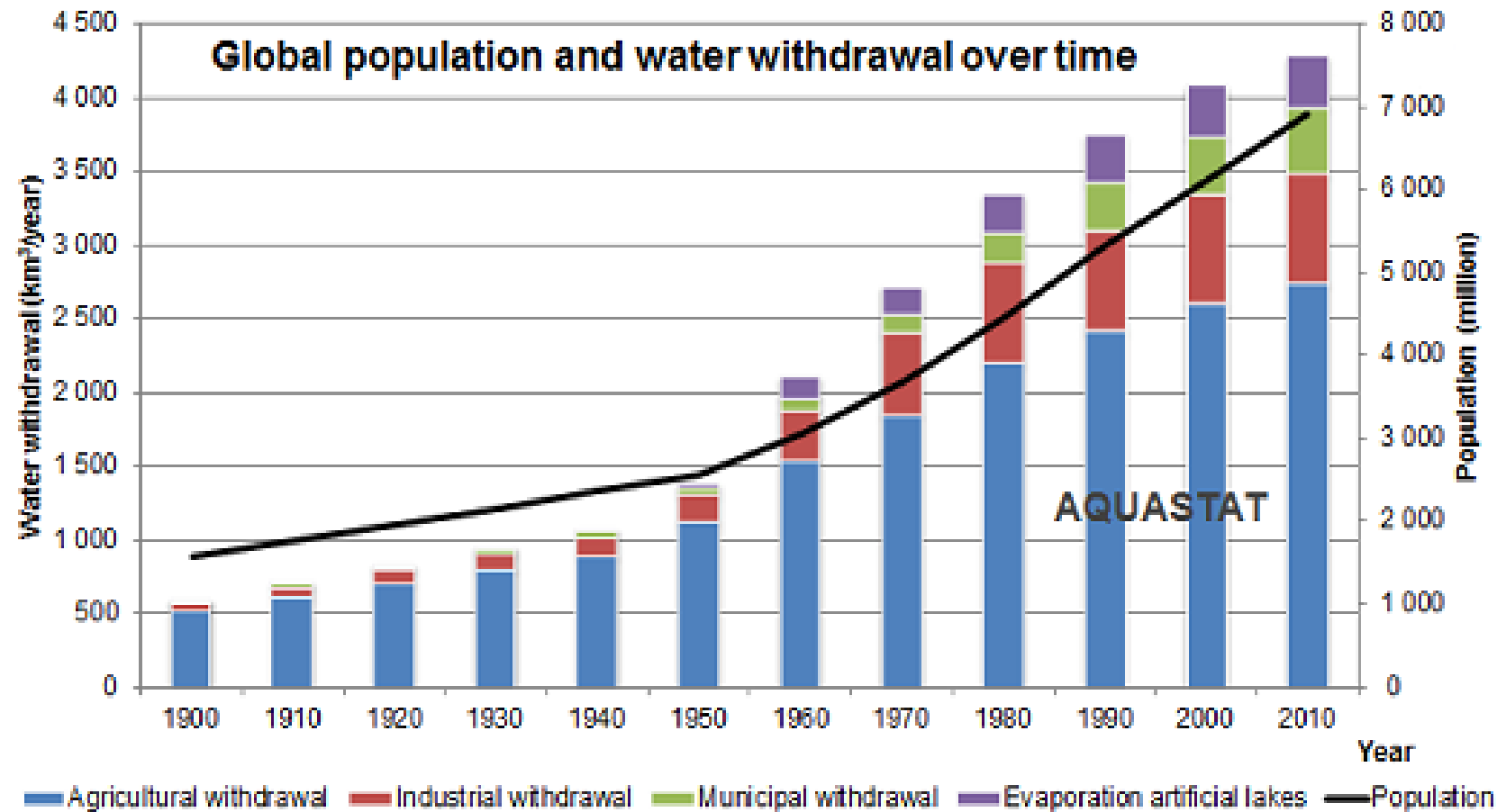
Increase in urban sewers

Annual percentage change in sewer coverage in urban areas (2000-2015)

Keeping up Not keeping up Falling behind



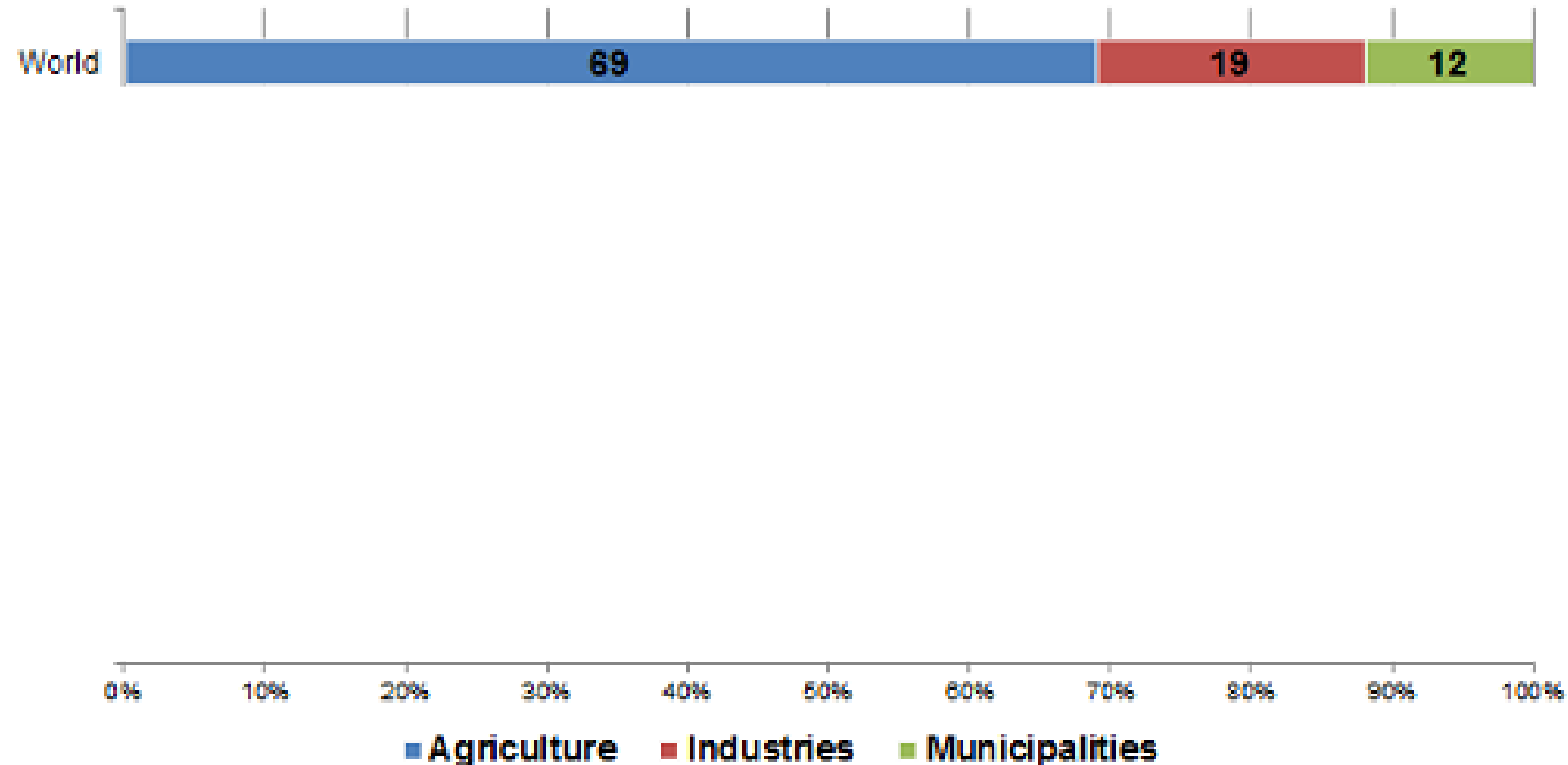
GLOBAL WATER WITHDRAWALS OVER TIME



WATER USES for AGRICULTURE and INDUSTRIES



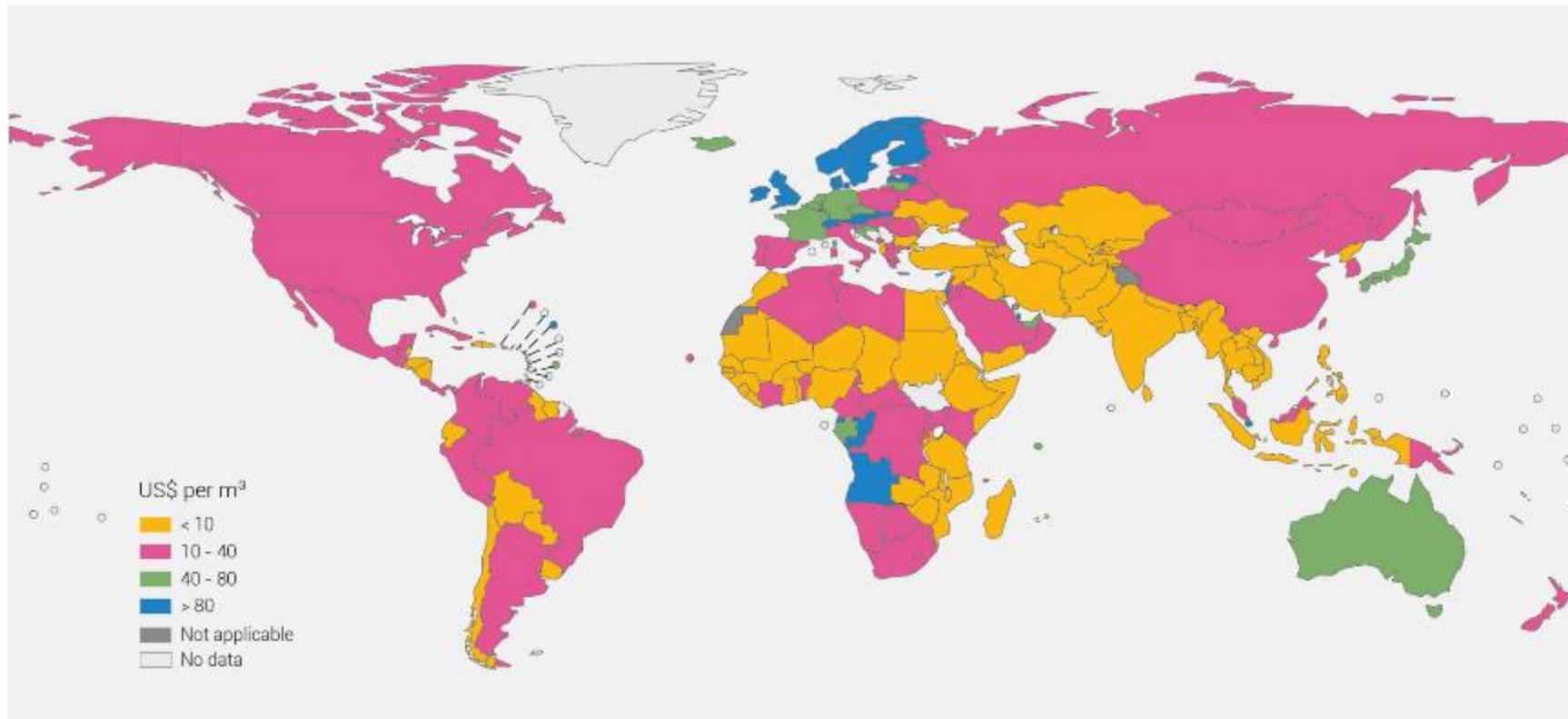
Water withdrawal ratios by continent



SDG 6.4.1

Change in water-use efficiency over time

Water-use efficiency is defined as the gross value added per unit of water used, expressed in US\$/m³.

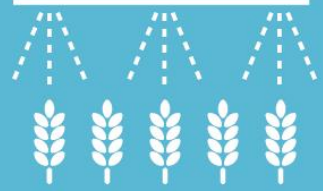


Countries at a different level of general development have comparable values of water-use efficiency.

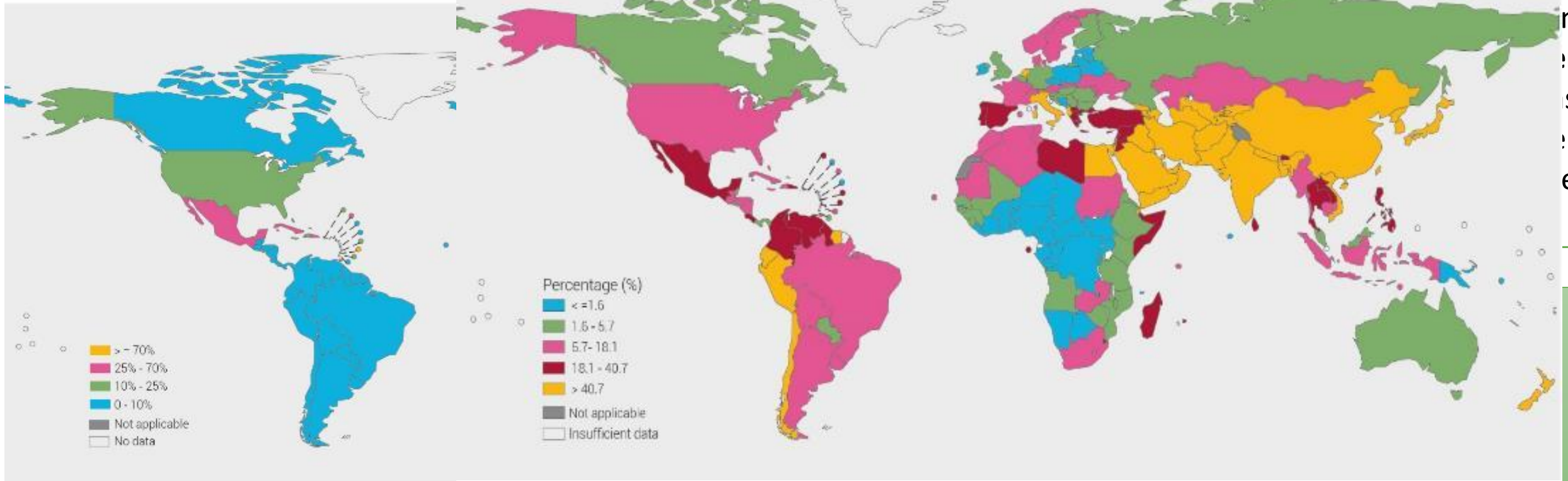
Increasing water-use efficiency means using less water while carrying out society's economic activities.

This can be done by increasing agricultural water productivity and reducing water losses, such as tackling leakage in municipal distribution networks.

6.4 MORE EFFICIENT WATER USE



SDG 6.4.2 Level of water stress: freshwater withdrawals as a proportion of available freshwater resources



Le: **Area equipped for irrigation as a percentage of cultivated area**

Sub-Saharan Africa, has a low level of water stress at 3%, but this masks the large differences between the wetter north and drier south and the degree of water resources development.

Main Message 4

Developing capacity and using effective smart technologies for managing water wisely

The case of AGRICULTURE

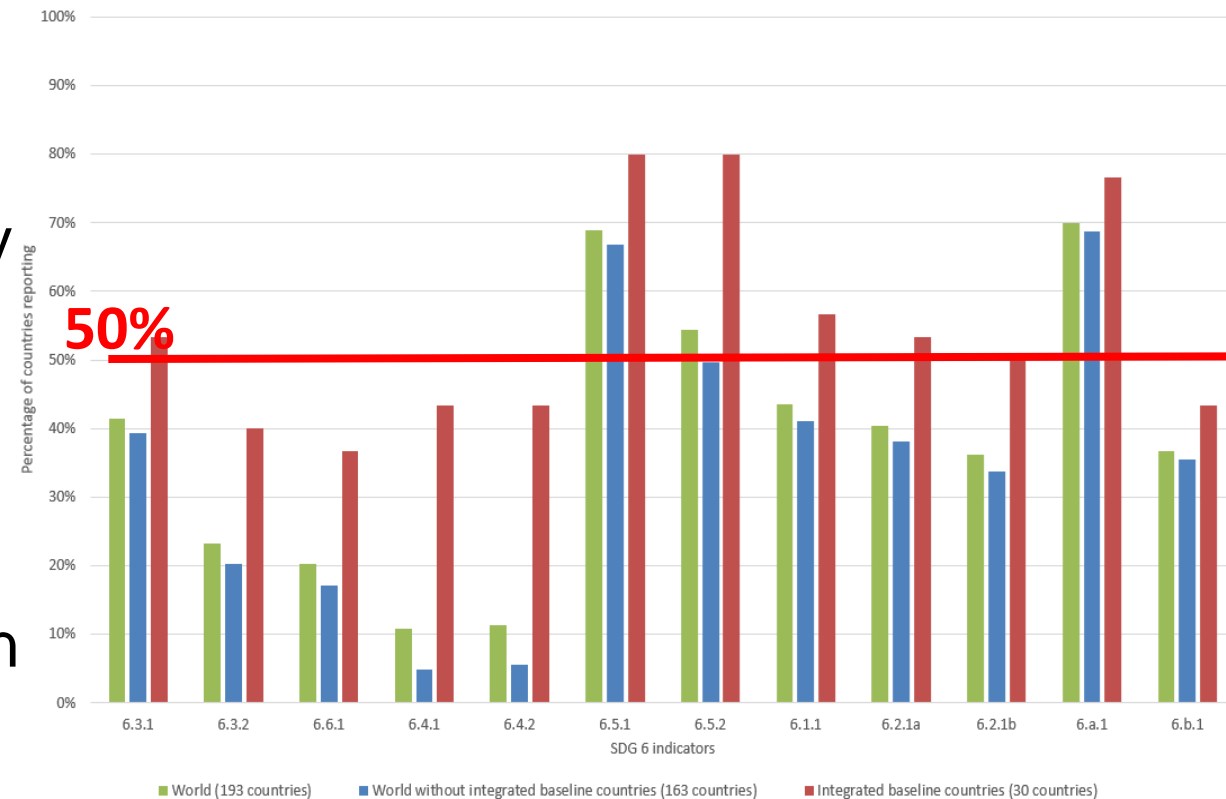


Effective water management needs more and better data



‘You cannot manage, what you do not measure’

- Reliable (good quality), consistent and disaggregated
 - Increase transparency and accountability
 - Available and accessible (sharing)
- Less than 50% of Member States have comparable data
- Future: use latest technology (EO, citizen sciences etc.)
- Increase resource and develop capacity!



Main Message 5

Improving Governance and Public Participation



Implement IWRM

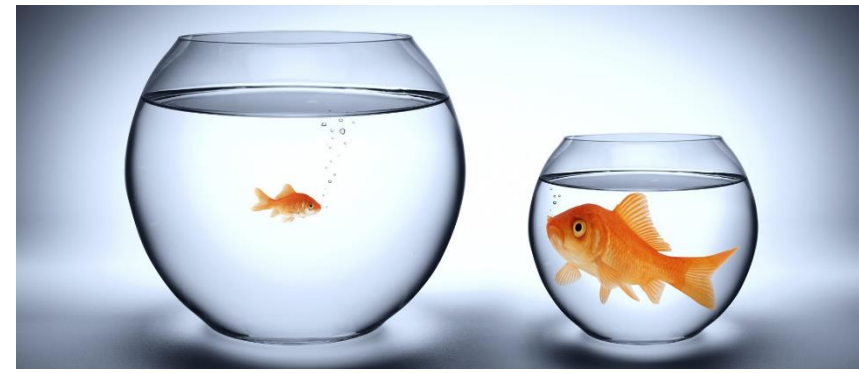
Integration across water and water-using sectors and effective **transboundary governance** frameworks is essential to ensure that limited water resources are shared effectively among many competing demands.



Public participation is critical to water management.

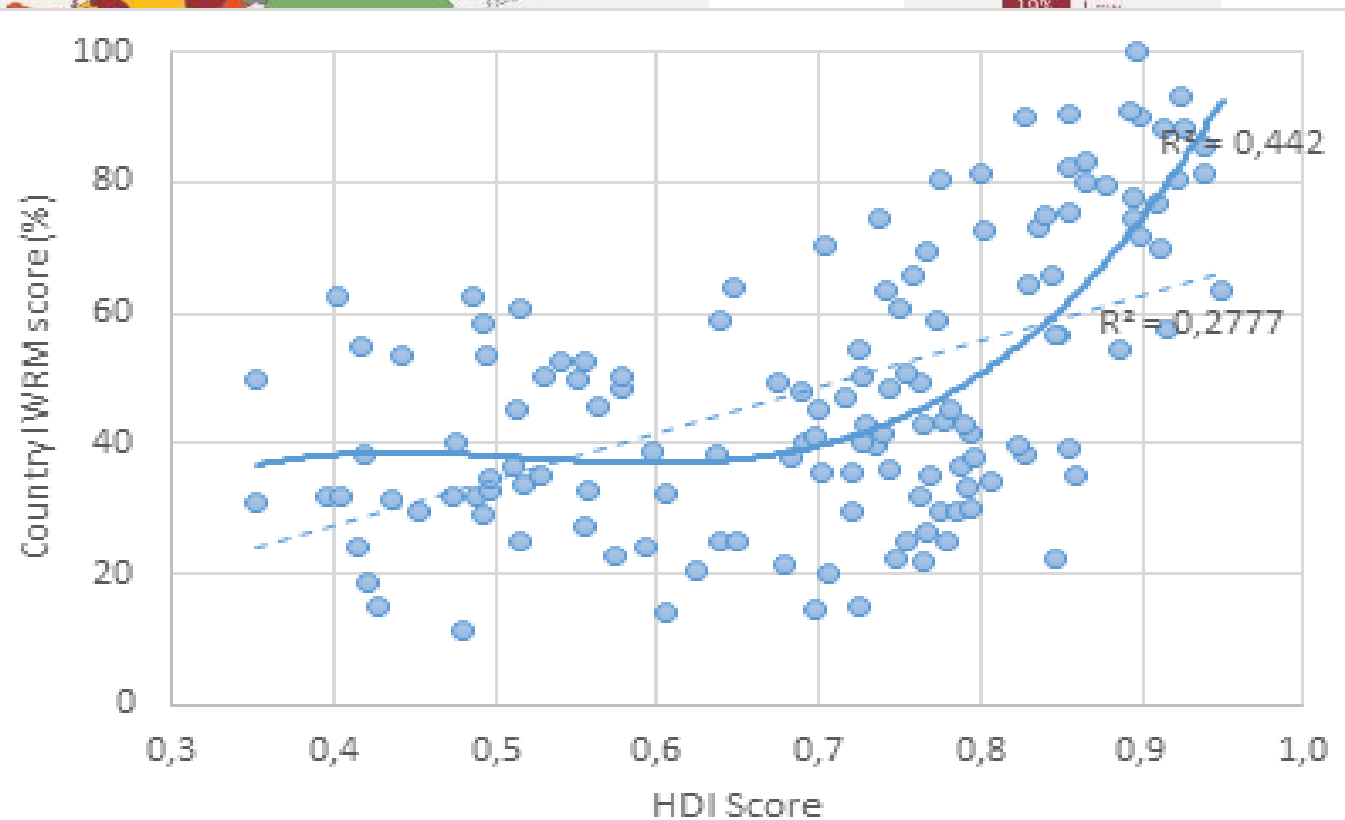
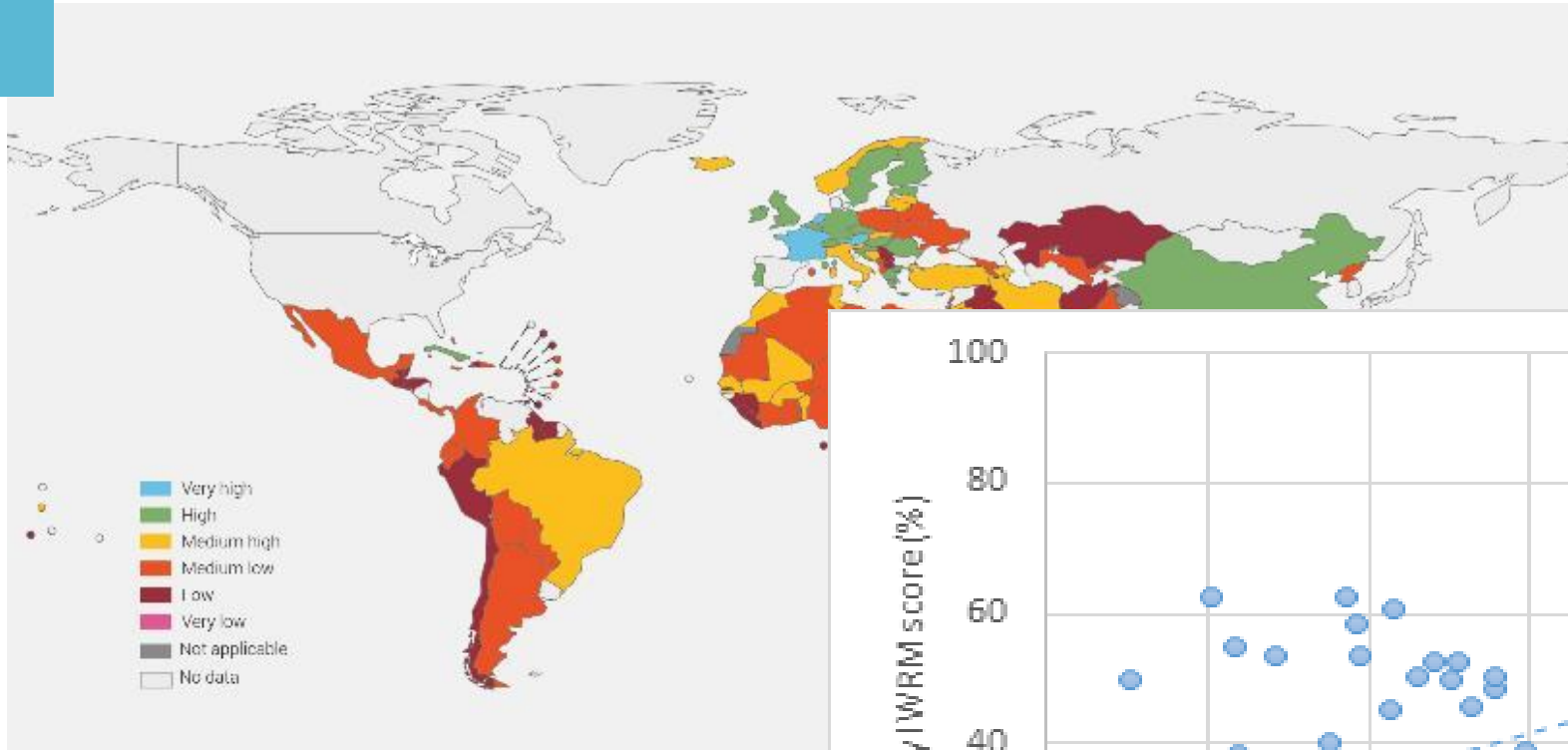
Community **participation** in decision-making can yield many benefits, but better means of measuring quality and effectiveness of such participation are needed.

Good water governance is essential



SDG 6.5.1 Degree of implementation of IWRM

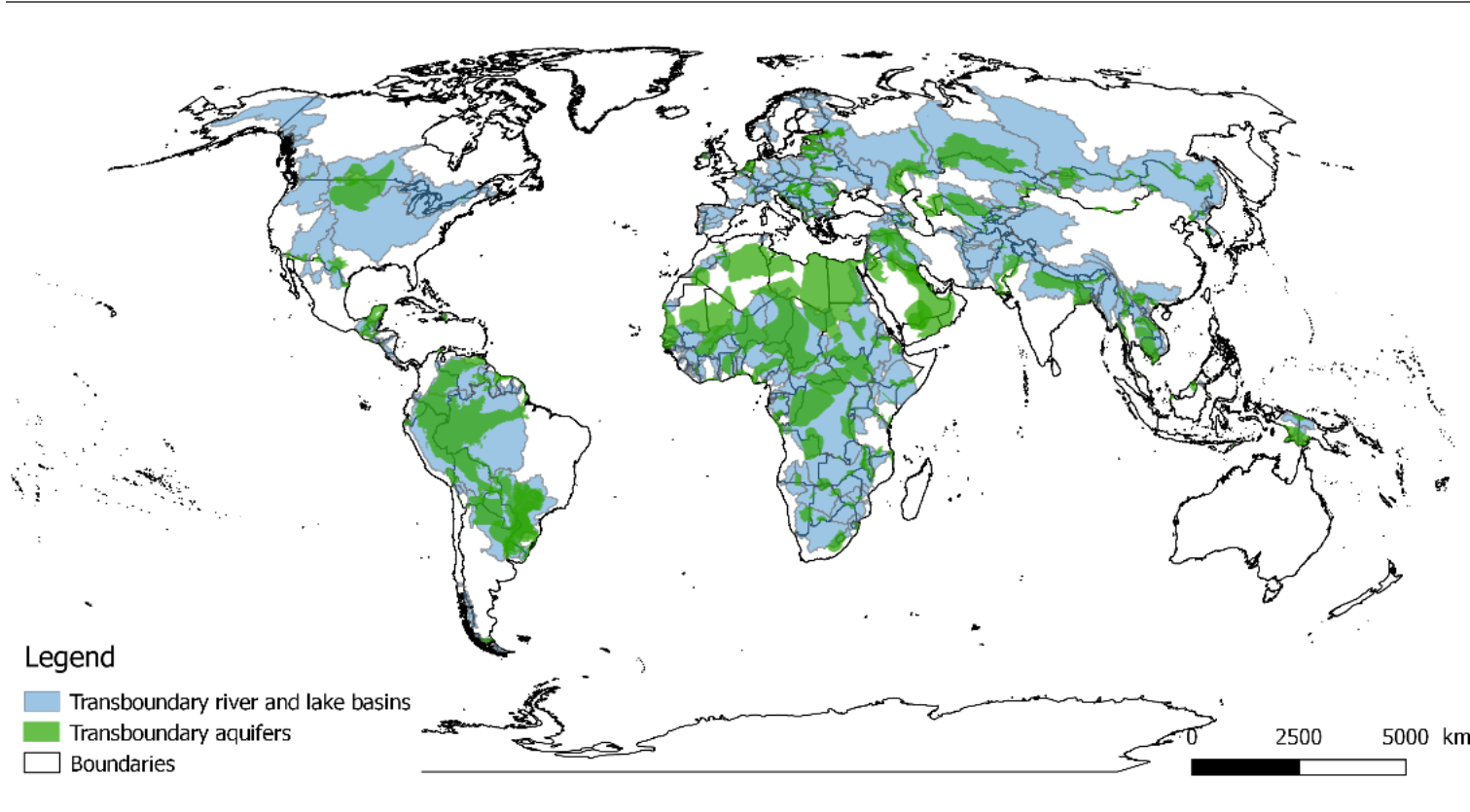
38% of countries reported at least medium-high IWRM implementation in 2017/18





SDG 6.5.2

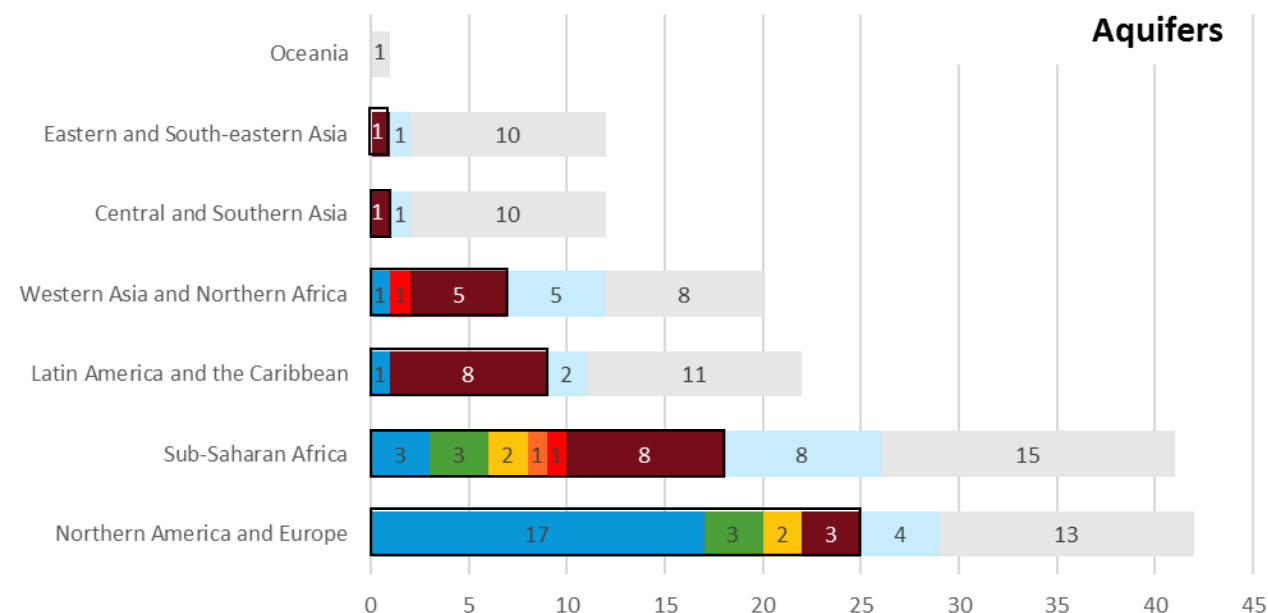
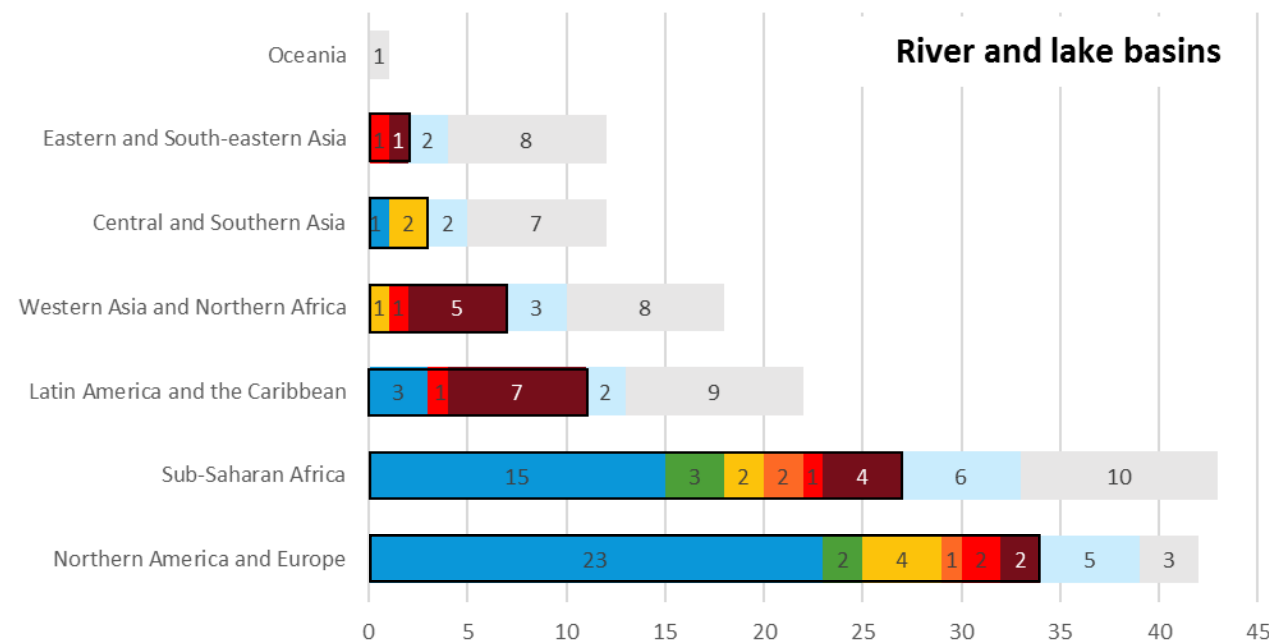
Proportion of transboundary basin area with an operational arrangement for water cooperation



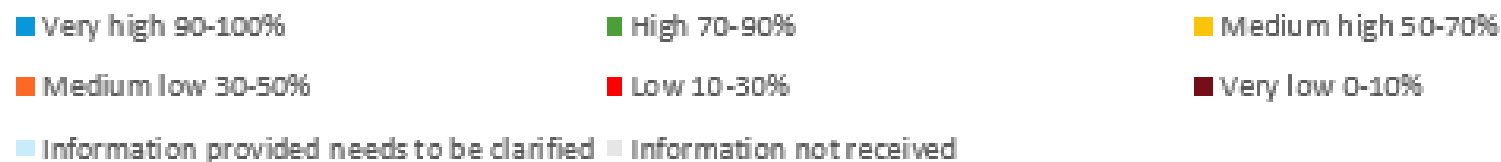
The world's 286 transboundary river and lake basins cover almost half of the Earth's surface area, over 150 countries have territory in a transboundary water basin and almost 600 transboundary groundwater aquifers (TBAs) have been identified.

SDG 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation

Regional breakdown of the number of countries sharing basins and level of transboundary water cooperation (based on SDG6.5.2 indicator)

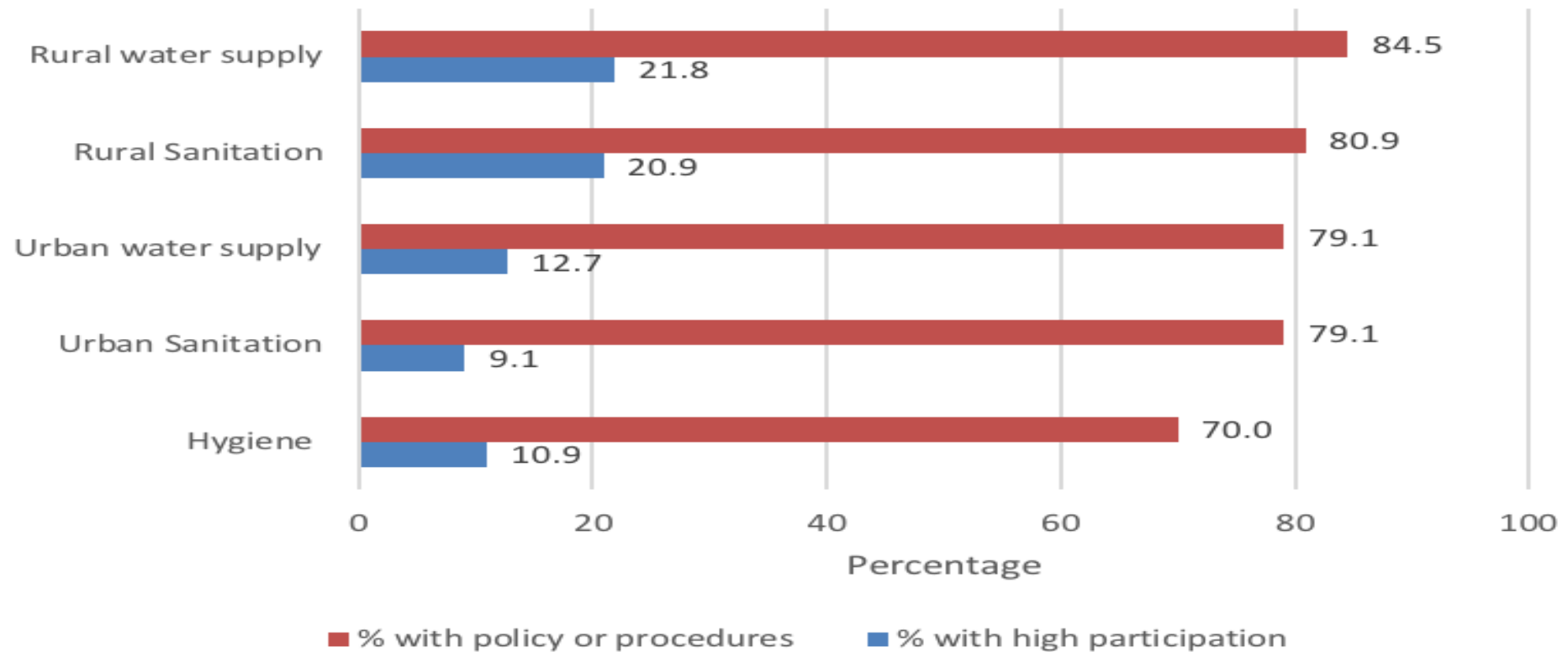


The average of the national percentage of transboundary rivers and lake basins covered by an operational arrangement is 64% and it is 47% for aquifers.





SDG 6.b Percentage of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management



Percentages of countries with defined procedures in law or policy for participation (number of countries = 110)

Source: WHO and UN-Water (2017).

Data sources: WHO and UN-Water (2017).

Main Messages 6:

Global SDG 6 targets must be localized and adapted to the country context



Some findings of the SURVEY

Figure 6. SDG 6 targets
perceived as the biggest
challenge by respondents

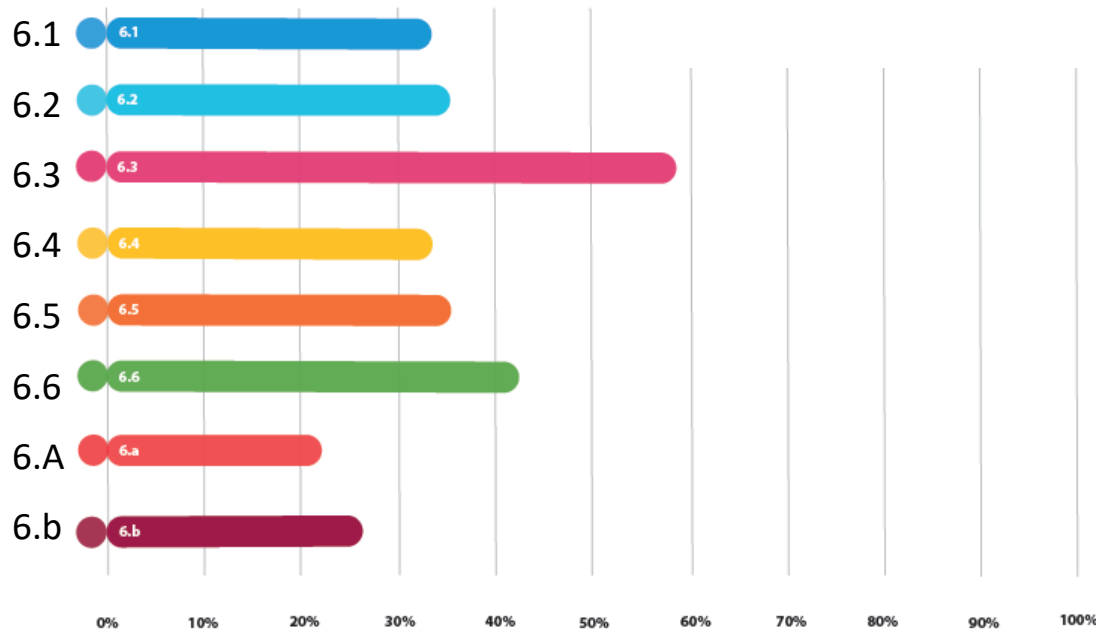
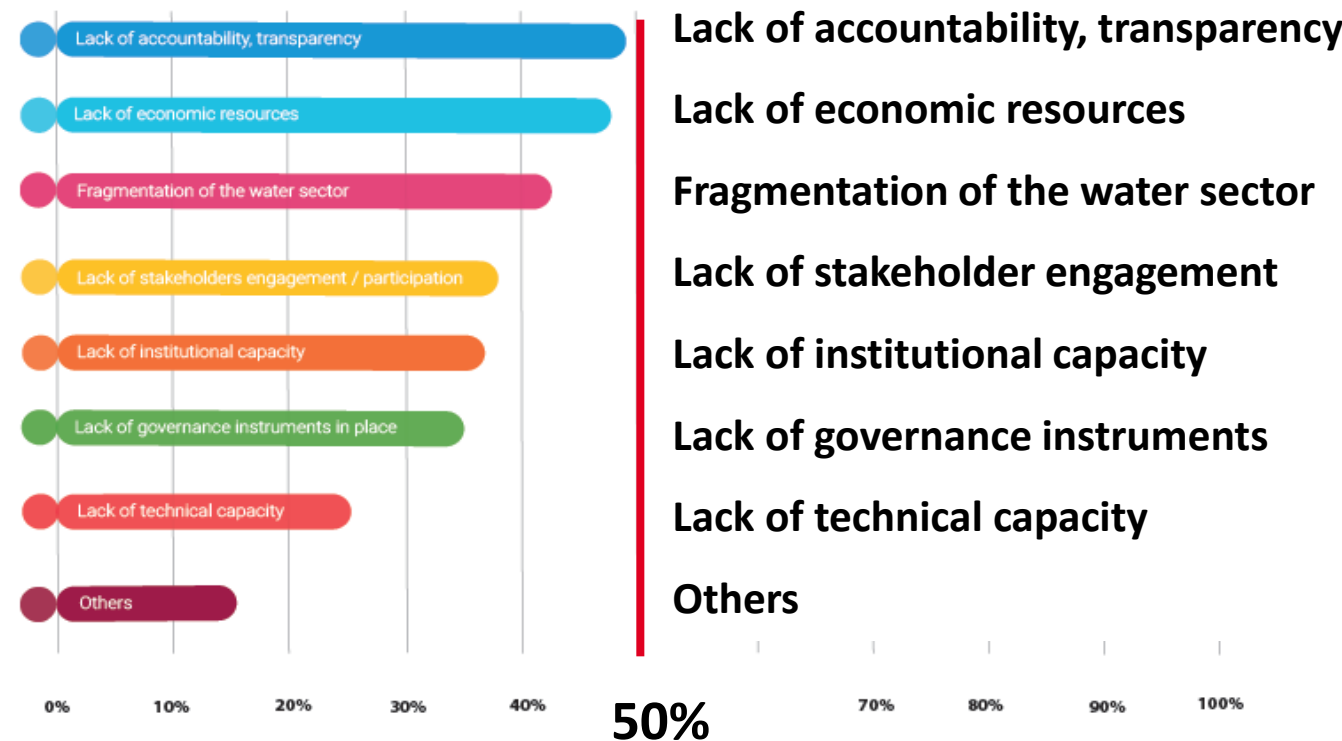
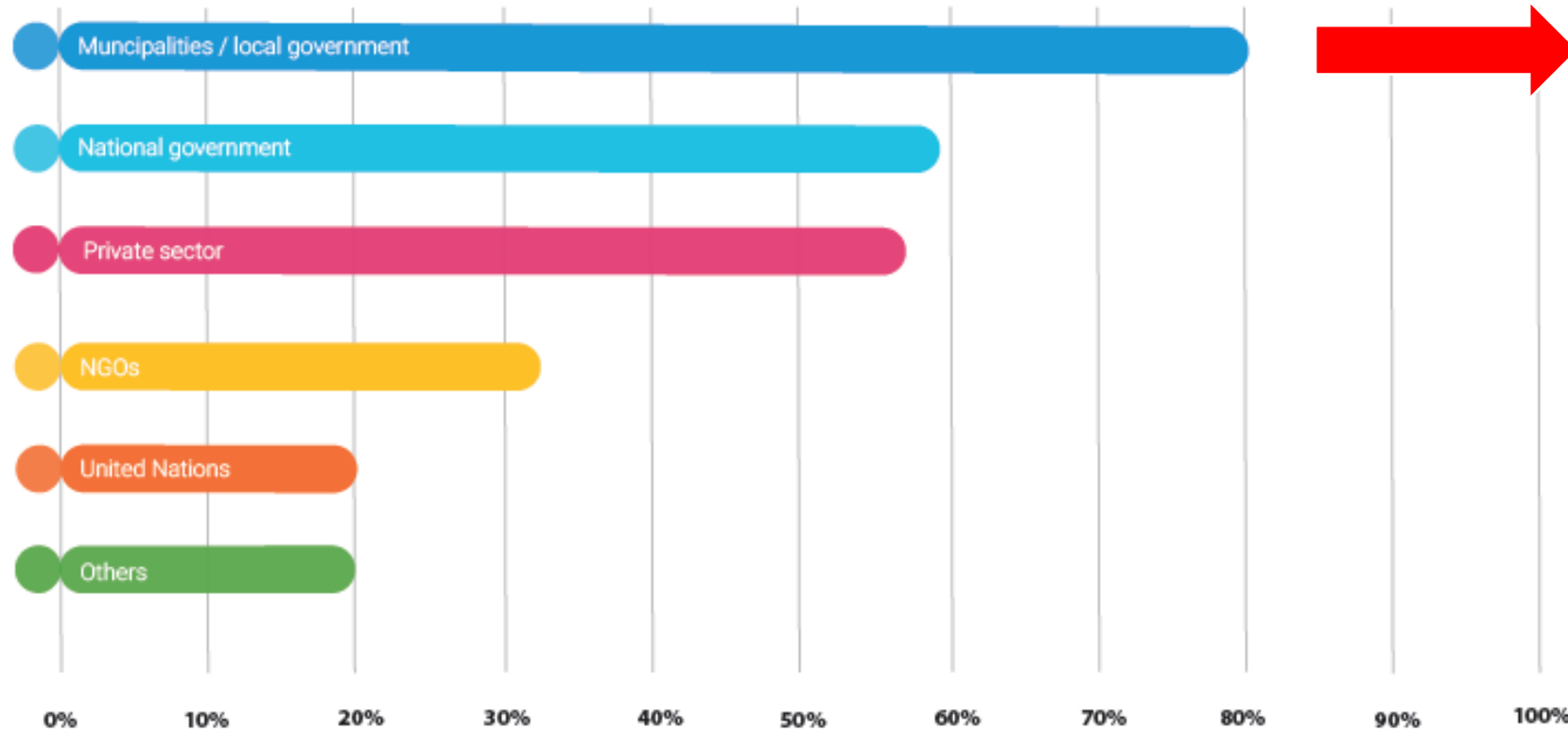


Figure 9. Main obstacles to
the achievement of SDG 6
perceived by respondents



Some findings of the survey

Figure 10. Roles in the implementation of SDG 6

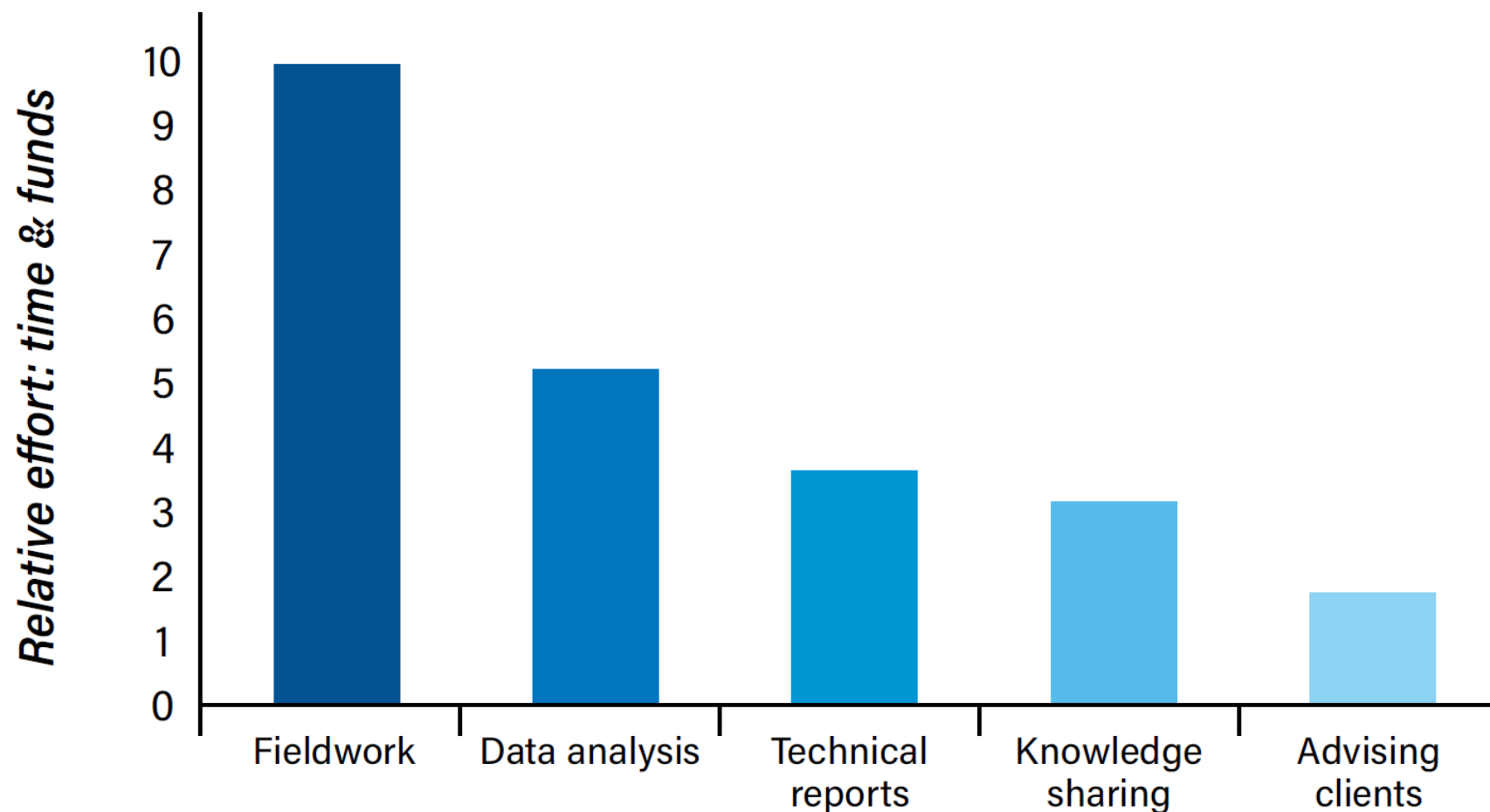


Are local governments supported sufficiently in the implementation of the SDG 6?

— Some Reflections on Research Gaps

1. Understanding interlinkages incl. quantification
2. Truly transdisciplinary projects (stakeholder involvement)
3. More and better data (incl. visualisation, modelling etc.)
 - Utilise latest technology, EO, big data, citizen science, private sector data etc.
 - Disaggregated, improve space-time resolution
 - Development of effective indicators to underpin governance and evidence-based decision making
4. Standardisation and harmonisation of monitoring (comparability, efficiency etc.)

Research into Policy and Practice



Relative time allocation and funds for different stages along the research to utilization chain (Hatibu, 2006)

Thank you!

This work is only possible due to the support from:

UN-Water Task Force SDG 6 Synthesis Report

CEO Water Mandate, FAO, ILO, UNDP, UNECE, UN-Environment, UN-Habitat, UNESCO WWAP (coordinator), UNICEF, UNU, UN-Water TAU, WHO, WMO and World Bank.

Contribution to data analysis by UNESCO–IHP, CDP,

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Federal Ministry for Economic Cooperation and Development (BMZ), Germany

Swiss Agency for Development and Cooperation (SDC), Switzerland

Ministry of Infrastructure and Environment, Netherlands

Swedish Development Cooperation (SIDA), Sweden

Ministry of Foreign Affairs, Italy



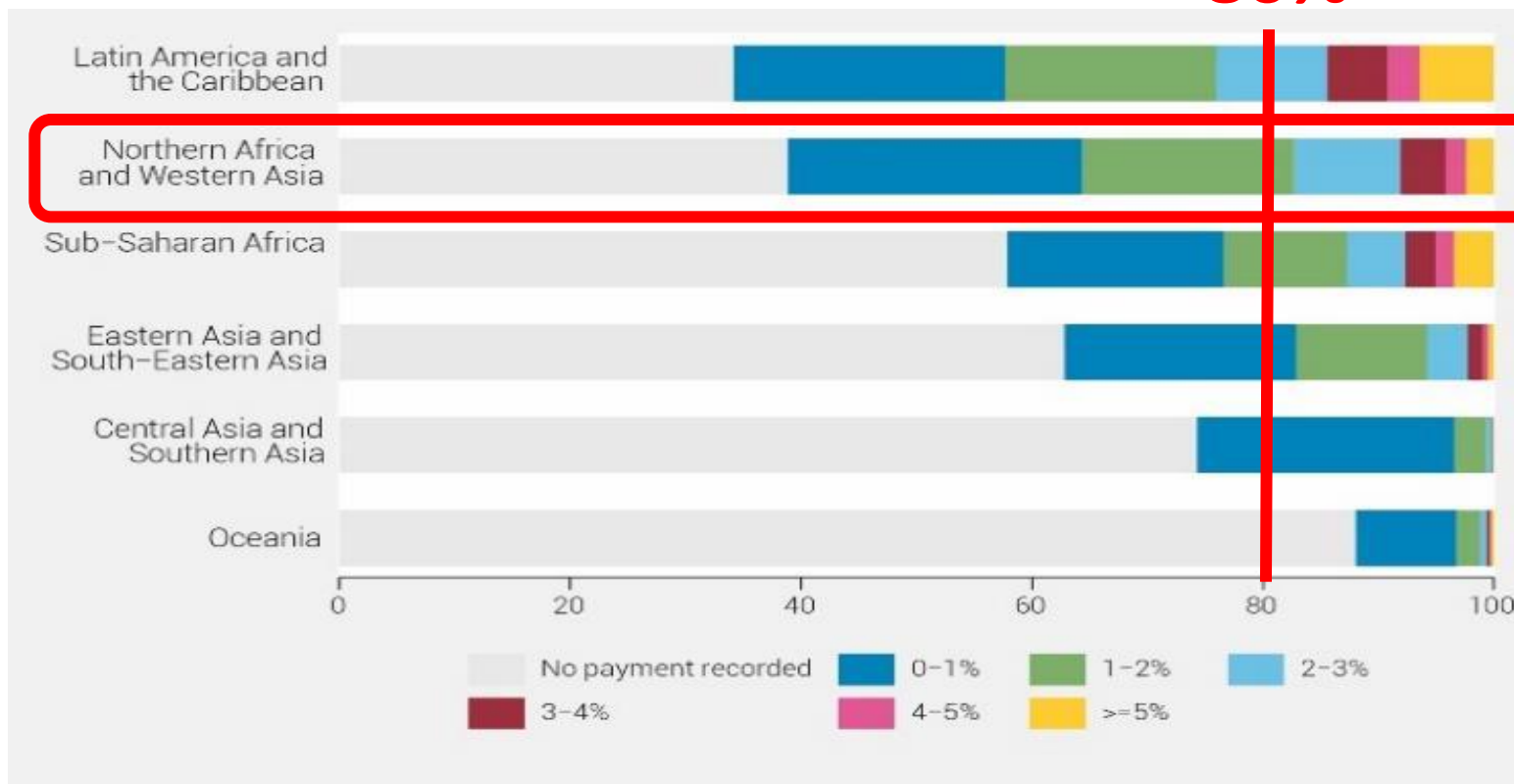
Main Message 7

Create new ways to finance water and sanitation



Why is this needed?

80%



WaSH services should be 'affordable'.

This implies that payment for services should not present a barrier to access or prevent people from meeting other basic needs

Water and sanitation require a new financing paradigm

- Costs are increasing (ca. 500 bill/year); triple WASH investments to US\$114 bill./year (without O&M costs), additional water resources investments
- >80% of participating countries reported insufficient financing for national WaSH targets
- WaSH ca. 5% of total ODA disbursements; aid commitments have declined in SSA



GLOBAL WATER WITHDRAWALS OVER TIME

