

# Institutional Responsibility in the support of SDG 6 and the rights to water and sanitation



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Masterclass on Investment in the rights-based approach for sustainable water solutions

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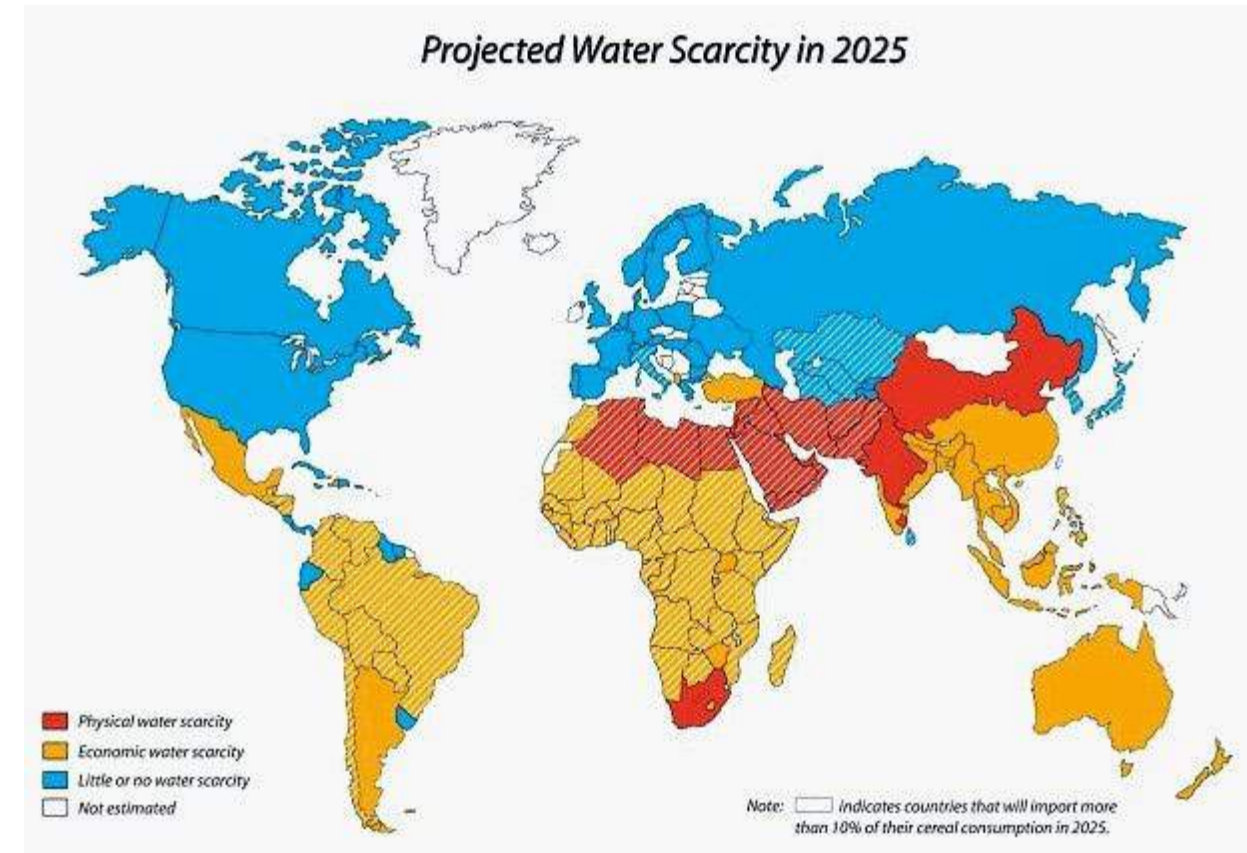
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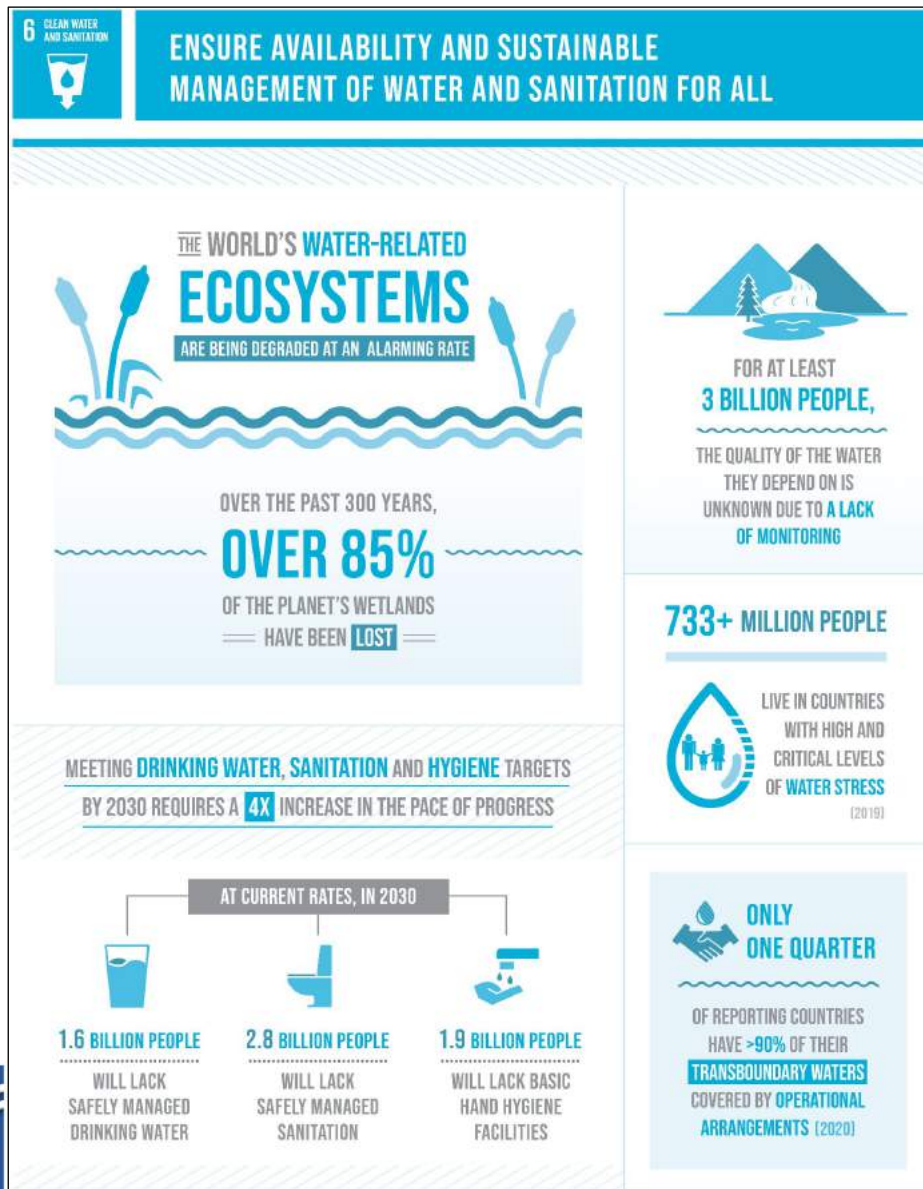


# Global water security status

- Most of the world's population lives in water-scarce countries. Over 80% of the global population live in water insecure countries.
- There is an uneven distribution of water resources at the global level, most of which are transboundary in nature. The least water-secure regions are Africa and South Asia.
- Globally, all regions face a trajectory of low levels of water security due to a range of compounding factors.
- More than 10% of people do not have access to basic drinking water, and more than 70% do not have access to a safely managed drinking water service (the SDG 6.1 target).



# State of global water-related ecosystems



## Key SDG 6 Targets

- 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity
- 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- 6.a By 2030, expand international cooperation and capacity-building support to developing countries in water and sanitation related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- 6.b Support and strengthen the participation of local communities in improving water and sanitation management

# South Africa perspective: An overview of water resources of South Africa

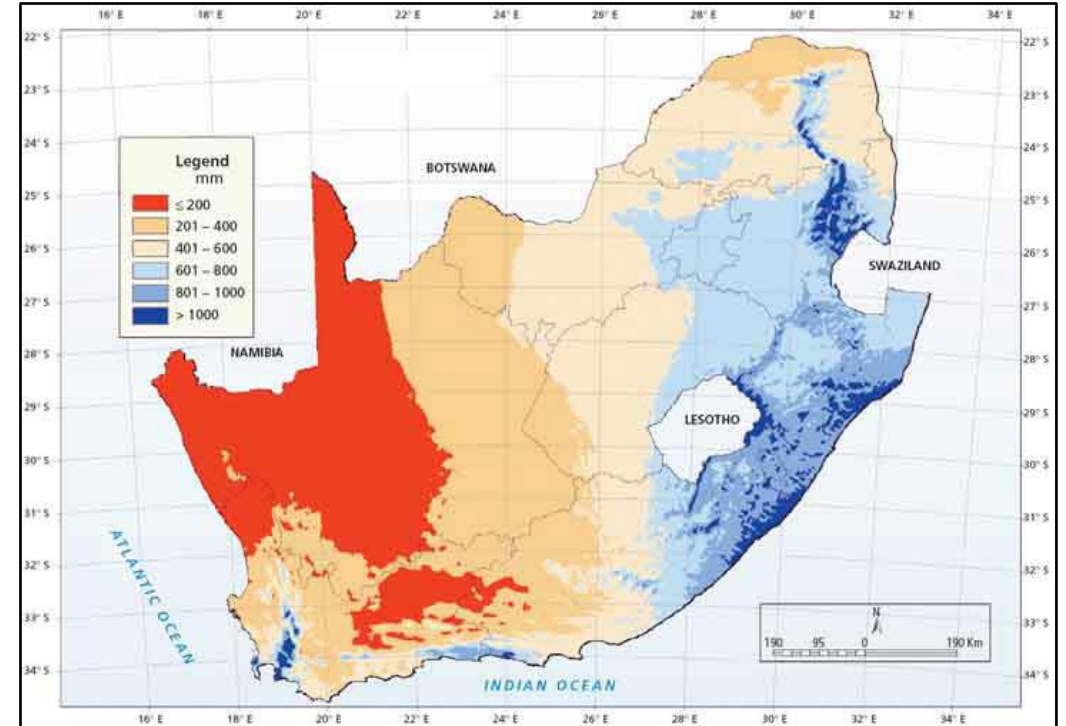
South Africa is a water scarce country, ranking the 30<sup>th</sup> driest country in the world.

Rainfall distribution is uneven, varying from less than 50 mm in the northwest to more than 3000 mm in the coastal mountains.

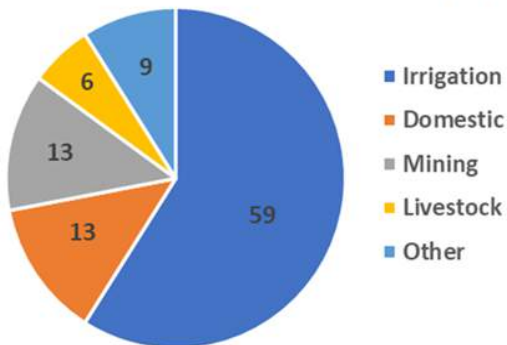
## An overview of the water resources of South Africa

The country has an average rainfall of about 40% less than the annual world average, but uses 61,8% more water per day, than the world average of 175 litres.

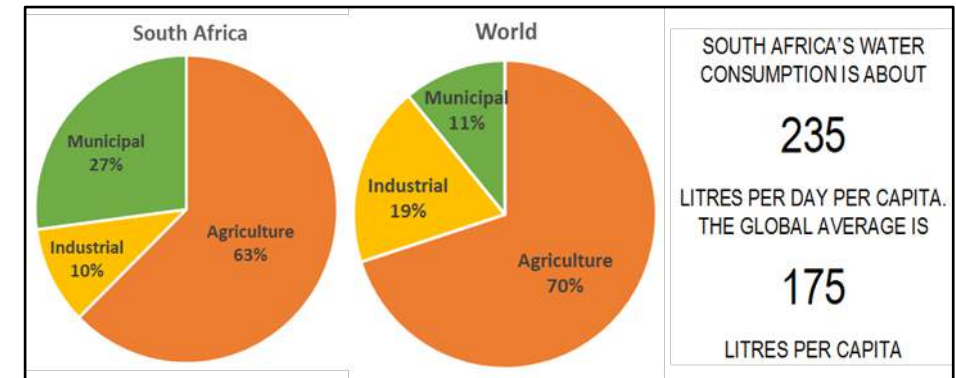
Its average annual rainfall of less than 500 mm is less than the world average of about 850 mm.



Groundwater use by sector in SA (%)



Although groundwater resources availability in South Africa is still unknown, 13% of the country's freshwater resources come from groundwater of which 59% is used in irrigation



SOUTH AFRICA'S WATER CONSUMPTION IS ABOUT

235

LITRES PER DAY PER CAPITA. THE GLOBAL AVERAGE IS

175

LITRES PER CAPITA

# Water sector challenges in the context of South Africa

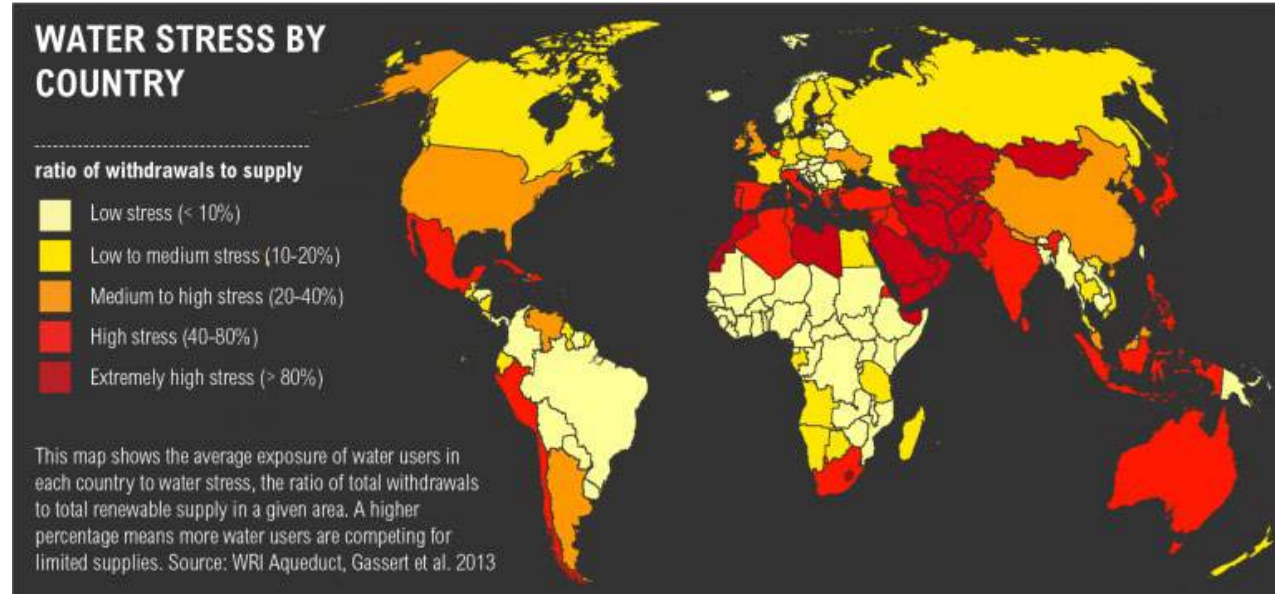
98% of the available freshwater resources are already allocated (leaving little room for economic growth)

The NDP proposes to increase the irrigated area by 45000 ha by 2030 (but where is the water)

## Challenges within the water sector in South Africa

Non-revenue water accounts to about 36% of water supplied (an equivalent of about R7.2 billion per annum)

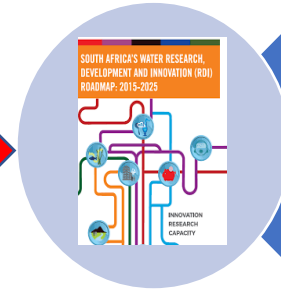
Climate change pressures continue exacerbating existing challenges through drought, heatwaves, shortened rainy season, etc.



Based on population and economic growth projections South Africa's **water demand will outstrip supply by 17% by 2030.**

Agriculture already consumes over 60% of available freshwater resources and irrigation expansion will only compound existing pressures. Most water allocated to agriculture is used for irrigation.

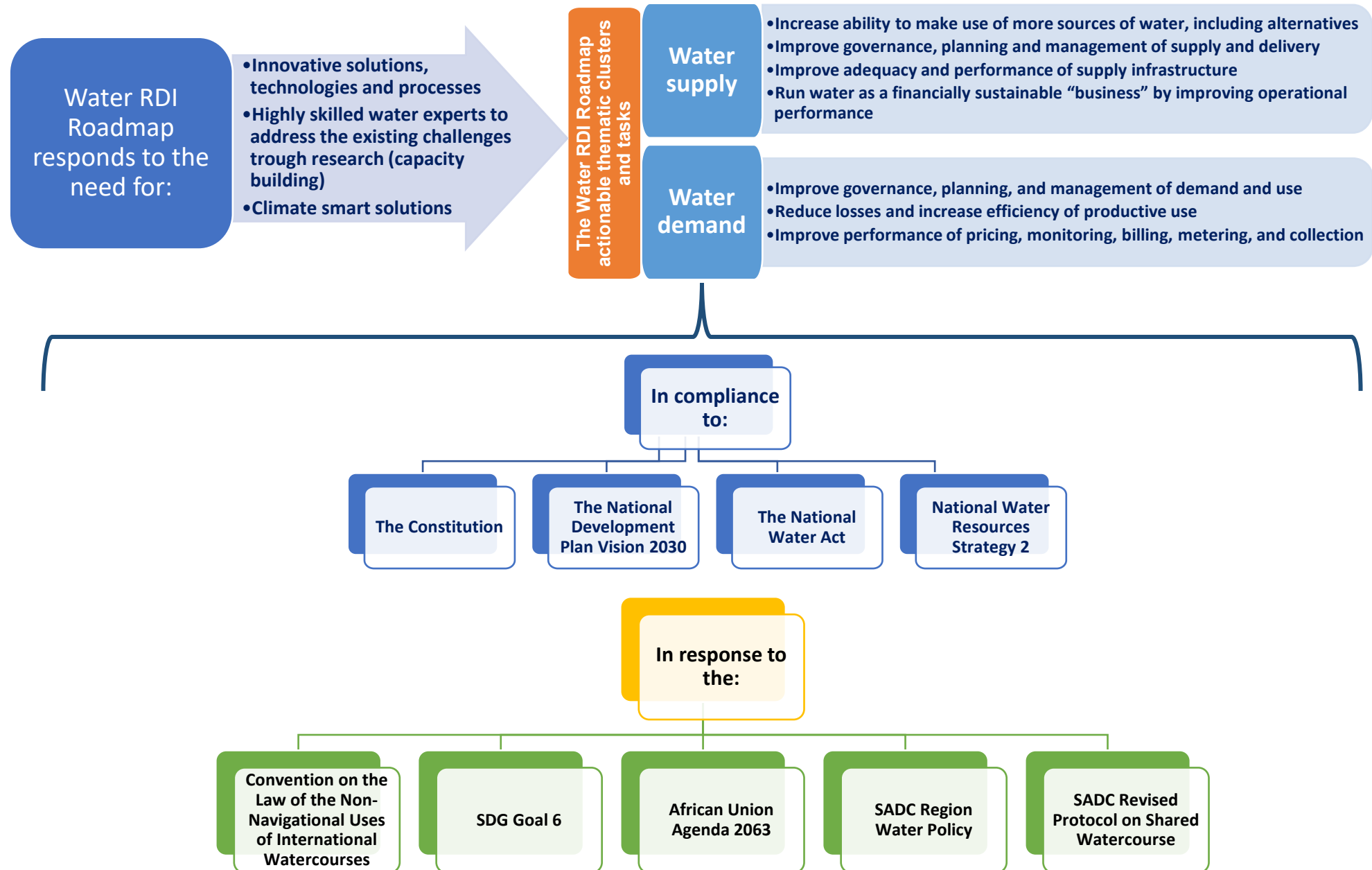
**National challenges** of recurring droughts, population growth, urbanization, improving living standards are exerting pressures on WEF resources.



Tools to address water challenges  
The Water RDI Roadmap was developed to address these challenges

Public-private partnership

# Legal frameworks supporting the Water RDI Roadmap (2015-2025)



# Threats to water security in South Africa



## Primary drivers

- Climate Change
- Increasing population
- Increasing irrigated area
- Demand outstripping supply



Climate change compounds the challenges, such that by 2030 SA could face a water deficit of 17%

The challenges require transformative and circular solutions to achieve sustainability



## Water-climate proofing

Assessing the resilience of water management and water services to cope with climate change

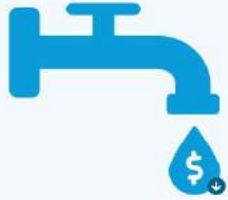
- ▶ Challenges for water management
  - ▶ Scenarios and forecasts – possible futures
  - ▶ Uncertainties and how to deal with them
- ▶ Assessing risks
- ▶ Assessing cost-effectiveness of coping measures
- ▶ SMART and CLIMATE resilient Water Management
- ▶ Strongest El Nino forecast for 2023



# Need for close public-private partnership (investment)

## WASH funding: a snapshot

### ODA ALLOCATED TOWARDS WASH



The world's WASH systems were not sufficiently prepared for the future risk of the COVID-19 pandemic



Investment in WASH fell in 2019-2020 and generally shows plateauing or declining investment globally since 2018



Between 2010 and 2019, the share of total ODA disbursements allocated towards WASH from all donors **STAGNATED AT AROUND 4%**



Between 2017 and 2020, aid for water and sanitation **DECREASED BY 5.6%**

## GLOBAL HUMANITARIAN FUNDING



Most humanitarian donors have funding cycles of only **12-18 MONTHS**

Overall humanitarian funding was never more than



met during the COVID-19 peak of 2020-2022

**IT DROPPED TO 9.2%** in 2023

WASH needs were never more than



funded during the COVID-19 peak of 2020-2022

**ONLY 8.6%** of funding needs have been met in 2023

## IMPACT OF UNDERINVESTMENT



of the world's poorest people will reside in 'fragile' states by 2030, many of which are off track to reach SDG 6

The impact of this chronic underinvestment on progress towards SDG 6 is also clear coming out of the COVID-19 crisis:



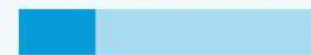
**ONLY 45%**



of countries are on track to achieve drinking water coverage



**ONLY 25%**



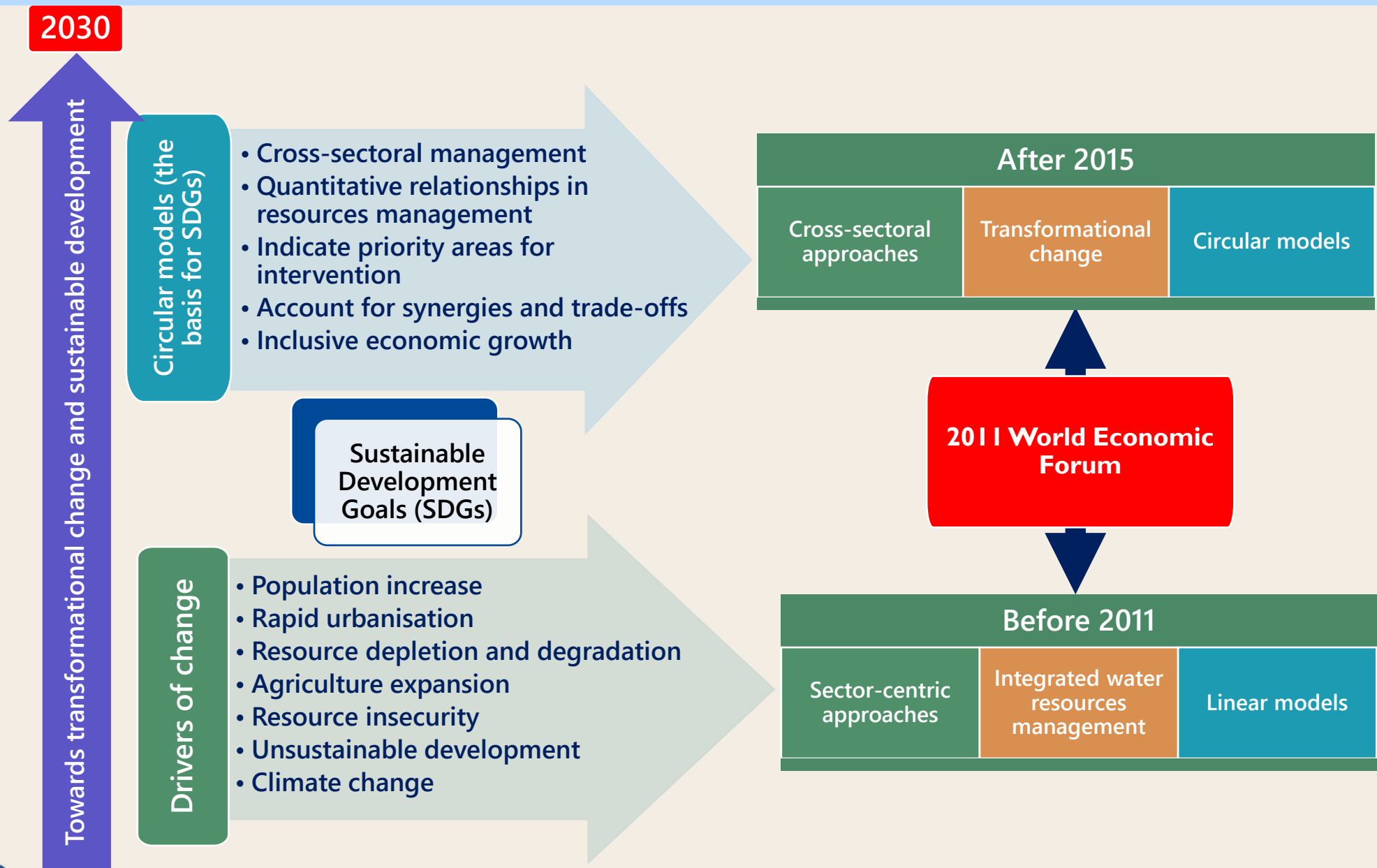
are on track for sanitation targets

# Private sector actions and interventions

- Prioritize water efficiency across operations by installing best practice technologies for water conservation, particularly in water scarce areas.
- Mitigating against water pollution with state-of-the-art wastewater treatment processes for effluent discharge.
- Development of innovative manufacturing processes such that substances with high water contamination potential are eliminated and substituted with materials that are easier to remove from water systems.
- Private sector should invest in wastewater treatment so that municipal treatment facilities are not overburdened by industrial waste-water.
- Collect and treat agricultural run-off and use as fresh water source.
- Integrate gray water back into building operations, reducing the amount of potable water needed to flush toilets.
- Reduce the likelihood of groundwater contamination by treating and processing all waste with exceptional precaution, according to local and federal guidelines.
- Invest in water and sanitation projects or infrastructure in under-served regions.
- Ensure that all employees and their families have ample access to safe drinking water and adequate sanitation and raise awareness about hygiene practices.
- Invest in clean-ups and restoration of water ecosystems to ensure sustainable water withdrawals.
- Prohibit the use of chemicals and materials that can be particularly detrimental to water quality if improperly disposed.
- Working with other groups such as governments, community groups, peer companies to improve local water governance or on water projects to address identified challenges.



# The Roadmap Towards Water SDGs Targets and cross-sectoral approaches



# Circularity: An alternative towards water sustainability by 2030?

## Linear and monocentric approaches

- Sector-based resource planning and management
- Divergent sector-based policies
- Aggravate contemporary crises
- Focus on the present situation

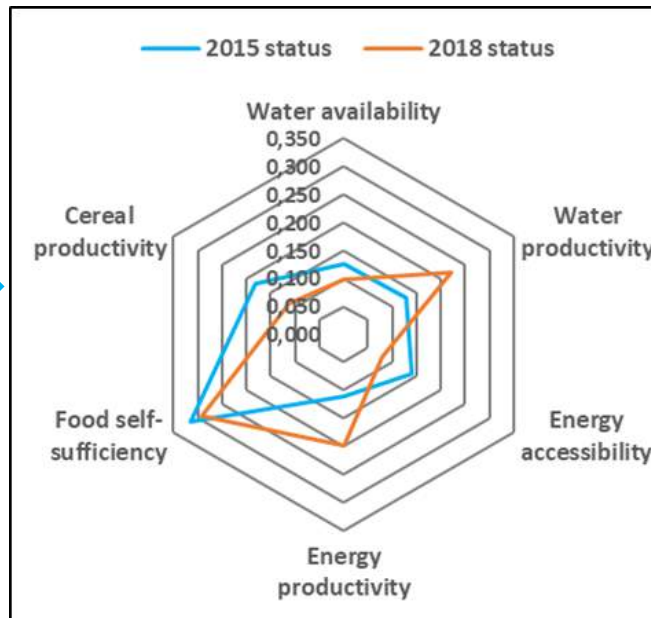
VS

## Circular and polycentric approaches

- Cross sectoral resource planning and management
- Interact with the present, but also mirroring into the future
- Expedite the resilience building initiatives
- Create a balanced system through use of smart technologies

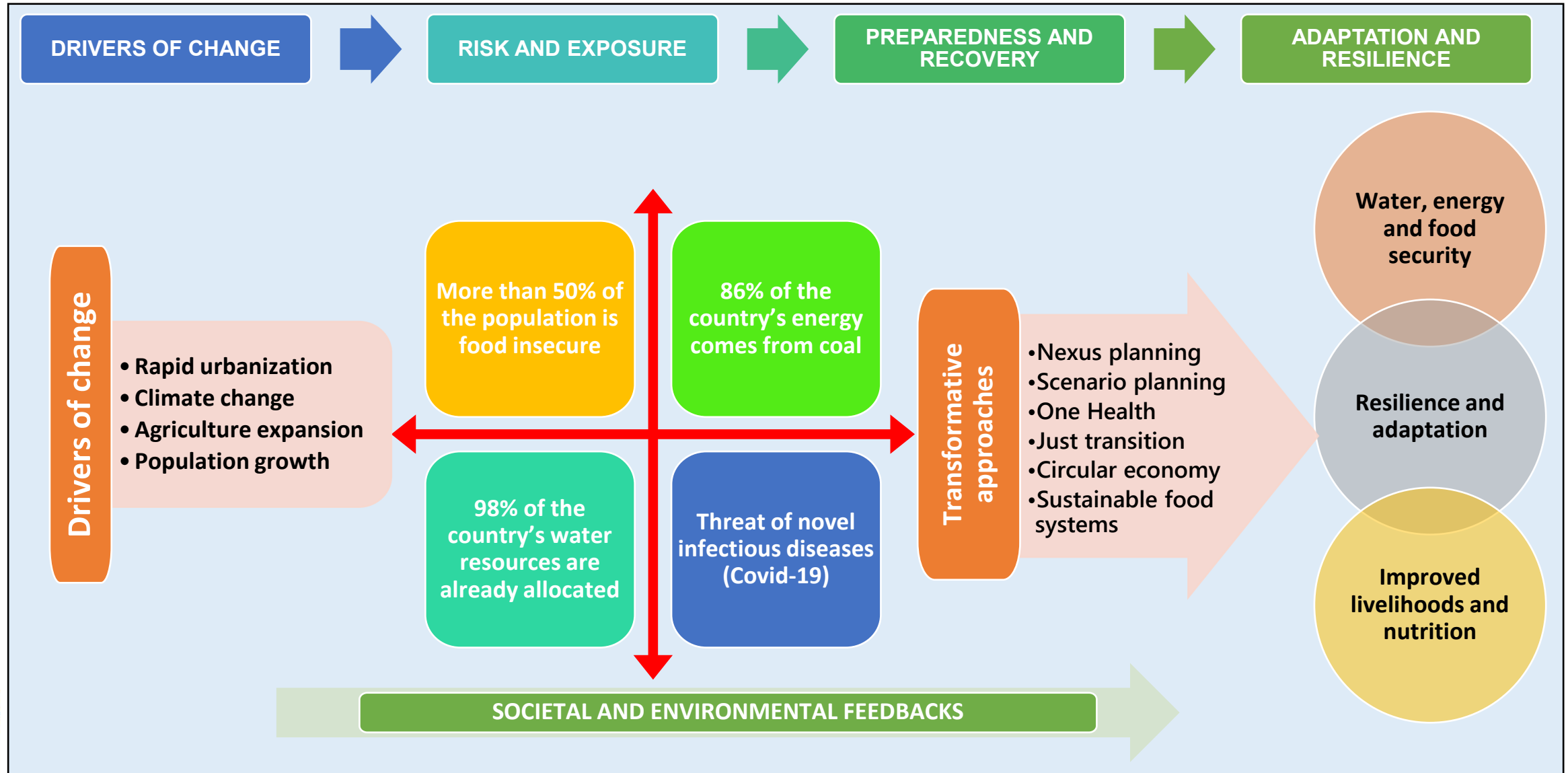
Consequences of monocentrism in resource management

An imbalanced economy

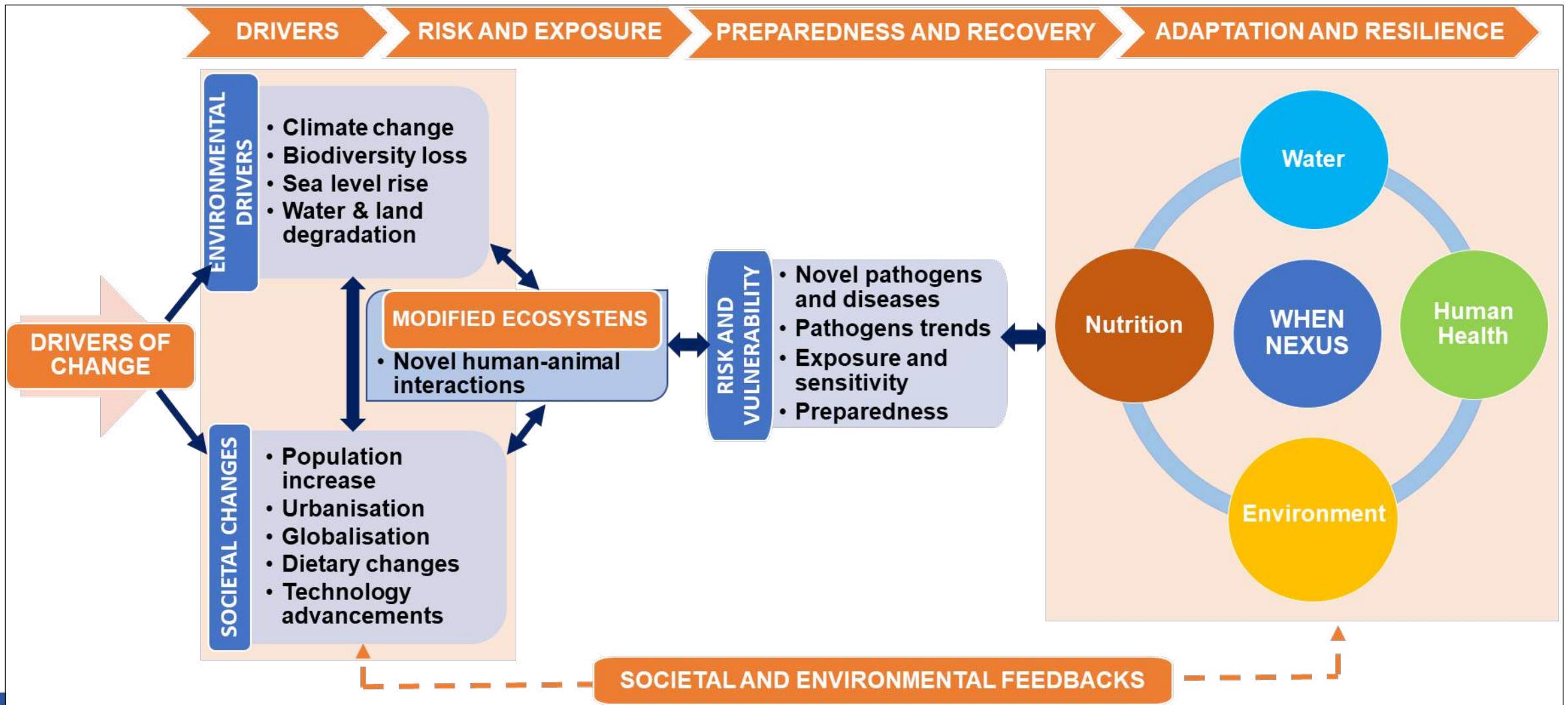


Transformative approaches seek to build resilience and adaptation through scenario planning, and achieve a circular economy

# Why transformative approaches in attaining rights 2 water?



# Types of transformative and circular approaches



# Fundamental requirements for providing water and sanitation



## **HEALTH WORKFORCE:**

adequate numbers of skilled human resources with decent working conditions, empowered and informed to respond to these environmental challenges.



## **WATER, SANITATION, HYGIENE AND HEALTH CARE WASTE MANAGEMENT:**

sustainable and safe management of water, sanitation and health care waste services.



## **ENERGY:**

sustainable energy services.

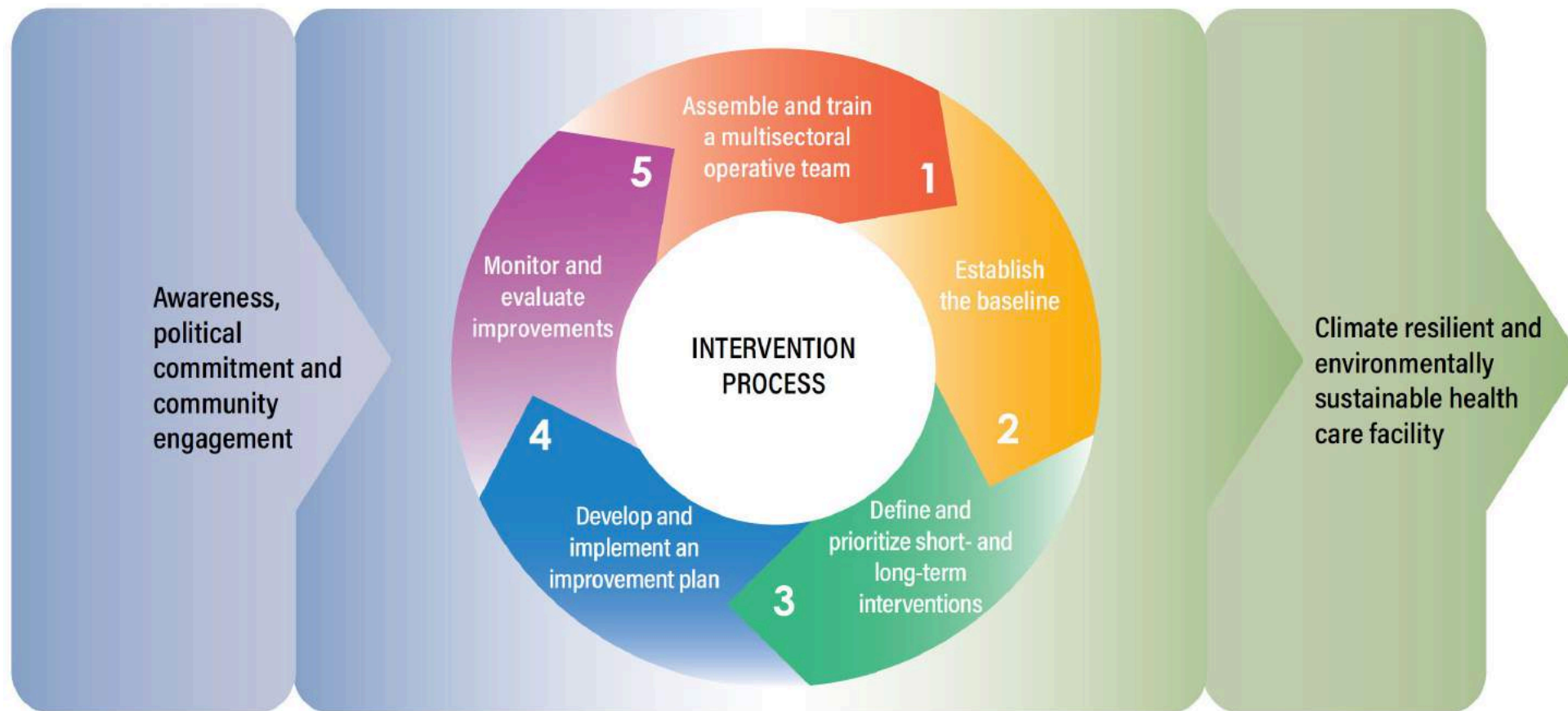


## **INFRASTRUCTURE, TECHNOLOGIES AND PRODUCTS:**

appropriate infrastructure, technologies, products and processes, including all the operations that allow for the efficient functioning of the health care facility.



# Framework and process for action



## Water - Energy - Food Nexus Narratives and Resource Securities

A Global South Perspective



Edited by  
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## ADVANCES TOWARDS SUSTAINABLE SOCIO-ECONOMIC TRANSFORMATION THROUGH CIRCULAR AND TRANSFORMATIVE APPROACHES

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THANK YOU

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