The Water-related Sustainable Development Goals, Targets and Indicators

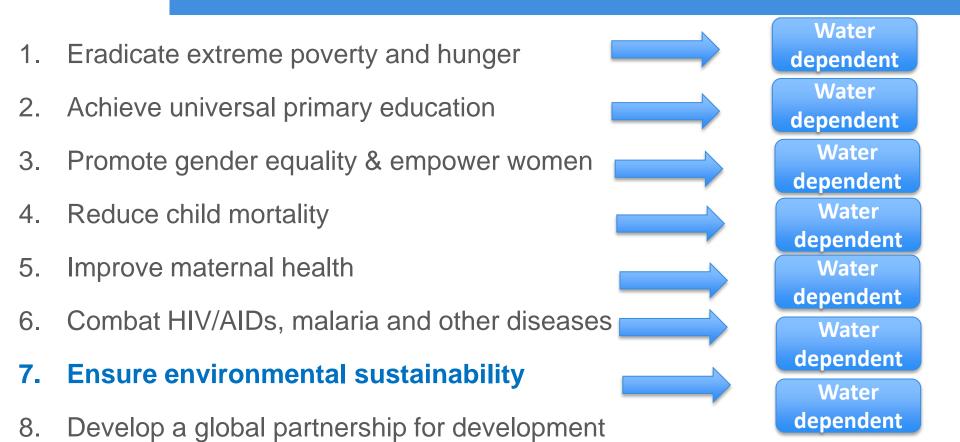
MDG+ Initiative High Level Meeting on the Water-related SDGs Amman, 1-2 November 2016

Economic and Social Commission for Western Asia



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The Millennium Development Goals (MDGs)



However, most MDGs did not explicitly reference the water sector

MDG Goal 7. Ensure environmental sustainability

Target 7.A:	Integrate the principles of sustainable development into country policies and programme	
	and reverse the loss of environmental resources	
7.1	Proportion of land area covered by forest (indicator)	
7.2	CO2 emission, total, per capita and per \$1 GDP (PPP)	
7.3	Consumption of ozone-depleting substances	
7.4	Proportion of fish stocks within safe biological limits	
7.5	Proportion of total water resources used	
Target 7.B:	Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	
7.6	Proportion of terrestrial and marine areas protected	
7.7	Proportion of species threatened with extinction	
Target 7.C:	Halve, by 2015, the proportion of people without sustainable access to safe drinking water	
	and basic sanitation	
7.8	Proportion of population using an improved drinking water source	

Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Proportion of population using an improved sanitation facility

7.10 Proportion of urban population living in slums

7.9

Plus national reporting until 2005 on the adoption of national IWRM plans

Measuring access under the MDGs was insufficient: Key challenges not represented

Arab Ministerial Water Council recognized that access to
improved drinking water & sanitation does NOT necessarily
mean access to:

- Regularity water supply (intermittency challenge)
- Drinking water quality
- Affordability of the drinking water
- Wastewater treatment
- Wastewater reuse
- ☐ Capacity to store and sustainably manage water resources in face of water security, scarcity, disasters and shared resources.
- Led to request by the AMWC for a new set of indicators in 2009 & the launching by AMWC of the MDG+ Initiative in 2010.

MDG+ Indicators Water Supply Sanitation Water consumption Treated quantity Continuity of supply Treatment type Reuse utilization Water quality Distance to source Reuse type Tariff structure Tariff structure Affordability Affordability Water Waste Water Water & Water Scarcity Efficiency **Sanitation** water Quality

These concerns now reflected in the SDGs

SUSTAINABLE GCALS DEVELOPMENT





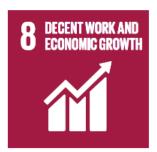
































2030 Agenda for Sustainable Development Chapeau: Emphasis on Universality, Inclusiveness & Human Rights

Chapeau emphasizes

"A world where we reaffirm our commitments regarding the human right to safe drinking water and sanitation and where there is improved hygiene; and where food is sufficient, safe, affordable and nutritious. A world where human habitats are safe, resilient and sustainable and where there is universal access to affordable, reliable and sustainable energy".

United Nations, Transforming Our World: The 2030 Agenda For Sustainable Development
Outcome Document of the United Nations Summit for the Adoption of the
Post-2015 Development Agenda
September 2015



17 SDGs & 169 Targets

THE GLOBAL GOALS
For Sustainable Development

7 SDGs with Explicit Waterrelated Targets

1 Dedicated Water Goal

9 SDGs with Implicit waterrelated targets

All 17 SDGs are Water-related

Dedicated



Explicit











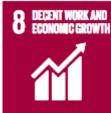




Implicit





















1 Dedicated Water Goal

Ensure availability and sustainable management of water and sanitation for all

Access to Basic Services

- 6.1 by 2030, achieve universal and equitable access to safe and affordable drinking water for all
- by 2030, achieve access to adequate a sanitation and hygiene for all, and end defecation, paying special attention to women and girls and those in vulnerable statements.

Water Quality & Wastewater

6.3 by 2030, improve water quality by reducing pollution, eliminating dumping minimizing release of hazardous chem materials, halving the proportion of untreated wastewater, and increasing safe reuse globally

Water Use Efficiency & Water Scarcity

6.4 by 2030, substantially increase water-use across all sectors and ensure sustainab withdrawals and supply of freshwater water scarcity, and substantially reduce of people suffering from water scarcity

IWRM, Ecosystems & Shared Basins

6.5 by 2030 implement integrated water management at all levels, including the transboundary cooperation as appropriate transboundary cooperation.

IWRM & Shared Water

6.6 by 2020 protect and restore water related ecosystems, including mountains, for wetlands, rivers, aquifers and lakes

Water Ecosystems

Means of Implementation

Waste water

o, expand international cooperation and y-building support to developing countries er and sanitation related activities programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

Water Scarcity

t and strengthen the participation of local inities for improving water and ion management



SDG6 Targets and Indicators

 6.1 Universal, equitable, safe, affordable Drinking Water for all 6.2 Adequate, equitable Sanitation & Hygiene for all 6.3 Improve water quality, wastewater treatment, recycling & safe reuse 6.4 Increase water-use efficiency; address water scarcity; reduce number of people suffering from water scarcity 6.5 IWRM, including transboundary water cooperation 6.6 Protect & restore water-related ecosystems 6.7 Universal, equitable, safe, affordable drinking water services 6.2.1 Population using safely managed drinking water services 6.2.2 Population using safely managed drinking water services 6.2.1 Population using safely managed sanitation services with soap & water 6.3.2 Proportion of water-use efficiency 6.4.1 Change water-use efficiency 6.5.1 IWRM implementation level 6.5.2 Portion of basin area with operational arrangement for water cooperation 6.6.1 change in the extent of water-related ecosystems over time 		
6.2 Adequate, equitable Sanitation & Hygiene for all 6.3 Improve water quality, wastewater treatment, recycling & safe reuse 6.4 Increase water-use efficiency; address water scarcity; reduce number of people suffering from water scarcity 6.5 IWRM, including transboundary water cooperation 6.6 Protect & restore water-related 6.2.1 Population using safely managed sanitation services with soap & water 6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of water bodies with good ambient water quality 6.4.1 Change water-use efficiency 6.4.2 Level of water stress on freshwater 6.5.1 IWRM implementation level 6.5.2 Portion of basin area with operational arrangement for water cooperation 6.6.1 change in the extent of water-	6.1 Universal, equitable, safe, affordable	6.1.1 Population using safely managed
Sanitation services with soap & water 6.3 Improve water quality, wastewater treatment, recycling & safe reuse 6.4 Increase water-use efficiency; address water scarcity; reduce number of people suffering from water scarcity 6.5 IWRM, including transboundary water cooperation 6.6 Protect & restore water-related 5.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of water bodies with good ambient water quality 6.4.1 Change water-use efficiency 6.5.1 IWRM implementation level 6.5.2 Portion of basin area with operational arrangement for water cooperation 6.6.1 change in the extent of water-	Drinking Water for all	drinking water services
 6.3 Improve water quality, wastewater treatment, recycling & safe reuse 6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of water bodies with good ambient water quality 6.4 Increase water-use efficiency; address water scarcity; reduce number of people suffering from water scarcity 6.4.1 Change water-use efficiency 6.4.2 Level of water stress on freshwater 6.5.1 IWRM implementation level 6.5.2 Portion of basin area with operational arrangement for water cooperation 6.6 Protect & restore water-related 6.6.1 change in the extent of water- 	6.2 Adequate, equitable Sanitation &	6.2.1 Population using safely managed
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6.5 IWRM, including transboundary water cooperation • 6.5.1 IWRM implementation level • 6.5.2 Portion of basin area with operational arrangement for water cooperation • 6.6.1 change in the extent of water-		
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cooperation 6.5.2 Portion of basin area with operational arrangement for water cooperation 6.6 Protect & restore water-related • 6.6.1 change in the extent of water-	C.E. IVA/DM in all discrete and a sure description	6.5.1 IWRM implementation level
6.6 Protect & restore water-related arrangement for water cooperation • 6.6.1 change in the extent of water-		6.5.2 Portion of basin area with operational
	Cooperation	arrangement for water cooperation
ecosystems related ecosystems over time	6.6 Protect & restore water-related	6.6.1 change in the extent of water-
	ecosystems	related ecosystems over time

SDG6.a and SDG6.b identify means of implementation for meetings these targets



Goal 1. End Poverty in all its forms everywhere

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Target 1.4: By 2030, ensure that all men and women, in particular the poor and the Portion of population living in vulnerable, have equal rights to economic households with access to basic resources, as well as access to basic **services**, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

Indicator 1.4.1 services

Basic services usually includes water, sanitation, waste removal, electricity, healthcare, electricity & roads

Water & **Sanitation**

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

Target 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

Indicator 3.3.3: Malaria incidence per 1,000 population

Malaria, the world's most important parasitic infectious disease, is transmitted by mosquitoes which breed in fresh or occasionally brackish water.

Indicator 3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe WASH for all services)

Water **Ecosystems**

Water & **Sanitation**



Goal 4. Ensure inclusive & equitable quality education

Goal 11. Make cities and human settlements inclusive, safe, resilient & sustainable

Target 4.a: Build & upgrade education facilities that are child, disability & gender sensitive & provide safe, non-violent, inclusive & effective learning environments for all

Indicator 4.a.1 Proportion of schools with access to electricity, computers, infrastructure for disabled, (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities WASH indicator definitions)

Water &

Target 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and **basic services** and upgrade slums

inadequate housing

11.5.1: Number of deaths, missing persons and persons affected by

disaster per 100,000 people

11.1.1 Proportion of urban population

living in slums, informal settlements or

Target 11.5: By 2030, significantly reduce # of deaths, number of people affected & direct economic losses caused by disasters, including **water-related disasters**, with focus on poor and vulnerable.

No specific wastewater indicator

Target 11.6: By 2030, reduce the adverse per capita **environmental impact of cities**, with focus on air quality and municipal and other waste management

No specific water-related ecosystems indicator

Target 11.7: By 2030, provide universal access to safe, inclusive and accessible, green & public spaces, in particular for women & children, older persons and persons with disabilities

Water Ecosystems

Sanitation

Water +

Climate

Waste

water





Goal 11. Make cities and human settlements inclusive, safe, resilient &sustainable

11.a Support positive economic, social and environmental links between urban, periurban and rural areas by strengthening national and regional development planning

Indicator 11.a.1 Proportion of population living in cities that implement urban and regional development plans integrating pop projections and resource needs, by size of city

Water & Sanitation

11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

Indicator 11.b.1 Portion of cities with DRR strategies in line with Sendai

Water + Climate

11.b.2 Number of countries with national and local DRR strategies





Goal 12. Ensure sustainable consumption and production patterns

Target 12.2: By 2030, achieve the sustainable management and efficient use of **natural resources**

Target 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Target 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

Indicator 12.2.1 Number of countries with SCP strategies or policies Indicator 12.2.1 Material footprinting

Water Efficiency

Indicator 12.2.2 Domestic material consumption patterns

12.4 – no specific water indicator

Water Quality Waste water

Indicator 12.6.1 Number of companies publishing sustainability reports





Goal 14. Conserve and sustainably use the oceans, seas & marine resources for sustainable development

Target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

14.1.1 Index of coastal eutrophication and floating plastic debris density

Waste water

14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want"

14.c.1 ...ocean-related instruments....for the conservation and sustainable use of the oceans and their resources

Water Quality



Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Target 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

Indicator 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Water Quality

Target 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

Indicator 15.3.1 Portion of and that is degraded over total land area

Water + Climate

Target 15.8 By 2030, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and **water ecosystems** and control or eradicate the priority species.

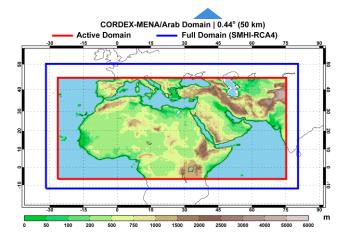
Indicator 15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems

Water Ecosystems





Goal 13. Take urgent action to combat climate change and its impacts



Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Water + Climate

Integrate climate change measures into **national policies, strategies and planning**

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Hydrological Modelling
Runoff – future
(preliminary outputs based on Bias-Corrected RCM Projections)
Change
1986 - 2005
2081 - 2100
(2081 - 2100) - (1986 - 2005)

Implement the commitment undertaken by developed-country parties to the UNFCCC to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries and fully operationalize the Green Climate Fund through its capitalization as soon as possible;

Promote mechanisms for **raising capacity** for effective climate change-related planning and management in LDCs and SIDS.

Implicit Water-Related Goals - selected



 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality



• 5.1 End all forms of discrimination against all women and girls everywhere



- 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
- By 2030, increase substantially the share of **renewable energy** in the global energy mix
- 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology



Thank you!

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Based on the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs)

"Final list of proposed Sustainable Development Goal Indicators" (E/CN.3/2016/2/Rev.1)