



Sustainable Development Goal - 6

By
Dr.Sanjay Banerji
Founder Director/Dean of Amrita School of Business



Dear Friends,

This month we shall discuss the sixth Sustainable Development Goal: Clean Water and Sanitation.

In this blog, we shall try to explain:

- A. What it is and why is this relevant
- B. What are its indicators and targets?
- C. Where do we stand in India?
- D. What can we do to support the goal?

As stated earlier, I have little to contribute on my own. I have attempted to provide a few references, so that if anyone is interested in probing deeper, you could do so.



A. What is SDG 6 and why is this relevant [1]

The SDG 6 aims at ensuring ‘access to safe water sources and sanitation for all’. Here are some facts [1] related to this goal as of 2019:

- a) 1 in 4 health care facilities lacks basic water services
- b) 3 in 10 people lack access to safely managed drinking water services and 6 in 10 people lack access to safely managed sanitation facilities.
- c) At least 892 million people continue to practice open defecation.
- d) Women and girls are responsible for water collection in 80 per cent of households without access to water on premises.
- e) Between 1990 and 2015, the proportion of the global population using an improved drinking water source has increased from 76 per cent to 90 per cent
- f) Water scarcity affects more than 40 per cent of the global population and is projected to rise. Over 1.7 billion people are currently living in river basins where water use exceeds recharge.
- g) 2.4 billion people lack access to basic sanitation services, such as toilets or latrines
- h) More than 80 per cent of wastewater resulting from human activities is discharged into rivers or sea without any pollution removal
- i) Each day, nearly 1,000 children die due to preventable water and sanitation-related diarrheal diseases
- j) Approximately 70 per cent of all water abstracted from rivers, lakes and aquifers is used for irrigation

B. What are its indicators and targets? [1]

The indicators for this goal are:

- a) Population using at least basic drinking water services (%)
- b) Population using at least basic sanitation services (%)
- c) Freshwater withdrawal as % total renewable water resources
- d) Imported groundwater depletion (m³/year/capita)
- e) Anthropogenic (man-made) wastewater that receives treatment (%)

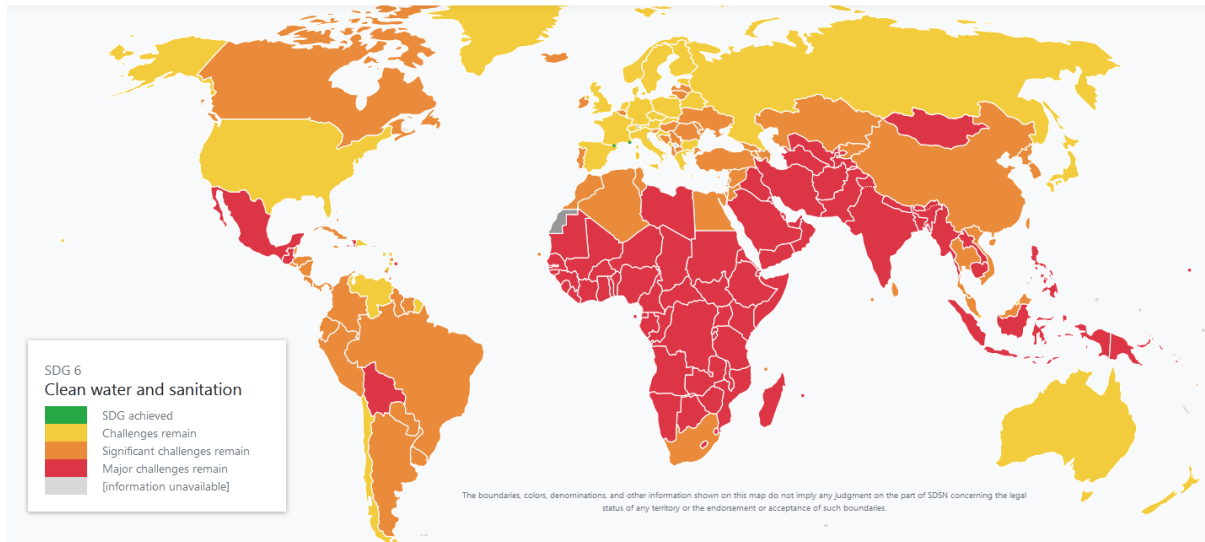
The following is a list of the targets for this goal.

- 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 trans boundary 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 programmes, 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

C. Where do we stand in India?

The following images offer some national as well as global status on SDG 6 Clean Water and Sanitation [4].

Sustainable Development Report Dashboards 2019
 Transformations to Achieve the Sustainable Development Goals



No part of the globe has achieved this goal, but all countries in South Asia (including India), the Middle East and most of Africa face major challenges.

The following table shows India’s performance on the five indicators for SDG 6 in 2019 [5]:

SDG6 – Clean Water and Sanitation

Population using at least basic drinking water services (%)	87.6	●	↗
Population using at least basic sanitation services (%)	44.2	●	→
Freshwater withdrawal as % total renewable water resources	44.5	●	●●
Imported groundwater depletion (m ³ /year/capita)	0.2	●	●●
Anthropogenic wastewater that receives treatment (%)	2.2	●	●●

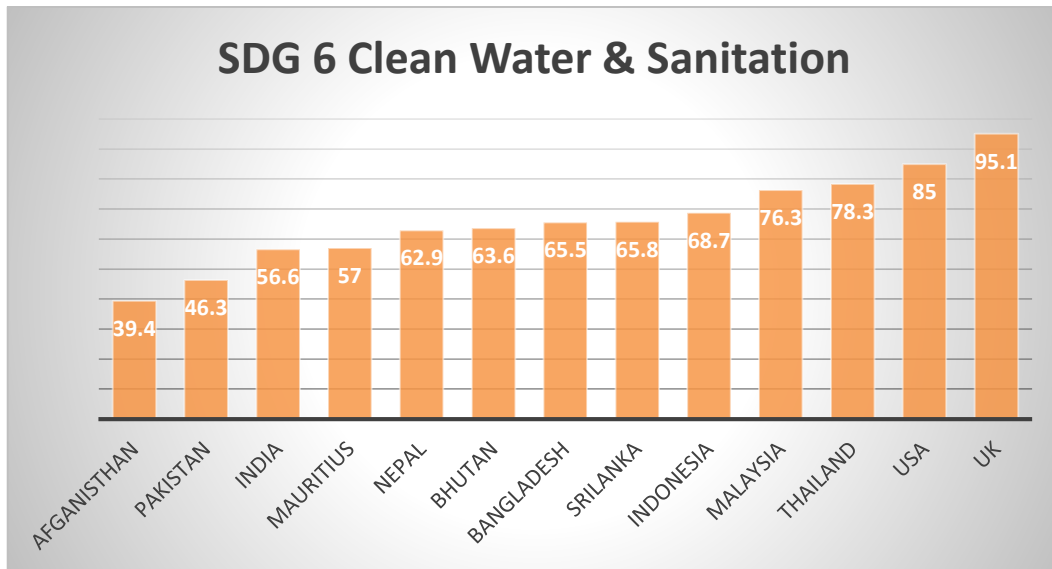
■ Major challenges
 ■ Significant challenges
 ■ Challenges remain
 ■ SDG achieved
 ■ Information unavailable

↓ Decreasing
 → Stagnating
 ↗ Moderately improving
 ↑ On track or maintaining SDG achievement

In India, only 2.2% of all wastewater generated by humans are treated and only 44.2% of the population have access to the least basic sanitation facilities.

In the following graph we offer a comparison of SAARC nations, 3 ASEAN countries and UK, and USA on the performance on SDG 6. India is ahead of Pakistan and Afghanistan only on this count. Some of the key indicators are: Proportion of population using safely managed

drinking water services, safely managed sanitation services and hand-washing facility with soap and water, proportion of domestic and industrial wastewater flows safely treated, proportion of bodies of water with good ambient water quality and level of water stress: freshwater withdrawal as a proportion of available freshwater resources.



If we look at the indicators level, the comparison is shown below:

Country	Population using at least basic drinking water services (%)	Dashboard Color	sdg6_water	Population using at least basic sanitation services (%)	Dashboard Color	sdg6_sanita	Freshwater withdrawal as % total renewable water resources	Dashboard Color	sdg6_fresh water	Imported groundwater depletion (m3/year/capita)	Dashboard Color	sdg6_gwd	Anthropogenic wastewater that receives treatment (%)	Dashboard Color	sdg6_waste water
Afghanistan	62.98	red	39.22	red	43.67	yellow	16.40	orange	0.00	red					
Bangladesh	97.33	yellow	46.92	red	3.79	green	4.07	green	0.00	red					
Bhutan	97.56	yellow	62.87	red	0.56	green	15.75	orange	0.00	red					
India	87.56	orange	44.15	red	44.53	yellow	0.16	green	2.25	red					
Mauritius	99.87	green	93.15	yellow	26.35	yellow	42.41	red	8.40	red					
Nepal	87.75	orange	46.13	red	5.86	green	2.36	green	0.00	red					
Pakistan	88.55	orange	58.25	red	102.50	red	1.44	green	0.10	red					
Sri Lanka	92.31	yellow	94.21	yellow	34.08	yellow	11.59	yellow	0.00	red					
Indonesia	89.52	yellow	67.89	red	9.24	green	1.52	green	0.03	red					
Malaysia	96.43	yellow	99.57	green	3.41	green	13.55	orange	19.59	orange					
Thailand	98.23	green	95.01	green	17.49	green	2.89	green	12.07	red					
United Kingdom	100.00	green	99.11	green	9.67	green	9.41	yellow	98.35	green					
United States	99.20	green	99.97	green	22.61	green	5.46	yellow	50.44	green					
China	95.82	yellow	75.04	orange	29.38	yellow	1.57	green	16.13	orange					

Source: Sachs, J., Schmidt-Traub, G., Kroll, C., Laforune, G., Fuller, G. (2019): Sustainable Development Report 2019. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN)

D. What can we do to support the goal? [2, 3]

At the individual level, we can try to raise the awareness among communities used to open defecation practices. Toilets built under the Swachh Bharat programme in rural areas remain unused in some cases. Raising awareness of the evils of open defecation is essential. Similarly, it is important to raise awareness among relatively rich households about the need for

conserving water. Adoption of rain water harvesting on a larger scale by individual households can be a good solution.

The UN Report [1] suggests the following:

“Generating awareness of the roles of women, youth and indigenous communities in water resources governance, and turning them into action will lead to win-win results and increased sustainability and integrity for both human and ecological systems.

“You can also get involved in the World Water Day and World Toilet Day [6] campaigns that aim to provide information and inspiration to take action on hygiene issues”.

It is apparent that India fairs poorly on two counts: treatment of wastewater and basic sanitation facilities. In this context, two national programs: Namami Gange and Swachh Bharat comes to mind.

Namami Gange - National Mission for Clean Ganga (NMCG) [2] was registered as a society on 12th August 2011 under the Societies Registration Act 1860. It is the implementation arm of National Council for Rejuvenation, Protection and Management of River Ganga (referred as National Ganga Council). The Act envisages five tier structure at national, state and district level to take measures for prevention, control and abatement of environmental pollution in river Ganga and to ensure continuous adequate flow of water so as to rejuvenate the river Ganga as below:

1. National Ganga Council under chairmanship of Hon'ble Prime Minister of India.
2. Empowered Task Force (ETF) on river Ganga under chairmanship of Hon'ble Union Minister of Jal Shakti (Department of Water Resources, River Development and Ganga Rejuvenation).
3. National Mission for Clean Ganga (NMCG).
4. State Ganga Committees and
5. District Ganga Committees in every specified district abutting river Ganga and its tributaries in the states.

Here is an info graphics [3] on the status of making India Open Defecation Free:



There is a contradiction between the above data showing 91 to 100% households having toilets, while the SDG report claims that only 44.15% of population having basic sanitation services. The SDG Report defines this indicator as ‘The percentage of the population using an at least basic sanitation service, that is, an improved sanitation facility that is not shared with other households. Source: JMP (2019). Year of reference: 2015 (or closest available)’. Perhaps the year of reference needs updating. Some more details of this indicator [6] is:

“WHAT DOES ‘SAFELY MANAGED SANITATION’ MEAN?

“When someone has a ‘safely managed sanitation service’, it means they use hygienic toilet facilities that are not shared with other households and where excreta are either separated from human contact and safely disposed of in situ or transported and treated off-site, thereby protecting people and the environment from disease agents. Examples include flush/pour flush toilets connected to piped sewer systems, septic tanks or latrine pits; ventilated improved pit latrines; composting toilets; or, pit latrines with slab covers.”

References

1. <https://www.un.org/sustainabledevelopment/water-and-sanitation/>
Accessed on June 8 2020 10:13 IST
https://www.nmcg.nic.in/about_nmcg.aspx
Accessed on June 8 2020 13:10 IST
2. <https://swachhbharatmission.gov.in/sbmcms/index.htm>
Accessed on June 8 2020 13:20 IST
3. SDG Index Dashboard
<https://dashboards.sdgindex.org/#/IND> Accessed on May 28 2020 11:10 IST
4. India_SDR_2019.pdf downloaded from:
<https://github.com/sdsna/2019GlobalIndex/blob/master/2019GlobalIndexIndicatorProfiles.pdf>
5. World Toilet Day Factsheet <https://www.worldtoiletday.info/theme/>
Accessed on June 9, 2020 17:00 IST.

