Sustainable Development Transition Forum: "Accelerating the recovery from the COVID-19 pandemic and the full implementation of the 2030 Agenda for Sustainable Development at all levels"

Clean Water and Sanitation (SDG-6)

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Sustainable Development Goals – SDG-6

- Agenda 2030 states "We commit to making fundamental changes in the way that our societies produce and consume goods and services".
 Recognising that there is no life without water, how does that aspiration get reflected in the way we produce, consume, and dispose of water in all facets of life?
- Sustainable Development Goal 6 (SDG-6): "Ensure availability and sustainable management of water and sanitation for all" by 2030.
- Millennium Development Goal 7C: "Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation". Between 1990 and 2015, 2.6 billion people gained access to improved drinking water sources. But 2.4 billion people are still using unimproved sanitation facilities, including 946 million using open defecation, including many in the Asia-Pacific region.

SDG-6 Targets by 2030

- 6.1 Universal and equitable access to safe and affordable drinking water
 6.2 Access to adequate and equitable sanitation and hygiene for all and end open defecation
 - 6.3 Improved 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 Increased water-use efficiency across all sectors and sustainable withdrawals and supply of freshwater to address water scarcity
 - 6.5 Integrated water resources management at all levels
 - 6.6 Protect and restore water-related ecosystems
 - 6.a Expand international cooperation and capacity-building support to developing countries
 - 6.b Support and strengthen participation of local communities in improving water and sanitation management

Progress to date

- With 8 years to go until 2030, how is the Asia-Pacific region tracking in achieving these targets?
- ESCAP's Asia and the Pacific SDG Progress Report 2022 is subtitled "Widening disparities amid COVID-19".
- There has been little or no progress in the areas of quality education (Goal 4), gender equality (Goal 5), water and sanitation (Goal 6), decent work and economic growth (Goal 8), sustainable cities and communities (Goal 11) and life below water (Goal 14).
- In addition to regression on Goal 12 and Goal 13, the North and Central Asia subregion has regressed on life below water (Goal 14); the Pacific subregion has regressed on clean water and sanitation (Goal 6), reduced inequalities (Goal 10) and sustainable cities and communities (Goal 11); the South-East Asia subregion has regressed on Goal 6, Goal 11 and Goal 14; and the South and South-West Asia subregion has regressed on Goal 11.

Potential solutions?

 "The most urgent needs include enhancing quality and equity in education, closing all types of gender gaps, ending violence against women and girls, effectively managing scarce water resources and ensuring everyone has access to safely managed drinking water services". Perhaps access to safe sanitation should also be added.

Goal 6 - Clean water and sanitation

6.a.1	ODA to water and sanitation (LDCs)
6.2.1	Open defecation and handwashing
6.4.1	Water use efficiency
6.1.1	Safely managed drinking water services
6.5.1	Integrated water resources management
6.b.1	Policies and procedures for participative water and sanitation mgmt
6.4.2	Water stress
6.6.1	Permanent water body extent



AND SAMELING

Water Use Efficiency

- Aggregation of water use statistics at national and local levels and the change over time what gets measured, gets done!
- Water rights attached to land ownership bought back by the government and re-allocated efficiently and according to optimum social, environmental, and economic benefits.
- Shift from flooding-based irrigation to trickle irrigation systems and wet-dry alternation in rice production.
- Water pricing schemes that reflect the true value of the water supplied.
- Wastewater recycling, water conservation, and leakage prevention in urban water supply systems.

Safely Managed Drinking Water Services

- Follow WHO's Guidelines for drinking water quality which provide a framework for the assessment of the health risks presented by the various microbial, chemical, radiological and physical constituents that may be present in drinking water.
- Water safety plans should focus on catchment protection initiatives for long-term, sustainable improvements in water quality, rather than relying on expensive infrastructure, especially for water treatment, with high recurrent costs and carbon footprints.
- Safe drinking water cannot be considered in isolation from sanitation and hygiene practices.
- Increasingly factor in climate change impacts on water sources and increased demand for water due to heatwaves.

Integrated Water Resources Management

- IWRM is a comprehensive approach to water resource management that views water as a single resource with competing uses and interlinkages with the ecological, social and economic systems.
- Strategic action plans, including drought and flood forecasting and management on a watershed basis must be developed to address climate variability and climate change, as well as social, economic, land use, and infrastructure changes, both existing and planned.
- An IWRM policy should be the basis for water resources legislation, strategic planning, institutional arrangements, and operational management.
- While it is desirable to decentralize water management to the level of hydrological boundaries, allowance needs to be made for administrative and political boundaries, including transboundary water resources management.

Policies and Procedures for Participative Water and Sanitation Management

- Safe drinking water and sanitation and a quality living environment are basic human rights, so the holders of those rights need to be involved in decisions regarding water and sanitation management.
- Unfortunately, conflict, violence and political/social instability can derail national progress towards universal access to basic water and sanitation services. Accordingly, participative water and sanitation management may need to be part of a broader peace or conflict resolution process. Many observers have also expressed fear that future armed conflicts will be over access to water resources.
- People living in fragile states are twice as likely to lack basic sanitation and about four times as likely to lack basic drinking water services as populations in non-fragile situations, so they need specific assistance.
- Policies and procedures for participation by local governments in the management of water and sanitation can help ensure that communities are informed, consulted and represented in gender sensitive ways in the delivery of these vital services.

Water Stress

- Long-term groundwater overdrafts to end and watersheds to be brought into hydrologic balance avoid robbing Peter to pay Paul.
- Implementation of time-bound Groundwater Sustainability Plans to restore sustainable groundwater levels, avoid saline intrusion, prevent toxic pollutant contamination, eliminate land subsidence, and promote groundwater refreshment.
- Canal operation "losses" and conveyance inefficiencies measured to obtain true surface water withdrawals and accurate water pricing.
- Coverage of irrigation canals and surface water ponds with solar energy panels to reduce evapotranspiration losses and provide locally available electricity.

Permanent Water Bodies

- Lack of abundant surface water in the poorest countries heightens their vulnerability to climate change and water scarcity, so part of the solution is provided by increasing permanent water storages, bearing in mind that large, artificial water storages can disrupt aquatic ecosystems and may displace riverside communities.
- Thailand's approach of smaller "monkey cheek" storages may be applicable in countries that have adequate rainfall.
- Sponge cities, as practiced throughout China, can ensure increased storage in groundwater, as well as minimizing urban flooding.
- Building codes may be adjusted to ensure that all new buildings incorporate rainwater harvesting and storage.

Conclusions

- There is no good reason for Asia and the Pacific to regress on the achievement of SDG-6.
- The solutions to all of the backsliding on water stress, water storage, water efficiency, participatory management, and integrated water resources management are well known, with many practical examples available from other countries.
- Therefore, there should be a concerted effort by all countries in the region to accelerate the necessary actions for SDG-6.

