Session 2: The Scaling Up of Affordable and Sustainable Water and Waste Management

WASH in Asia: Status, challenges and solutions

April 25 - 27, 2023
Structure of Presentation

Contents...

- Access to drinking water in Asia: status & challenges
- Key strategies to scale up access to water
- Access to sanitation in Asia: status & challenges
- Key strategies to scale up access to sanitation
- Climate, environment & WASH in Asia
Access to Water in Asia

Source: WHO/UNICEF JMP, 2021
Access to Water in Asia

- Access to piped water is still a major challenge, especially in rural areas.
- Ensuring water quality is the biggest hurdle in ensuring safely managed water services.

Source: WHO/UNICEF JMP, 2021
Self-supply in Asia

A high proportion of the population relies on self-supply (especially when including non-drinking use in conjunction with bottled water).

Source: Foster et al., 2021
Increased attention is needed to:

- Reach the last mile with basic water services;
- Ensure water safety – water safety planning, water safe communities, water quality monitoring etc;
- Support self-supply – financing, regulation, innovation etc;
- Transition from point sources to piped water supply.

**Safely Managed Drinking Water Services defined:**
- **Accessible on premises:** Located within the dwelling yard or plot
- **Available when needed:** Sufficient water available or at least 12 hours per day
- **Free from contamination:** Compliant with standards for faecal contamination (E. coli) and priority chemical contamination (arsenic and fluoride)
Access to Sanitation in Asia

Source: WHO/UNICEF JMP, 2021
Access to Sanitation in Asia

- The unfinished business of eliminating open defecation remains.
- Most of the population relies on on-site/non-sewered sanitation (latrines or septic tanks).

Source: WHO/UNICEF JMP, 2021
Accelerating access to Sanitation in Asia

• Open defecation must retain attention
  ➢ Reaching the last mile (ensuring equity)
  ➢ Tackling slippage
  ➢ Ensuring sustainability

• An inclusive approach to safely managed sanitation is needed
  ➢ Sewered and non-sewered systems
  ➢ Regulated market-based approaches
  ➢ City-wide inclusive sanitation (CWIS)

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SDG 6 Global Acceleration Framework
Climate, Environment & WASH in Asia

Negative impacts on WASH infrastructure and services result from:

- Water stress and scarcity
- Climate-related disasters
- Pollution
- Long-term environmental degradation
Climate adaptation and resilience in WASH

Climate resilient WASH services should consider ALL the following aspects:

- **Risk analysis** is considered to identify potential impacts of extreme weather events, and preventive measures are included;

- **Water sources are reliable at all times**, both during the year (i.e. during dry season) and during extreme weather events (i.e. during droughts/floods);

- **Management/service delivery models** are sufficiently robust to cope with crisis and ensure longer-term sustainability of the infrastructure;

- The impact of the system in terms of **greenhouse emissions** is considered and (when feasible) renewable energy sources are used.
Climate mitigation in WASH – an untapped resource?

Can the WASH sector utilise climate finance more effectively to accelerate access to safely managed sanitation in urban areas?

Methane is responsible for more than 25 per cent of the warming we are experiencing today and has a Global Warming Potential more than 80 times greater than that of carbon dioxide (CO\textsubscript{2}) during the 20 years after it is released into the atmosphere.

TROPOMI XCH4 enhancements showing methane emissions

Source: de Foy et al., 2022
Thank you!

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