3rd APWF Webinar

Re-Charting Water Pathways for Greener Recovery Options

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Trends in Asia

- Global connectivity and pandemics
- Balancing growth with sustainability
- The fourth industrial revolution
- Rise of Asia
- Lack of Progress on Environmental SDGs
- Plastic pollution due to rapid urbanisation
- Eight of the world’s ten largest mega cities
- >60 percent of World Population
SDGs Progress in Asia-Pacific
The Challenge of Leaving no one Behind!
Underemployment and unemployment due to the crisis mean some 1.6 billion already vulnerable workers in the informal economy.

An estimated 71 million people are expected to be pushed back into extreme poverty in 2020, the first rise in global poverty since 1998.

It is emphasized that the urban inequalities and long-term development deficits, especially the vital access to water and sanitation, and necessitated the strengthen capacities of local government.

More than one billion slum dwellers worldwide are acutely at risk from the effects of COVID-19, suffering from a lack of adequate housing, no running water at home, shared toilets, little or no waste management systems, overcrowded public transport and limited access to formal health care facilities.

Climate change is still occurring much faster than anticipated. The year 2019 was the second warmest on record and the end of the warmest decade of 2010 to 2019.
1. **Key observation on Water Consumption**

- Lock-down policy and restriction in **business and production sector** has reduced the overall water demand in business, whereas water consumption has increased in **residential scenario**.
  - In Jakarta, the water demand of the industry and commercial sector decreased by 23% up to 34% compared to the pre-COVID-19 situation, while most of the domestic use has increased to 11%.
  - The growth in household water consumption was observed 30% in Istanbul, 20% in Lima and in Karachi, as well as 5% in Tehran in the early months.
  - Istanbul, Mumbai, Lima and Wuhan
1. Key observation on Water Consumption

- Enforced by the risk reaction policy, **priority was given to maintain undisrupted water supply for the citizens.**
  - Megacities such as Istanbul, Mumbai, Lima and Wuhan were still able to manage the normal water demand and supply

- COVID-19 Pandemic **aggravated the already insufficient capability of water utilities** to meet the water demand and fill water shortage.
  - In Mexico City and Lagos, the water pressure occurred, which placed challenged water facilities and operation as well as occasional facilities;
  - Karachi faced a 35% shortage of water supply as the result of non-revenue water loss (45%) and water pollution;
  - In Tehran, short-term water shortage occurred due to the high temperature in June 2020.
1. Key observation on Water Consumption

COVID-19 Pandemic particularly necessitated the specific reaction on water provision to vulnerable communities, where the water service was already in deficit.

- In Mexico City, over 125,000 people have no access to grid water in the household;
- In Jakarta, 37% of the population is not connected with piped water;
- 0.8 out of 10 million inhabitants in Lima are supplied with water trucks instead of piped water.
- In Karachi and Sao Paulo, water service to slums and informal settlements were the most affected
2. Other Highlights for Megacities’ Response

- **Immediate actions to meet the urgent water access demand in low-income communities and informal settlements**
  - Jakarta (Indonesia): Water kiosks and hand washing stations
  - Lima (Peru): Water trucks for 0.8 million affected people to avoid service disruption
- **Massive restriction on industrial and commercial sector**
  - Significant decrease in water related revenues, for instance in Cairo (Egypt) and Mexico City
  - Financial solutions proposed to operators and utilities in Karachi (Pakistan), supported 60% of the water utility’s operational costs
- **Leading role of scientists in combating COVID-19**
  - Specific disinfection and monitoring in water supply and wastewater treatment plants in Istanbul (Turkey) and Wuhan (China)
- **Sector-to-sector communication and cooperation**
  - As mentioned by Tehran (Iran) working together at different levels (federal, state, municipalities) is crucial to achieve cooperation between diverse institutions linked to water services and management and to adapt the pandemic strategy properly to the diverse population groups
- **Leading role of scientists in combating COVID-19**
  - Specific disinfection and monitoring in water supply and wastewater treatment plants in Istanbul (Turkey) and Wuhan (China)
3. Interactive Survey

COVID-19 influence in water services

- Water utilities operations (reduction of staff, disruption of service)
- Water revenue reduction
- Water supply service reduction (quantity)
- Water treatment (quality)
**Importance of Water Security in Combatting the COVID-19 Pandemic**

**Total population: 165 survey Participants**

- **80%** Essential
- **19%** Important in addressing many issues or needs
- **1%** Minimal importance, addressing only some issues or needs

**3. Interactive Survey**

UNESCO IHP Water and COVID Webinar and Survey
3. Interactive Survey

Affected issues by the COVID-19 pandemic at city level

- Economy
- Social welfare (education, infrastructure, etc.)
- All of the above
- Livelihood (food, water, shelter and clothing)
- Amenities/Services
- Environment
- Other
3. Interactive Survey Result

Impact degree due to COVID-19 pandemic

- Significant disruption or closing of some actions or operations (38%)
- Modest/medium impact and/or with full recovery of operations (15%)
- Minimal impact, no disruption but stresses on personnel, revenue, safety (22%)
- Major disruption or closing (4%)
- Negligible impact or not applicable (N/A) (21%)

Total population: 105 survey
3. Interactive Survey

Actions in response to COVID-19 in water services

- Staff remote virtual working
- Increased sanitary and safety measures in sites & operations
- Billing suspension/forgiveness/change of rates
- Wastewater monitoring to track COVID-19 spread
- Academia/Research
- Staff reduction
- Other
3. Interactive Survey

**Future priorities relating to water management in the post-COVID Era**

- Integrate public health in water management
- Expand reliable access to safe water for vulnerable populations
- Build infrastructure resilience (e.g., integrating green and grey, back up supply systems)
- Build operational resilience (e.g., staff training, crisis management protocols, staff redundancies)
- Accelerate digital buildout (e.g., metering, monitoring, billing)
- Other technological upgrades
The human rights to water and sanitation

H in WASH is usually missing

• On 28 July 2010, the United Nations (UN) General Assembly adopted a historical resolution recognizing “the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights” (UNGA, 2010, para. 1).
Billions are being left behind in access to water, sanitation and hygiene (WASH)

Basic drinking water

Basic sanitation services
6.2 Safely managed water and sanitation services

6.2.1 Population with basic handwashing facilities on premises

[Graph showing trends in handwashing facilities]

6.2.1 Proportion of population practicing open defecation

[Graph showing trends in open defecation]

Asia-Pacific SDG 6 Progress
Hygiene comprises 4% of government budgets for WASH.

The rate of progress needed to reach basic hygiene targets ranges from 1 to 21 percentage points per year.

Note: Percentages in parentheses after country names indicate the annual rate of change needed to reach target. Source: GLAAS 2017-2019 country surveys.
Only 4% of countries reported that they have sufficient funding to reach their national hygiene targets.¹

Is financing allocated to hygiene improvements sufficient to meet national targets?
- More than 75% of what is needed
- Between 50% and 75% of what is needed
- Less than 50% of what is needed
- Data not available
- Not applicable

Map production: Water, Sanitation, Hygiene and Health, WHO.
Billions are being left behind in access to water, sanitation and hygiene (WASH)

Source: WHO/UNICEF (2017a, fig. 8, p. 5).
Drivers and consequences of poverty and discrimination

*Population growth – urbanization - extreme poverty - income inequality - education and employment*
Who is being ‘left behind’?
Walking the Walk
Socio-economic dimensions

Funding gap in WASH


The United Nations World Water Development Report 2019
Socio-economic dimensions: Funding and financing

WASH makes good socio-economic sense during and post COVID
Payment for Ecosystem Services in Water Catchments
One Health Nature Based Water Projects
Blended finance with development banks
National government self benefit and south-south green investments
Official development assistance (ODA)
Innovative muslim and commercial finance
Private sector CSR pilots e.g. zero plastic and clean oceans

Socio-economic dimensions: Funding and financing

Building Back Better
Post Covid Good Governance Investments in full WASH
The ‘invisible’ part of the water cycle

Human Rights Based Approach
Takeaway messages

- Major demand and supply impacts due to COVID-19
- H in WASH is often missing
- Governments report insufficient funding for hygiene to achieve national targets
- Asia-Pacific is seriously lagging SDG 6.2.1 on Hygiene and overall WASH targets
- Access to safe, affordable and reliable drinking water and sanitation services and hygiene are basic human rights.
- Billions are being left behind in terms of access to WASH services.
- Ensuring that WASH is affordable to all requires policy recommendations tailored to specific target groups.
- Investing in full WASH in general, and for the vulnerable and disadvantaged in particular, makes good economic sense.
- Covid-19 has highlighted need for good governance overcomes vested interests and exclusionary practices.
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