Ministry of Jal Shakti, Govt. of India, NITI Aayog and FAO

Workshop on Water Stress and Water Use Efficiency (SDG Indicators 6.4.1 and 6.4.2)

June 19-20, 2023

India Islamic Cultural Centre, 87-88, Lodhi Road, New Delhi - 110003

Tentative Workshop Agenda

DAY 1- 19 June 2023

Time	Topic	Presenter
09.00-9.30 hours: Registration		
09.30-10.30 hours: Inaugural Session **Moderator: Anuj Kanwal, Commissioner (CADWM&BWUE), MoJS**		
	Opening remarks • Takayuki Hagiwara, FAO Representative • Pankaj Kumar, Secretary, DoWR, RD&GR (TBC) • Neelam Patel, Niti Aayog • Debashree Mukherjee, Special Secretary, ASWRS-MoJS (TBC) • Navin Kumar, Member, WP&P (TBC) • Kushvinder Vohra, Chairman, CWC (TBC) • Himanshu Pathak, Secretary (DARE) & Director General, ICAR (TBC) • Manoj Ahuja, Secy. Agriculture, MoAFW (TBC) • Archana Verma, MD, NWM (TBC)	
10.30-11.30 hours: Technical Session I **Moderator: Sangita Dubey**		
10.30-10.45	Water Use Efficiency and Water Stress Anuj Kanwal, Commissioner (CADWM & BWUE)	
10.45-11.00	Water Resources of India Rishi Shrivastava, Chief Engineer (CWC)	
11.00-11.30	Discussion from all departments Comments from CWC, CGWB, Ministry of Agriculture, MoHUA, Others	

11.30-12.00 hours: Tea break

12.00-13.30 hours: Technical Session II **Moderator: ADG, SSD/NAD MoSPI**		
12.00-12.30	Introduction to the Monitoring Process of SDGs	Sangita Dubey, Regional Statistician, FAO
12.30-13.00	Introduction to Indicators 6.4.1 and 6.4.2	Patricia MejiasMoreno, Land and Water Officer, FAO
13.00-13.30	Discussion	

13.30-14.30 hours: Lunch Break

14.30-16.00 hours: Technical Session II **Moderator: Member WP&P, CWC, MoJS**		
14.30-15.00	SDG 6.4 in the Asia Pacific Region: Importance and Challenges	Somayeh Shadkam, Irrigation Specialist, FAO
15.00-15:30	Introduction to AQUASTAT and SDG 6.4 reporting process	Patricia MejiasMoreno, FAO
15.30-16.00	Discussion	

16.00-16.30 hours: Tea Break

16.30-17.30 hours: Technical Session III Moderator: MoJS		
16.30-17.00	Renewable Water Resources Assessment in AQUASTAT	Patricia MejiasMoreno, FAO
17.00-17.30	Wrap up discussion of Day 1	

DAY 2- 20 June 2023

Time	Topic	Presenter
09:30-11:00 hours: Technical Session IV Moderator: Konda Reddy		
09.30-10.00	Water uses in AQUASTAT	Patricia MejiasMoreno, FAO
10.00-10.30	Accounting for Environmental Flow Requirements	Patricia MejiasMoreno, FAO
10.30-11.00	Discussion	

11.00-11.30 hours: Tea break

11:30-13:00 hours: Technical Session V Moderator: Vikas Rawal		
11.30-13.00	Compilation of SDGi 6.4.1 and 6.4.2 (hands-on demonstration) Discussion	Sangita Dubey and Patricia MejiasMoreno, FAO

13.00-14.00 hours: Lunch Break

14:00-15:30 hours: Concluding Session Moderator: Takayuki Hagiwara		
14.00-15.30	Institutional setting for national SDG 6 reporting/Identification of focal points for reporting of different components of SDG 6.4.1 and 6.4.2	

15.30-16.00 hours: Tea break

Concept Note

Background

Sustainability of agriculture is globally a major priority under the Sustainable Development Goals. It is also extremely important in the context of India, and has thus come to be a major focus of the government's policies towards agriculture. Sustainability of agriculture has been identified as a major focus (Outcome 5) in the UNSDCF 2023-2027 and FAO's Country Programming Framework.

Target 6.4 of the Sustainable Development Goals is specifically aimed at sustainability of water use across various sectors including agriculture. Since agriculture is one of the largest users of freshwater globally and productivity of water use in agriculture is lower than in other sectors, sustainable use of freshwater in agriculture is critical for overall sustainability of water use.

1. **Target 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.
2. **SDG Indicator 6.4.1:** Change in water-use efficiency over time.
3. **SDG Indicator 6.4.2:** Level of water stress: freshwater withdrawal as a proportion of available freshwater resources.

FAO is the custodian agency for the two indicators – Indicators 6.4.1 and 6.4.2 – used for monitoring progress towards Target 6.4. The methodology for estimation of these indicators has been developed by FAO, and approved by the IEAG. With FAO's support, most countries have implemented these indicators, and the indicators are currently classified as Tier I indicators.

AQUASTAT, a global database maintained by FAO, is the primary source of information for global reporting of Indicators 6.4.1 and 6.4.2. Aquastat compiles data on Total Renewable Freshwater Resources and Total Freshwater Withdrawal reported by (or gathered from published reports for) 180 countries. Data on Environment Flow Requirement are available from IWMI Global Assessment of Environment Flows. Although data on water resources and water use have been compiled in AQUASTAT, these data are not reported regularly for all the countries, and as a result, global reporting for many countries is based on indirect estimates or by carrying forward historical estimates.

The Current Status

It is important that the globally-agreed indicators are integrated into the the National Indicator Framework. Globally-agreed and technically-sound indicators are critical for monitoring development. Global assessments of progress towards SDGs require that the countries use broadly uniform, standards-compliant indicators and methods of measurement. Lack of comparability of indicators would mean that the progress in the country cannot be benchmarked against that of other countries. Lack of data on comparable indicators would result in lower visibility of the country in global and regional progress reports.

Indicators should not provide a comprehensive and politically-neutral measure of progress. They should work as a guide to policy action, and also provide early warning for course correction in case the country is not on course to meet the target.

In addition to the globally-agreed indicators, countries often use additional indicators in their National Indicator Frameworks to address specific issues that might be of national importance.

India's National Indicator Framework uses three national indicators for Target 6.4. These are:

1. **NIF Indicator 6.4.1:** Per capita storage of water, (in m3/person)
2. **NIF Indicator 6.4.2:** Percentage ground water withdrawal against availability
3. **NIF Indicator 6.4.3:** Per capita availability of water (in m3/person)

It is clear that, while these indicators may be important as well as easily available in India, they are not a substitute for the globally-agreed indicators. The NIF indicators deal with segments of water sector and are not comprehensive in their scope (Indicator 6.4.1 deals with surface water only, and Indicator 6.4.2 deals with groundwater only). They also do not capture efficiency of water-use, the key concept in Target 6.4, or provide a comprehensive measure of sustainability of water withdrawals (covering both surface and groundwater).

Given this, it is important that SDG Indicators 6.4.1 and 6.4.2 are incorporated into the National Indicator Framework.

Objectives of the workshop

The workshop aims to take stock of the efforts made to date to report on the progress towards SDG 6.4 target at national level and prepare for future work for SDG 6.4 monitoring, reporting and use. The specific objectives of the workshop are:

- Strengthen the engagement and collaboration among national institutions on the monitoring and global reporting of SDG 6.4. and water data collection.
- Convene a cross-sectoral dialogue at national level to improve the monitoring, reporting and dissemination of SDG Indicators 6.4.1 and 6.4.2
- Improve the understanding of the methodologies for the computation of the Indicators 6.4.1 and 6.4.2, and discuss their implementation in India.
- Discuss the use of SDG 6.4 indicators and other water indicators to inform policies and the decision making process.
- Identify nodal agencies of the Government of India for supplying data required for computing Indicators 6.4.1 and 6.4.2.
- Describe the SDG 6.4 data collection, monitoring and reporting process of FAO through the AQUASTAT information system.
- Present the tools made available by AQUASTAT and IMI-SDG6 to support countries in the monitoring the SDG indicators, particularly for Target 6.4.
- Discuss the institutional arrangements needed for the regular reporting of data to AQUASTAT information system.
- Define the steps to be undertaken in order to improve the quality, quantity and timing of the data collected and reported.
- Discuss the steps in reporting these global SDG indicators to the custodian agency, FAO, for onward inclusion in the SDG monitoring database.

Target audience

Given the complexity of the water sector, a number of different government agencies and departments are involved in compiling data on water resources, water withdrawal, water use, and productivity. The data are compiled by central as well as state-level agencies. Data on river water flows and withdrawals from rivers are compiled at the level of river basins (rather than states). In view of this, collection of comprehensive data that are required for computation of Indicators 6.4.1 and 6.4.2 requires coordination of multiple agencies.

The proposed workshop aims to bring together all the key departments and government agencies, to provide training on Indicators 6.4.1 and 6.4.2. In addition, other technical institutions with expertise in different aspects of the water sector will also be invited to participate.

Agencies expected to participate in the workshop include:

1. Central Water Commission, MoJS
2. Central Ground Water Board, MoJS
3. National Water Mission, MoJS
4. National Institute of Hydrology, Roorkee
5. National Water Development Agency, MoJS
6. National Water Informatics Centre, MoJS
7. Command Area Development & Water Management and Bureau of Water Use Efficiency
8. Brahmaputra and Barak (B&B) Wing, MoJS
9. INDUS Wing, MoJS
10. Minor Irrigation statistics Wing, MoJS
11. Peninsular Rivers Wing, MoJS
12. RD & PP Wing, MoJS
13. State Projects Wing, Mojs
14. Water Resource Departments of States
15. Social statistics Division, MoSPI
16. National Accounts Division, MoSPI
17. National Sample Survey Office, MoSPI
18. NITI Aayog (Water Division & Agriculture Division)
19. Directorate of Economics and Statistics, MoA&FW
20. ICAR- Indian Institute of Water Management (IIWM)
21. Irrigation Association of India
22. Ministry of Housing and Urban Affairs
23. Food and Agriculture Organization of the United Nations
24. World Bank (TTL Water Division)
25. International Union for Conservation of Nature (IUCN)
26. UN Environment Programme (UNEP)
27. International Water Management Institute (IWMI)

Workshop duration

Duration of the workshop will be two days (June 19 and 20, 2023). The workshop will be conducted in a hybrid mode. Key stakeholders of the central government departments based in the Delhi NCR region will participate in-person while state-level officials, and officials from agencies located in other parts of the country, will attend virtually.

Experts from FAO will participate in-person as well as virtually.

Expected results

At the end of the workshop, participants will have:

- A better understanding of the SDG framework and reporting process.
- Improved knowledge of methodologies for the evaluation of indicators 6.4.1 and 6.4.2
- Improved understanding of SDG 6.4 indicators and their potential use in policies or water strategies.

- Identification of agencies for supplying various components of data required for computing Indicators 6.4.1 and 6.4.2.
- Identification/confirmation of GoI focal points to compile and report indicators 6.4.1 and 6.4.2 for clearance and global reporting.
- Proposal of the institutional mechanism for regular reporting of Indicators 6.4.1 and 6.4.2
- Agreed work plan for the continuous improvement of the collection of water data and the calculation of the indicators, including disaggregation and gender contextualization. This may include plans for a national activity (workshops, expert meetings) to be carried out after the workshop.