

Technical Session on localizing water balance towards sustainable development: Decoding Blue, Green, Grey and Virtual Water

// Date:21.03.2024 //

Mr. Elamuhil, Team Leader at Centre for Urban Water Resources (CURE), opened the session with introductory remarks, acknowledging World Forest Day and drawing parallels between Tamil culture and forests from Sangam Literature. He highlighted a study by Dr. T.V. Ramachandra on the correlation between food diversity in Indian culture and deforestation in the Western Ghats, impacting the flow of the river Cauvery. Mr. Elamuhil distributed a work sheet to farmers, prompting them to track water data for their villages over the past 30 years, emphasizing the necessity of water metrics.

In his keynote address, Dr. D. Suresh Kumar, Director of CARDS at Tamil Nadu Agricultural University (TNAU) addressed about the role of water budgeting in maximizing water use efficiency at the local level. He outlined major water sector challenges, including severe water scarcity, droughts, declining groundwater levels, reduced tank storage capacity, and increasing conflicts among water user groups. Mr. Kumar simplified water budgeting through case studies relevant to farmers, illustrating its importance in resolving conflicts and aiding crop selection based on agro-climatic conditions.

Following Mr. Kumar's presentation, Mr. Praveen Kumar from TDA decoded localizing blue water estimation, stressing the importance of testing drinking and irrigation water regularly for human and crop health.

Mr. Lokesh, Coordinator at CURE Vizag, presented on localizing grey water, emphasizing its value and introducing various household-level soak pit models and village-level management systems. He highlighted the importance of training Panchayat presidents for effective implementation.



Ms. Swetha, Project Executive, discussed green water conservation techniques such as mulching and drip irrigation, urging farmers to focus on both soil moisture and soil conservation.

Ms. Arsh, Project Executive, explained virtual water through examples like cotton shirts, demonstrating how participants could calculate virtual water for selected food items, enhancing their understanding of virtual water's impact on food choices.

Mr. Elamuhil later discussed industrialization's impact on rivers like the Mercy and Thames in the UK, drawing parallels with pollution in the river Noyyal and the virtual water economy. He emphasized the need for action to combat climate change's effects namely on annual rainy days, rainfall intensity, erratic rainfall and rise in temperature on water resources.

Following a comprehensive session aimed at localizing water balance for sustainable development, the participants collectively proposed the following declarations:

1. **Block-Level Water Budgeting Pilot:** We advocate for the initiation of a block-level pilot program on water budgeting like financial budget planning facilitated by the Water Knowledge Centre, hosted by the people Institutions.
2. **Establishment of Water Recording Stations:** We call for the installation of water recording stations, including rain gauges, at each Panchayat. These stations will be maintained by the association to ensure accurate and continuous monitoring of water resources.
3. **Irrigation Tank Survey Initiative:** We emphasize the need to survey irrigation tanks to determine their actual capacity for restoring the tanks assessing the impact and potential for further scaling.
4. **Compilation of Best Practices:** We propose the creation of a compendium showcasing best practices focusing on the effective utilization of blue, green, and grey water resources.
5. **Development of Water Budgeting Toolkit:** We advocate for the development of a simple, scientific, and context-based 'Water Budgeting' toolkit.

Overall, the session provided valuable insights into localizing water balance for sustainable development.