

# TAMIL NADU WATER WEEK 2024

WATER FOR PEACE : UNITE AROUND WATER 18 - 22 MARCH, 2024

DHAN Foundation is hosting Tamil Nadu Water Week from March 18 – 22, 2024 at Madurai on the theme of World Water Day 2024 called 'Water for Peace'. This is the fourth edition which focuses on demand management of water resources and sustainable solutions to address contemporary challenges in water and agriculture. The first edition of Tamil Nadu Water Week was held in the year 2013 at TNAU, Coimbatore and the subsequent editions were held at Madurai. The events aim to promote collective actions from various stakeholders working on the water resources of the State for addressing the future challenges of Water Scarcity and its implication on food production and food security in Tamil Nadu. It also envisages to provide space for the primary stakeholders especially the farming communities to share their experiences of collective action at various regions on water resources management towards food security.

### Technical Session on Localising Water Balance Towards Sustainable Development: Decoding Blue, Green, Grey, and Virtual Water



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 worksheet 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, Mr. D. Suresh Kumar, Director of CARDS at Tamil Nadu Agricultural University (TNAU) addressed 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 a 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 these 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.

### "Workshop on Building Climate Resilience using Roof Water Harvesting for drinking at individual and institutional infrastructure "

The workshop on "Building Climate Resilience using Roof Water Harvesting for drinking at individual and Institutional Infrastructure" began with a prayer, followed by Mr. N. Saravanan, the event anchor, providing insights into the agenda and objectives of the event. Subsequently, a warm welcome was extended to the guests, including Mr. P.M. Jose, Senior Programme Manager at Water.org, Chennai, the CEO of SUHAM, and leaders from DHAN and SUHAM field staff, who participated in the traditional lighting of the lamp ceremony.



Mr. N. Saravanan, representing SUHAM Trust, extended a warm welcome to all guests and participants to the workshop on "Building Climate Resilience using Roof Water Harvesting for Drinking at Individual and Institutional Infrastructure." The workshop, organized bv SUHAM, aimed to raise awareness about rainwater harvesting practices and adapting to climate change. Climate change affects the availability, accessibility, and quality of Water, Sanitation, and Hygiene (WASH) services, emphasizing the need for action and resilient development strategies to protect water resources.



Chief Guest Mr. P.M. Jose, Senior Programme Manager at Water.org, Chennai, emphasized the current water scarcity issue. He shared insights from a field visit to the Madurai rural region, where the community sought assistance for a battery inverter. Mr. Jose encouraged exploring solar panel options through guidance from Kalanjiam groups. Additionally, he stressed the importance of embracing climate change adaptation and grassroots technological advancements, highlighting strategies such as diversifying water sources, strengthening infrastructure. and promoting conservation.

Chief Guest Mrs. Jeyabharathi addressed the forum, emphasizing the significance of roof water harvesting in combating environmental pollution, preserving dignity, especially for women, and enhancing hygiene efforts. She advocated for proper excreta disposal and the provision of individual household roof water harvesting structures to ensure access to safe drinking water.

Tamil Nadu Water Week 2024

Mrs. Jeyabharathi also highlighted ongoing community education initiatives and the formation of forums to address climate change resilience collectively.

### **Collaboration: Key to move forward**

Mr. B. Saravana Kumar, as the event anchor, presented on Climate Resilience using Roof Water Harvesting for Drinking at Individual and Institutional Infrastructure. He underscored the broad-reaching effects of climate change on water resources, necessitating urgent action to safeguard water availability, quality, and access. Mr. Kumar emphasized the critical role of collaboration among governments, civil society, the private sector, and international agencies in addressing roof water challenges amid climate change.

## Discussion with Community based on Lead Questions:

A group discussion ensued, focusing on climateresilient roof water interventions and associated including product dissemination. challenges. community engagement, rainwater governance, and staff roles in ensuring safe water for all. Participants raised concerns regarding space constraints. financial limitations, and awareness gaps within Suggestions communities. emerged, such as repurposing existing water tanks for rainwater harvesting, and participants committed to implementing rainwater harvesting their at households.

### **Action Points:**

Community declarations included commitments to implement workshop learnings in the field, construct roof water harvesting structures across DHAN collective regions, install soak pits and solar panels in all households, and establish common bore wells at the village level. The meeting concluded emphasizing the importance of community involvement in monitoring and maintaining safe water sources. Participants were encouraged to conduct water quality testing, share knowledge, recognize contamination signs, and utilize household filtration systems.

A vote of thanks was extended, highlighting the crucial role of water conservation in securing a healthy future for generations to come.

### " Seminar on Building Climate-Resilient Agro-Ecosystems "

The seminar on "Building Climate-Resilient Agro-Ecosystems" commenced with a welcome address by Mr. V. Avadaiyappan, Team Leader, followed by the lighting of lamps by the participants. Mrs. S. Ahila Devi, Chief Executive of People Mutuals, delivered the keynote address. She elaborated on the various risks faced by the farming community and emphasized measures such as risk avoidance, prevention, reduction, mitigation, and transfer to minimize financial losses. Mrs. Devi stressed the importance of adopting an integrated approach to protect farmers from diverse risks, which vary across urban, rural, coastal, and hilly areas. Sharing best risk management practices among participants was encouraged to benefit farmers across different regions.



The session focused on enhancing agricultural resilience to climate change impacts. It emphasized the interconnected components of agricultural landscapes, including crops, soil, and water resources.

Insurance was highlighted as a crucial element in family financial development, with current coverage in India standing at only 4%. Efforts need to be made to ensure comprehensive coverage for all the eligible family members under various insurance programs. Auto-renewal systems for insurance policies were proposed to facilitate continuous coverage, with insurance playing a significant role in lifting families out of poverty.

Mr. N. Venkatesan, Chairperson of People Mutuals, delivered a special address, highlighting the increased risks faced by present and future generations due to climate change, attributed in part to factors such as pollution and rising temperatures. He emphasized the need for innovative and insurance products affordable to safeguard livelihoods. Mr. Ajith Kumar, Project Executive at People Mutuals, DHAN Foundation, discussed the design and features of heat index-based Livestock insurance products. He detailed the product's application in the dairy sector and emphasized the importance of innovative solutions to protect livelihoods in the face of climate change.

Dr. B. Bhakiyathu Saliha, Professor & Head and Chief Scientist at the Agriculture Research Station, Kovilpatti, presented on "Technology for Climate Risk Management Adaptation Practices." Topics included sustainable farming practices, climatesmart agriculture, soil health and management, and water management. Dr. Saliha underscored the role of technology in mitigating climate risks and outlined practices such as timely cropping and irrigation techniques to reduce vulnerability to climate change.



Group discussions yielded several recommendations, including the selection of suitable crops and varieties, timely weeding, and the adoption of drip irrigation systems. The Uzhavan app was highlighted as a valuable tool, with suggestions for widespread training among farmers. Soil testing and training on organic farming and integrated farming systems were also emphasized. The seminar concluded with a vote of thanks from Mr. Ajith Kumar, expressing gratitude to all participants for their valuable contributions.

" Workshop on Ensuring access to adequate safe water by sustainable partnership with Jal Jeevan Mission "



The workshop aims to ensure access to adequate safe water through sustainable partnerships with the Jal Jeevan Mission, promoting community health and development. The workshop commenced with Mr. Rafi extending a warm welcome to the participants. In his opening remarks, he highlighted the mission of Jala Jeevan Mission which aims for universal safe drinking water by 2024 to 19.31 crore participatory households through planning, development, promotion infrastructure of Functional Household Tap Connections (FHTCs), and community empowerment. By mid-2020, only 2% of households had received tap connections, equivalent to 3.86 crore households in rural India. Presently, 75% or 14.48 crore households in rural India have access to tap connections, with the goal of achieving 100% coverage by December 2024.

The objectives of the workshop encompass various critical areas aimed at advancing the goals of the Jal Jeevan Mission. Firstly, the workshop aims to facilitate the sharing of best practices implemented by the DHAN Foundation under the Jal Jeevan Mission. This sharing of experiences and successful strategies can serve as valuable insights for other stakeholders involved. Secondly, the workshop endeavours to formulate effective strategies to ensure that all eligible households have access to safe water connections, aligning with the mission's objective of universal rural clean water access. Thirdly, the workshop seeks to enhance participants' understanding of technical issues related to water quality, treatment, operation, and maintenance, essential for maintaining sustainable water infrastructure. Lastly, the workshop aims to address coordination gaps among various departments and agencies involved in water provision through strategic measures, fostering cohesive efforts towards achieving the mission's objectives.

Mr. Rajapandian, CEO of SUHAM Trust, in his keynote address provided insights into Jal Jeevan Mission's endeavours and the various activities undertaken within the scheme. Mr. Bharanitharan, Training Head, Panchayat, Collectorate, Madurai district, offered valuable insights into field-level issues, intervention strategies, daily operations, water conservation techniques, government funding mechanisms, and implementation strategies.

Mr. Malaisamy, President of Kondayampatty Panchayat, Alanganallur Block, shared practical experiences and challenges faced during the installation of tap water connections, along with innovative ideas for smoother implementation.

Mr. Prahalathan, representing DHAN Panchayat Development Foundation (DPDF), shared his experiences with tap water connections, insights into available government funding schemes, and approaches for CSR fund utilization. In his lead presentation, Mr. Arikumar provided a comprehensive overview of Jal Jeevan Mission programs, detailing mechanisms, achievements, and stakeholder involvement. He shared the strategies for rural communities to ensure tap connections include surveys, village identification, gram sabha participation, and collaboration with health departments and panchayats. To achieve 100% water tap connections by 2024, initiatives such as community literacy, technology adoption, and climate resilience were emphasized.

### Points emerged from the subgroup discussions:

- 1. Conducting potential assessments to target resources effectively for improving access to clean water in the community.
- 2. Assessing the quality of available water sources and discussing measures for improvement or maintenance in all villages.
- 3. Identifying gaps in water supply infrastructure and discussing potential solutions, especially at the Panchayat level.
- 4. Discussing strategies for sustainable water management, including rainwater harvesting and groundwater recharge.
- 5. Encouraging active involvement of community members in decision-making related to water management and conservation.
- 6. Addressing the importance of clean water for personal hygiene, sanitation, and overall community health.
- 7. Engaging communities in raising awareness at different levels, including schools, Anganwadis, and Primary Health Centers.
- 8. Identifying training needs and discussing capacity-building initiatives for empowering community members.
- 9. Establishing rapport and linkages with mainstream institutions to benefit the community.
- 10. Introducing an android app to identify abandoned borewells, tanks, and water bodies, aiding water interventions with photo uploads for a historical record.

In his valedictory remarks, Mr. Rajapandian, emphasized the importance of Jal Jeevan Mission's initiatives and proposed collecting funds of Rs 1000/= per household through Panchayat mechanisms for tap water connections. The workshop concluded on a promising note, with participants committed to implementing the outlined strategies for ensuring access to adequate safe water in rural areas.



Declarations are proposed:

**Ensuring Lasting Access:** Commitment to ensuring lasting access to safe water through sustainable partnerships with the Jal Jeevan Mission, aiming to provide Functional Household Tap Connections (FHTCs) to every rural household by 2024.

Sharing Best Practices: Pledge to actively share and implement best practices demonstrated by the DHAN Foundation under the Jal Jeevan Mission, fostering collaboration, and learning among stakeholders along with educational materials featuring case studies.

Strategic Formulation: Resolution to formulate and implement effective strategies to extend safe water connections to all eligible households, ensuring alignment with the mission's objective of universal rural clean water access to Schools, Anganwadi centers, Gram Panchyat buildings, Health centers, wellness centers, and community buildings. **Technical Understanding:** Acknowledgment of the importance of enhancing understanding regarding technical aspects of water quality, treatment, operation, and maintenance among stakeholders, to ensure the sustainability of water infrastructure.

**Coordination and Collaboration:** Recognition of the necessity to address coordination gaps among various departments and agencies involved in water provision, through strategic measures aimed at fostering cohesive efforts.

**Community Engagement:** Emphasis on active community engagement in decision-making processes related to water management and conservation, promoting awareness at multiple levels, including educational institutions.

Systematic Voters 'Education and Electoral Participation (SVEEP) Programme and Workshop on Technological solutions for productivity Enhancement in coastal agriculture

DHAN Foundation collaborated with the Agricultural College and Research Institute (AC&RI), Kurukkaththi, Nagapattinam, to commemorate World Water Day on March 21, 2024 at Keeezhvelur. The events aimed to rally various stakeholders involved in water resource management across Tamil Nadu to address the looming challenges of water scarcity and its implications on food production.

Dr. D. Dhamodaran, Ph.D., Professor & Academic Coordinator at AC&RI, delivered the welcome speech, extending a warm welcome to farmers, executive engineers from the Agriculture Engineering department and Tamil Nadu Water Supply And Drainage Board (TWAD), college staff, DHAN colleagues, and students During his felicitation, Mr. Venkatesan, Chief Executive Officer of DHAN Foundation Tankfed Agriculture Program, underscored the global importance of water, emphasized efficient water usage practices, and highlighted the community-led initiatives of the Vayalagam nested institutions and their impacts.

Mrs. Ilavarasi. Senior Team Leader-Human Resources Department at DHAN Foundation, enlightened participants during the technical session about traditional water body names, cascades, water supply methods for farming, and the significance of irrigation tanks and water bodies. She also shed light on other DHAN Foundation initiatives like Kalanjiam, Mutual. and Farmer Producer Organization, emphasizing community-led programs. Her session concluded with a song celebrating water and agriculture.

Mr. K. Murugesan, M.Tech, MBA, PhD, Executive Engineer of the Tamil Nadu Water Supply and Drainage Board, discussed water management and the current water source situation in Nagapattinam. He generously sponsored 100 tree saplings to be planted around the college campus.

Mr. Palanisamy, B.E. Agri, Executive Engineer in the Agriculture department, Nagai, shared insights into global water levels, the drawbacks of unleveled farmland, the benefits of laser leveling, and advocated against excessive water usage in farming. Following these speeches, college students delivered a special address on Water and the Right to Vote.

Concluding the function, Dr. Ravi, PhD, Dean of AC and RI, explained the institute's infrastructure and emphasized collaboration with DHAN Foundation. He encouraged farmers to cultivate millets instead of paddy, stressing their value-added products and marketing strategies. AC & RI are in the process of releasing a saline-tolerant variety of small millets.

The forenoon session ended with a vote of thanks by Dr. A. Anuratha, Ph.D., Associate Professor (Soil Science) at AC & RI, Keezhvelur, Nagapattinam. After lunch, the college organized a field visit to Pioneer farmers' fields for hands-on experience sharing. Farmers gleaned valuable insights from this visit.

### Declarations and Way forward of this Programme:

- 1. Students are encouraged to take social responsibility by learning from farmers and traditional technologies, enriching their education while contributing to sustainability and cultural preservation.
- 2. Collaboration among academic institutions, NGOs, government departments, and farmers is crucial for developing technological solutions to enhance productivity in coastal agriculture.
- 3. By adopting technologies like laser leveling and improving saline water quality, supported by government services, farmers can optimize resource use and mitigate challenges in coastal agriculture.
- 4. Recognizing the significance of voting as a civic duty, making voting compulsory encourages citizen engagement in decision-making processes.
- 5. Integrating native wisdom with current agricultural technology is essential for sustainable farming practices, promoting resilience. innovation, economic and development in rural communities.

