

SARNET News Bulletin

We welcome you to the second issue of the SARNET news bulletin

Issue 2, December 2023

The 2nd SARNET conference inspires water sector professionals from South Asia to act

The 2nd SARNET international conference concluded in Sri Lanka attracted the participation of water sector professionals, development practitioners, entrepreneurs' researchers, and academics from South Asia, Africa, and the Netherlands and inspired for action.

For example, in Maharashtra India Raah Foundation a member of the South Asia Rainwater Network (SARNET), and many others in the region have started sharing and exchanging knowledge on rainwater harvesting and are exploring the possibilities of forming a country-level collective to promote the adoption of the technology. Nepal too has started the process of forming a national-level alliance on rainwater harvesting. A member of SARNET from NEWAH in Nepal Resham Jung Singh has recognized the need to share knowledge with other like-minded development partners and is about to initiate the construction of a rainwater harvesting tank in the office and models of various rainwater harvesting technologies at the organization's premises.





In Bangladesh too CEO of *O Creeds* Shahadat Hossain a member of SARNET has initiated the construction of a pumpkin-shaped rainwater harvesting tank (popular in Sri Lanka) at a tourist attraction and an area with a high rainfall in the Sri Mangal area in Bangladesh..

"A Sustainable Solution for Climate Change Resilience and Achieving SDGs", the 2-day international conference of SARNET concluded on the 18th, of May 2023, at the International Water Management Institute (IWMI) in Colombo, Sri Lanka. This event was organized by SARNET in collaboration with the Lanka Rainwater Harvesting Forum (LRWHF) International Water Management Institute (IWMI), and with the support of USAID.

Increasing the knowledge and skills to promote rainwater harvesting technology, amplifying the importance of rainwater harvesting technology as a means of achieving SDG 6, and lobbying for increased investments in rainwater harvesting were the objectives of this event.



Rainwater Harvesting and Water Conservation in India

By Dr R. Manivanan

Across India, there are measures to conserve, harvest rainwater, renovate traditional and other water bodies/ tanks; recharge using old bore wells; and watershed development.

Activities taken up in this regard include:

- Roof-top Rainwater Harvesting Systems on all buildings- with priority for government buildings,
- Water harvesting pits in all compounds,
- Building of new check dams and ponds,
- Removal of encroachments of tanks/lakes,
- Desilting of tanks to increase their storage capacity,
- Removal of obstructions in their channels,
- Repairs to traditional step-wells
- Use defunct bores/unused wells to recharge aquifers,
- Rejuvenation of small rivers and rivulets,
- Revival of wetlands and protection of flood banks.

Implementation in rural and urban areas will focus on the following:

1. Enumerating, geo-tagging, and making an inventory of all water bodies; preparation of scientific plans for water conservation difference of the second se

Every district will enumerate all existing waterbodies/ Water Harvesting Structures (WHS) based on old revenue records and using remote sensing images and GIS mapping technology and use the data to plan scientifically new water harvesting structures. houses in and around Mira Road and fixes dripping taps. He simply replaces old Oring rubber gaskets with new ones. The idea struck him in 2007 when he noticed the dripping tap in his friend's house. "A

2. Jal Shakti Kendra

Jal Shakti Kendras' (JSKs) in all districts will serve as resource or "knowledge centers" for disseminating information related to water, techniques for water conservation, and water saving and provide technical guidance to local people as well as to the district administration. month so imagine how much we all waste" he points out. Surti and his assistants raise awareness through posters and pamphlets. He pays for all expenses from his pocket. Aabid Surti (born 5 May 1935) is a National Award-

3. Intensive afforestation

An afforestation drive will be taken up to plant painter, author, cartoonist, journalist, saplings to increase green cover. playwright, and screenwriter. Abid Surti

4. Awareness generation

There will also be awareness generation to be taken up to make Jal Andolan.





Water heroes!



Every Sunday, along with a plumber and an assistant, 87-year-old Abid Surti visits houses in and around Mira Road and fixes dripping taps. He simply replaces old Oring rubber gaskets with new ones. The idea struck him in 2007 when he noticed the dripping tap in his friend's house. "A tap that drips water once every second wastes about 1,000 liters of water every month so imagine how much we all waste" he points out. Surti and his assistants raise awareness through posters and pamphlets. He pays for all expenses from his pocket. Aabid Surti (born 5 May 1935) is a National Awardwinning Indian author who has earned accolades within India and abroad as a painter, author, cartoonist, journalist, playwright, and screenwriter. Abid Surti founded Drop Dead, a water conservation initiative in Mumbai in 2007.

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10th October @3.30p.m

Register: https://docs.google.com/forms/d/1XPm

gG8CLenkUjodA8YKdRhYS316kAlbakb

Role of Rainwater Harvesting in the Climate Resilience of a Watershed

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Webinar 12 of SARNET concluded 10th of October discussed rainwater harvesting as a measure for building resilience to climate change. The speakers were Dr. S. MuruganDirector, Agriculture, Agribusiness, Water & Natural Resources Management National Agro Foundation – India, and Dr. M.R Ramabsubramaniam, Executive Director of National Agro Foundation (NAF) National Agro Foundation.

Some key learnings of Webinar I2 on the role of rainwater harvesting in the climate resilience of a watershed

- Watershed management aims to care for natural resources in a way that supports human needs for water, food, fiber, energy, and habitation while supporting aesthetics and ecological function.
- In a broader sense, it is a mechanism that supports land management, ecosystem management, and the community in which it operates.
- Transforming the running water to walk, walking water to stand, and standing water to sleep is the concept in which water is harvested in watershed areas.
- Resilience building should be an inbuilt component of watershed management. When the community is resilient the watershed automatically becomes resilient.
- Climate change-induced ill-distributed rainfall, incessant rain, and frequent droughts create soil erosion, loss of soil nutrients, and soil nutrition depletion, soil salinity, especially in rainfed and drought areas.
- Rainwater harvesting creates an infrastructure that adds a dual role in drought areas' water storage structure and drainage of excess water for flood areas. Some of such structures are check dams, desilting channel clearing, and water absorption ponds.
- Conserving water can be used for multiple crop cultivation for food for timber etc. Rainfall is erratic it is always
 better to introduce alternate livelihoods so that communities in a watershed can be resilient to climate change
 and mitigate the shocks of climate change. The communities can be introduced to practice animal husbandry,
 beekeeping, fisheries, and poultry as means of diversification of livelihood development.
- Planning for crop diversification is part of building resilience to meet the challenges of climate change.
- Resource use, energy efficiency, and efficient natural resource use can increase resilience multifold.
- Communities are part of the ecosystem in which a watershed operates. They are the managers of the assets both economic and social.
- Human capital has to be improved by giving them training and capacity building and exposing them to good practices on watershed improvement so that they are insulated against the ill effects of climate change and contribute to the resilience of the watershed ecosystem they are part of.
- Sustainable agribusiness activities help to increase resilience and improve the financial independence of communities occupying a watershed area. Training the communities particularly women on aspects such as bio composting, goat farming dairy farming. This exposure helps women to encourage them to start micro-enterprises and empowers them as it helps to generate an income and improve the quality of their lives. Another area in which communities are trained is agroforestry. It helps to generate income and increases the green cover.

If you missed the webinar watch it on SARNET YouTube: https://youtu.be/xgsTylc4H8k



Perspectives from Bangladesh on rainwater harvesting. By Atiqur Rahman Mollick & Eng Md Shahadat Hossain



Rainwater harvesting can address a critical issue that often goes unnoticed. Many urban areas in Bangladesh heavily rely on groundwater, leading to a decline in its levels. Recent studies indicate a significant drop in aquifer levels in cities like Dhaka and Chittagong. The depletion of groundwater is a pressing concern, with levels falling up to 61m in Dhaka and varying from 7m to 35m in Chittagong. Projections suggest that if demand increases without adequate measures, groundwater levels could plummet to 100-150m by 2050, exacerbating water scarcity issues in these cities.

Rainwater, when treated, can serve various potable purposes such as drinking, bathing, cooking, and washing. Non-potable uses, including flushing toilets, watering gardens, and general cleaning, often do not require treatment. The volume of rainwater collected varies by location and is influenced by weather conditions. In tropical regions like Malaysia, it is feasible to collect substantial amounts, such as 2 m3 in a single rain, while Zambia, Africa, may accumulate around 10 m3 annually from a roof of similar size.

Rainwater harvesting offers several advantages, including water and environmental conservation, pollution reduction, flood control, and mitigation of the impacts of climate change. The achievement of Sustainable Development Goals (SDGs), particularly SDG 6, relies heavily on the effective management of rainwater. Neglecting sustainable rainwater management can result in severe consequences for society and the environment, leading to issues like floods, waterlogging, and soil erosion, especially in rain-intensive countries such as Bangladesh.

Sustainable rainwater management poses a significant challenge, not only for Bangladesh but also for other nations experiencing substantial rainfall. The key distinction lies in the profound impact of climate change faced by Bangladesh, making it one of the most vulnerable countries to such effects. Despite these challenges, local communities have demonstrated creativity in addressing their problems.

> Would you like to share a story of change, best practices from your country findings of the latest research on water and development, or a photograph that tells a story?

Send us your submission to Irwhf.regionalcoordinator@gmail.com



News & anouncements

Anouncements

News

The annual State of the Cryosphere Report for 2023 published by the International Cryosphere Climate Initiative (ICCI) warns that even 2°C – the "upper" Paris Agreement temperature limit will lead to catastrophic global damage from loss of ice sheets, mountain glaciers, and snow, sea ice, permafrost, and in polar oceans. This will unfold disastrous consequences for millions of people, societies, and nature (ICIMOD, 2023).



ABOVE GLACIER IN PAKISTAN AND BELOW DESTROYED HOUSE DUE TO GLACIAL LAKE BURST - COURTESY ALTAZEERA



Registrations are open for the 3rd International Maji Scientific
 Conference

Water Institute has been organizing scientific water conference annually, and the 3rd International Maji Scientific Conference (IMSC) is planned to take place from 3lst January to 2nd February 2024 at Mlimani City in Dar es Salaam, under the main theme "Water and Sanitation in a Changing World". Abstracts are welcomed in line with the conference focus and spearheading momentum towards achieving SDG 6. More details on https://majiconference.ac.tz/upcoming-conference

 International Workshop on "Impacts of Climate Change on Small Island Developing States (SIDS)" during 28-29 February 2024 in Virtual-Mode

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi jointly with the Indian Ocean Rim Association (IORA) Secretariat, Mauritius and the Scientific Committee on Problems of the Environment (SCOPE), Amstelveen, the Netherlands announces the organization of a two-day International Workshop on "Impacts of Climate Change on Small Island Developing States (SIDS)" during 28-29 February 2024 in Virtual mode.

Details for registering and submissions https://iora-italy.org/impacts-ofclimate-change-on-small-states-island-developing-

countries/#:~:text=In%20New%20Delhi%2C%20the%20Center,29%2C% 202024%20in%20virtual%20mode.

Regional Conference Rainwater Harvesting and Management

A SARNET member organization SMART WASH Solutions Nepal in collaboration with the Department of Water Supply and Management and the Nepal Rainwater Harvesting Alliance is organizing a South Asia regional conference on the theme Harnessing Water for Enhanced Water Security and Climate Resilience. More details on important dates and registration, https://smartwash.org.op/

Songwriting competition on rainwater harvesting

SARNET is on the lookout for lyrics to give it life with a melody, a voice, and a dance to promote rainwater harvesting. This song will be released to YouTube in a virtual event at World Water Day on 22nd March 2024. Send an email to – <u>lrwhf.regionalcoordinator@gmail.com</u> for more details.