

াজনাম কর্ম বল হান্দি मंत्रालय जल संसाधन, नदी विकास और गंगा संरक्षण विभाग, भारत सरकार MINISTY OF JAL SHARTI DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION, GOVERNMENT OF INDIAN



0





### "KNOW YOUR WATER SOURCE" Monthly Online Competition

The National Institute of Hydrology (NIH) Roorkee is organizing an online "Know your water source" competition.

Do participate through the link given at <u>https://docs.google.com/.../16irEoRecC-fXzLtz.../edit</u>



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लगभग 180 लघु मंदिर हैं।

### 72 Years old finds solution

to resolve the crisis of clean water.

Meet 72-year-old N. Arunachalam from Madurai who along with his family is relying solely on recycled rainwater in the last 34 years. A former chief engineer from Madurai, Arunachalam adopted some of the best practices when it came to water conservation and is now reaping benefits of his efforts for over 30 years by being water selfsufficient and not having to pay any bills for it.

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सूर्या कुंड, मोढेरा, गुजरात

गुजरात में प्रसिद्ध सूर्य मंदिर के परिसर में स्थित 'सूर्या कुंड'

भारत के सबसे प्राचीन और शानदार बावडीयों में शुमार है,

जो की 11वीं शताब्दी में चालुक्य वंश के भीम के शासन

काल के दौरान बनाया गया था। सुर्य मंदिर पृष्पावती नदी के किनारे बना हुआ है। यह सूर्य मन्दिर भारतवर्ष में विलक्षण

स्थापत्य और शिल्प कला का बेजोड उदाहरण है, इसमें

भगवान गणेश, विष्ण और अन्य स्थानीय देवताओं के

5-27 Parwan Major Multipurpose Irrigation Project is an ambitious project of Rajasthan located near village Akawad Kalan, district Jhalawar across 9-31 MP-Rajasthan inter-State river Parwan, a tributary of river Kalisindh, which in turn is a 2-33 tributary of river Chambal. It comprises a 360 M 4-35 long and 38m high concrete gravity dam. It's gross storage capacity at full reservoir level is 490.40 million cubic meter (MCM).





### सर्वश्रेष्ठ ग्राम पंचायत - सियालसीर, मिजोरम

सियालसीर गांव भारत के मिजोरम में सिरचीप जिले के पूर्वी लूंगदार उपखंड में स्थित है। राज्य के सबसे पुराने गांवों में से एक सियालसीर गांव की आबादी तकरीबन 350 है। इस गांव के लोगों ने जनभागीदारी का सटीक उदाहरण देकर जल संरक्षण के क्षेत्र में काम करके गांव को जल समर्थ बनाया है।

### सर्वश्रेष्ठ शहरी स्थानीय निकाय सुधार

कच्छ गुजरात राज्य का एक जिला है, जिसका मुख्यालय भुज में है। गुजरात की यात्रा कच्छ भ्रमण के बिना अधूरी मानी जाती है। अमिताभ बच्चन द्वारा कही गई लाइन "कच्छे नहीं देखा तो कुछ नहीं देखा".... एकदम सही प्रतीत होती है। गुजरात घूमने आए और आपने कच्छ नहीं देखा तो गुजरात की यात्रा व्यर्थ है।



From the Chief Editor's Desk Water Heritage of India

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[as Under Secretary (IEC), Ministry of Jal Shakti, Do WR, RD & GR, Shram Shakti Bhawan, Rafi Marg, New Delhi -110001

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## From the Chief Editor's Desk



Dear Reader,

Water is the most important natural resource which needs to be managed sustainably for our well being and economic growth. Use of technology and building climate resilient water infrastructure is needed to achieve this aim.

The November-December issue of Jal Charcha brings to you another round of new and interesting facts on dams, rivers, success stories on water conservation and various praiseworthy efforts by our citizens.

The month of November witnessed the mega event of 7th India Water Week with the theme 'Water Security for Sustainable Development with Equity' from 1st -5th November, 2022 giving a platform to multiple stakeholders from around the world to deal with water security in accordance with SDGs.

This edition brings you inspirational examples, ideas, initiatives and stories on water conservation and management.

Read about the historical landmark of Surya Kund, Modhera Gujarat and its cultural and historical significance. Also meet our 72 year old water warrior N. Arunachalam from Madurai who has been relying on recycled rainwater for the last 34 years. Enhance your knowledge about the Parwan major multi-purpose irrigation project, an ambitious project in Rajasthan, located near village Akawad Kalan. Have a glimpse of the work done by Sialsir, a small village located in Mizoram, and how the Gram Panchayat has set an example for water and conservation for other villages to follow.

I hope the contents of this issue will motivate us all to renew our efforts in the field of water conservation and management.

Happy reading to you all!

Warm Regards

# सूर्या कुंड, मोढेरा, गुजरात





धार्मिक समारोहों के प्रदर्शन के लिए भी किया जाता था। यह बावड़ी गुजरात की एक अद्भुद संरचना है जो यहाँ आने वाले पर्यटकों के लिए मनमोहक दृश्यों की पेशकश करती है। सूर्य कुंड के बारे में दिलचस्प बात यह है कि यह काफी व्यापक है। इसे रामकुंड या मोढेरा सूर्य मंदिर का जलाशय भी कहा जाता है।



गुजरात में प्रसिद्ध सूर्य मंदिर के परिसर में स्थित 'सूर्या कुंड' भारत के सबसे प्राचीन और शानदार बावड़ीयों में शुमार है, जो की 11वीं शताब्दी में चालुक्य वंश के भीम के शासन काल के दौरान बनाया गया था। सूर्य मंदिर पुष्पावती नदी के किनारे बना हुआ है।

यह सूर्य मन्दिर भारतवर्ष में विलक्षण स्थापत्य और शिल्प कला का बेजोड़ उदाहरण है, इसमें भगवान गणेश, विष्णु और अन्य स्थानीय देवताओं के लगभग 180 लघु मंदिर हैं। सूर्य कुंड मंदिर परिसर के पूर्वी किनारे पर एक बावड़ी के रूप में एक आयताकार कोणें में है, जिसके चारों कोणों में मुख्य मंदिर हैं।

इसमें पिरामिड के आकार की सीढ़ियाँ हैं जो दिलचस्प आयताकार पैटर्न बनाती हैं। जमीनी स्तर से, कुंड धीरे-धीरे छतों और सीढ़ियों के माध्यम से जल स्तर तक जाता है। 'सूर्या कुंड' का उपयोग न केवल पानी के भंडारण के लिए किया जाता था, बल्कि



# Pennar River



Pennar river rises from the Chenna Kesava hills of the Nandi ranges of Karnataka and outfalls into Bay of Bengal. The total length of the river is 597 km.

The principal tributaries of the river are the Jayamangal, the Kunder, the Sagileru, the Chitravati, the Papagni and the Cheyyeru. Pennar basin extends over an area of 55213 sq. km.It is bounded on the north by the Erramala range, on the east by the Nallamala and Velikonda ranges of the Eastern Ghats, on the south by the Nandidurg hills and on the west by the narrow ridges separating it from the Vedavati valley of the Krishna basin.

The basin lies in the States of Andhra Pradesh and Karnataka. The culturable command area of the basin is about 3.54 M. Ha

## One Farm Pond Transforms Lives in a West Bengal village



The tribal-dominated Purulia district of West Bengal is situated close to the Ajodhya Hills. Majority of farmers depended on Lac cultivation for livelihood. Lac cultivation is done when a farmer ties a stick containing eggs ready to hatch to the tree to be infested. Thousands of lac insects colonize the branches of the host trees and secrete the resinous pigment. The coated branches of the host trees are cut and harvested as sticklac. Lac is used for the production of resin, dye, wax etc.

The high mortality of the insects, however, made the lac cultivation non-profitable, forcing the villagers to switch to traditional agriculture. Water scarcity came as a blow to those shifted to agriculture from lac farming, and hence, water conservation by checking run-off became the need-of-the-hour. As a consequence, a farm pond with horticulture plantation was proposed in the village.

The primary objective of the creation of farm pond (known as Happa locally) was to check the run-off water during the rainy season. A farm pond with a spillway outlet was also dug close to the agricultural plot for the removal of excess water during the rainy season. This also helped in recharging groundwater. Mango and Guava were planted for a better sustainable agri-horti production system. The plantation work was executed through convergence with horticulture and food processing industry (FPI) departments of West Bengal. The Horticulture Department arranged the material component, whereas the labour component was provided under MGNREGA. An NGO was also involved in the implementation process under Usharmukti initiative of the West Bengal government

The intervention converted unproductive agricultural plots of farmers into cultivatable land. The project is also benefitting the nearby farmers by helping them to meet their water requirements. The area that had remained barren started changing gradually to farmland. Moreover, with minimal efforts such as restricting the run-off water through structures across the slopes, the low-lying areas have been converted as small reservoirs of water for agricultural purpose and groundwater recharge. As a result of the implementation of this work, 1.06 hectares of land became cultivable. Estimatedly, a total of 2.3 hectares of mixed fruit orchards has been developed benefitting several households.





## **Rejuvenation of River Sirsa in Firozabad**





The story of a 22.4 kilometer stretch of River Sirsa in Firozabad district of Uttar Pradesh is a testament of the impact small river rejuvenation can make in achieving the twin goals of water conservation and river rejuvenation. River Sirsa originates in Gorakhpur Khajoori area of Haryana and merges into River Sengar in Etawah, Uttar Pradesh. Sengar is a tributary of River Yamuna.

The work of rejuvenating River Sirsa in Firozabad district was taken up by the district administration under MGNREGA in 2020. Sirsa flows through 49 Gram Panchayats in Firozabad.

Some of the important works that were carried out as part of the rejuvenation exercise was deencroachment on the river bed, de-silting in Banipura, Santhi and Bhainsa Brajpur Gram Panchayats and plantation drive in Sandalpur Gram Panchayat of Firozabad. A total of 43979 man days were created in this work. A lot of focus is being given to small river rejuvenation under the Namami Gange Programme that envisages to clean River Ganga and its tributaries.

A network of small rivers like Sirsa feed big rivers like Ganga and Yamuna. Revival of small rivers and rivulets contributes immensely in rejuvenation of bigger rivers and improving the riverine ecosystem.



# 72 Years old finds solution to resolve the crisis of clean water.



The fear of water scarcity looms large in many parts of India. The need of the hour is to not just clean-up the freshwater sources, but conserve every drop of water and recycle as much as possible. In every Jal Charcha we come across certain stories that restore our belief that water can be conserved using endless techniques. Meet 72-year-old N. Arunachalam from Madurai who along with his family is relying solely on recycled rainwater in the last 34 years.

A former chief engineer from Madurai, Arunachalam adopted some of the best practices when it came to water conservation and is now reaping benefits of his efforts for harvesting system in place which involves catchment area, water storage tanks, filtration chamber among other things. 34 years down the line, Arunachalam uses only recycled rainwater for drinking and cooking and hasn't paid any water bill in over three decades. He strongly believes that water is nature's gift and buying or selling it is a crime and rainwater harvesting can go a long way to make us self-reliant.

N. Arunachalam, the water warrior follows 'gravity flow' technique for harvesting and recycling rainwater and aiding groundwater recharge. The collected water is



over 30 years by being water self-sufficient and not having to pay any bills for it. He started water conservation as early as 1985 by collecting rainwater in giant copper vessels, a technique that he learnt from his mother and grandmother. The collected water was then filtered using a dhoti (man's wrap around) to make it usable for the purpose of drinking and cooking. The excess water was then used for washing floor in the house with an area of 5000 sq feet.

During his civil engineering days, Mr. Arunachalam was very interested in the structural design, geology and hydraulics involving various water saving techniques. Later, he started promoting the concept of rainwater harvesting among government offices, schools and corporates when he joined Public Works Department (PWD). When his house was under construction, he ensured that the structure had adequate rainwater directed to a filter chamber and passes three layered filtration process. With the help of gravity, the filtered water is directed to the underground sump which is the storage tank to the overhead tank installed on the roof.

This way Arunachalam saves 16,000 litres of water every year is sufficient for three families. Arunchalam's family uses 8000 litres every year and the remaining 8000 litres are used by two families of tenants. Also, the stored water from borewell is utilized in bathing and washroom.

The family is relying solely on recycled rainwater and doesn't have a connection to water supplied by Municipal Corporation. Mr Arunachalam who is using only rainwater for the last 34 years believes water crisis will continue to prevail in the country because of population growth, global warming, deforestation and other things and rainwater harvest is a current plausible and doable solution.



## **Parwan Multipurpose Irrigation Project**



Parwan Major Multipurpose Irrigation Project is an ambitious project of Rajasthan located near village AkawadKalan, district Jhalawar across MP-Rajasthan inter-State river Parwan, a tributary of river Kalisindh, which in turn is a tributary of river Chambal.

It comprises a 360 m long and 38m high concrete gravity dam. Its gross storage capacity at full reservoir level is 490.40 million cubic meter (MCM). The live Storage Capacity of the reservoir is 462 MCM. The length of central ogee type spillway is 296 m. The central spillway has been designed for a probable maximum flood (PMF) of 29834 m3/sec. There are 15 redial crest gates of size 16.00 m x 15.00 m each in the spillway. The project is proposed to provide irrigation in 2,01,166 ha area of 637 villages with 60.65% intensity of Irrigation through right and left main lined canal benefitting Kota, Baran and Jhalawar districts in Rajasthan. Provision has also been made for drinking water, downstream flow in the river and supply of water for thermal power generation as 50 MCM, 16 MCM and 79 MCM respectively.

The project is to provide drinking water benefits to 1821 villages and towns of Baran, Jhalawar & Kota districts. The project envisages water supply to 2970 MW of Thermal Power Stations. The project was given investment clearance by DoWR, RD & GR in the year 2021. The project was started during the year 2017 and is proposed to be completed by Dec-2023.



## Arts, Commerce and Science College BODWAD





Pledge taking at Jalshakti Abhiyan

The Arts, Commerce and Science College is situated in Bodwad, a Taluka of Jalgaon district of Maharashtra. It is in north-western region of the state of Maharashtra which receives 772 mm of normal annual rainfall. This has caused 19-29% of drought conditions in the last ten years. Due to lack of storage and its management, Bodwad citizen face water scarcity every year. The institute based on its vast research and innovative practices had made efforts to share public awareness regarding the conservation of domestic use of water and its proper management in the Bodwad City.

The institute strongly supports the objectives of Jal Shakti Abhiyan under which Ministry of Jal Shakti is taking efforts for conservation, restoration, recharge and reuse of water. It introduced and implemented its ideas in the campus and undertook a minor research project on "A Critical Study of Water Deficiencies and its Management in Bodwad City". The research aimed at creating a sustainable community-managed water supply in rural villages. The project concluded on December 2020 and a major survey was carried out in 305 houses of Bodwad City as well as interviews with public representatives the outcomes of which was published in a book.

Moving forward, the institution also organized many interactive programs, such as, oath taking programme for Jal Shakti Abhiyan, awareness program on water conservation and environment conservation, establishment of Go-Green society, essay competition on water conservation, orientation program for the students to participate in water management survey in the Bodwad City. The project undertaken by the college



An Awareness Programme by Dr. Kapil Pawar

Jalshakti Abhiyan committee, to determine problem and the survey carried out by College Students to aware the citizens about the scarcity issues in the city. Fruitful suggestions were made to Nagarpanchayat, Government and citizens of local community. A model for smooth and perfect implementation of water management was also suggested. The institution strongly believes that if suggestive Modal is implemented by the Nagar Panchayat, problems of water supply will definitely be solved and citizens can be satisfied.

The suggestions made by the project investigators are effective in planning proper management in rural villages. Taking into account that the public representatives play important role in fulfilling public demands, institution engaged public representatives and has taken their suggestions for designing of action plan in managing water supply properly. The implementation of suggestions made to citizens, Nagarpanchayat and government authorities will be fruitful in long term planning of water management in rural areas. As per the model, the Roof top water harvesting system is effectively working and small storage dam in adopted village is helpful in small scale farming and water percolation. Also, the tree plantation around the campus makes the surrounding pleasant, green and lush.

This community based participatory approach has helped in dissemination of knowledge about the public views for water conservation. The citizens and public representatives of Bodwad has engaged enthusiastically in various initiatives and thus is resulted in good outcomes.







Union JalShakti Minister at the Evening Session of Ganga Utsav

National Mission for Clean Ganga (NMCG) organized Ganga Utsav - The River Festival 2022 on 4<sup>th</sup> November at New Delhi in two sessions. Shri G. Kishan Reddy, the Union Minister for Culture, Tourism & DoNER was the Chief Guest in the morning session in the gracious presence of Shri Bishweswar Tudu, the Minister for State, Jal Shakti and Tribal Affairs, H.E. Freddy Svan, Royal Danish Ambassador to India, Sh. Sriram Vedire, Advisor, Ministry of Jal Shakti and Sh. G. Asok Kumar, Director General, NMCG.

The evening session was presided over by Shri Gajendra Singh Shekhawat, the Union Minister for Jal Shakti in the presence of Shri Pankaj Kumar, Secretary, Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti and Sh. G. Asok Kumar, DG, NMCG. Taking inspiration from the speech of Prime Minister, Shri Narendra Modi on 26<sup>th</sup> September 2021, the central aim of the Ganga Utsav-The River Festival 2022 is to celebrate all the rivers of India (Nadi Utsav). NMCG has been celebrating Ganga Utsav since 2017 every year on 4<sup>th</sup> November, the day on which river Ganga was declared the National River of India in the year 2008.

• Ganga Utsav 2022 is dedicated to the Azadi ka Amrit

Mahotsav

- 75 events will be organised as part of the Utsav over a period of AKAM in Ganga Basin states promoting local culture
- Activities under Arth Ganga such as Ghat Mein Haat, Ghat Par Yoga, Ganga Artis etc. will be organised

Ganga Utsav 2022 is dedicated to the Azadi ka Amrit Mahotsav that is being observed to commemorate the 75 years of Indian Independence. As Ganga Utsav 2022 is held in the 75<sup>th</sup> year of independence, it is planned to have 75 separate events in Ganga and its tributary basin cities and towns, by August 2023, 3-day events in 15 major cities like Haridwar, Mathura, Delhi, Kanpur, Varanasi, Patna, Bhagalpur, Kolkata etc., 1-day events in 60 smaller towns/cities, in which local and pan-India culture based events will be promoted. Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat, began his address by congratulating everyone who became the part of the Ganga Utsav 2022 and made it known on the national as well as international stage. "The expansion of civilization is not possible without rivers, they are the elixir of life, Ganga is not just our National River but is also our cultural heritage. Despite being a country imbibing different languages, religions, cultures and music, there are



some elements that bind each one of us together and unite us. Ganga is one of them."

Union Jal Shakti Minister said "The Indian civilization and culture can never be complete without mentioning Mother Ganga. Mokshadayini Maa Ganga is not just a river, but is the very basis of religion, philosophy, culture, civilization flowing through the ages in India. Its pure flow has assimilated every aspect of the land of India. It not just gives water, but also gives nutrition and employment opportunities."

He mentioned Hon'ble Prime Minister Narendra Modi's speech in Madison Square Garden in 2014 wherein he spoke about the dream of making Ganga pollution free. "Through the efforts of Namami Gange and volunteers, River Ganga has become Aviral and Nirmal. Any cause, no matter big or small, can be achieved when we combine all the individual efforts" He thanked everyone who has contributed to the Clean Ganga Fund, irrespective of the amount donated.

Shri Shekhawat noted how in the ancient times our sages imparted religious messages on Ganga so that people keep it clean. "Through Arth Ganga, we are generating economic opportunities for the individuals living near Ganga basin," he said, adding, "Namami Gange is able to adopt a holistic and multi-sectoral approach for conservation, promotion and rejuvenation of Ganga and its tributaries. This program, run by the National Mission for Clean Ganga, is emerging as a river rejuvenation model across the country. He said that it is important to promote natural farming practices and incentivise farmers to shift to Natural Farming. Medicinal plantation should be done at a bigger scale as well. The Union Minister further said "we need to move beyond Ganga cleanliness and Nirmalta and also look into it river-people connect and prevent it from getting polluted". He also mentioned the significance of promoting tourism along River Ganga and how Ganga model can be applied to other rivers of the country for their rejuvenation. Thanking everyone associated with Ganga, he said that through Ganga Utsav 2022 people are able to connect with River Ganga and hoped for continued success.

Congratulating the NMCG on celebrating the 6th edition of Ganga Utsav, Shri G Kishan Reddy said "through this festival, the social, cultural and historical heritage of India



Union Minister for Culture, Tourism & DoNER Sh. G. Kishan Reddy addressing the gathering during the morning session of Ganga Utsav 2022

is showcased. Jan Bhagidari is very important in the rejuvenation of rivers across the country and the relation between people and rivers is so strong that rivers are revered as Mothers in India. Ganga Utsav 2022 is also representing the Azadi ka Amrit Mahotsav that is being celebrated across the country". Giving the example of Southern India, Shri Reddy said "the people across the country have immense faith in Ganga, which is a symbol of our culture and civilization. Conservation of rivers is the biggest responsibility which we have to fulfill together, especially River Ganga which selflessly provides livelihood to more than 40% of the population and constitutes more than 20% of the country's landmass".

Shri Reddy also said "various initiatives taken by the Ministry of Tourism in collaboration with the National Mission for Clean Ganga to promote tourism in the areas of Ganga Basin. These initiatives will generate employment opportunities for the local communities giving impetus to Arth Ganga, the concept espoused by the Prime Minister, Shri Narendra Modi. Ganga and

tourism are related to each other in such a way that they cannot be separated. Today, tourists from all over the world are coming to these tourist places on the banks of the Ganges. For the first time in the history of independent India, a new National Tourism Policy is being finalized by the Government of India. Ganga Utsav is a unique and one-of-its-kind event and engaging young children with river conservation is a commendable step. Cleaning our rivers is not the job of government bodies alone, but of every single individual whose lives have been touched by the rivers of the country, irrespective of caste, class, gender and religion. It is the responsibility of every individual to work towards Ganga conservation. The government's initiative in this regard has been of complete commitment and determination towards the cause".

Shri Bishweswar Tudu, Minister of State, Jal Shakti said "Ganga is not just a river but a focal point of our civilization. Ganga river is one of the oldest rivers in the world, and is revered in every family of the country. The importance of rivers in Indian culture can be known from the fact that there are many such areas like religious, social, economic, commercial, agriculture, tourism and medicine which are directly connected with our rivers. Rivers are the basis of the life of the Indian people not only as a source of water, but they have been the center of faith. When we talk about rivers, it cannot be complete unless we talk about Ganga. Among the rivers, the Ganges has a special place, which is an integral part of our Indian heritage. Ongoing projects have been tirelessly working towards Ganga rejuvenation. The main objective of this festival is to bring about a change in the behavior of people towards water and ecology with public awareness, participation, engagement among the people of the Ganga basin. The festival has acted as an important platform to strengthen ties with people from all walks of life. At the same time, it has helped in promoting development in and around the Ganga basin."

Shri G. Asok Kumar, DG- NMCG, welcomed the Union Ministers and other dignitaries to the event. He proclaimed the event to be of the people and not of one single body. He welcomed everyone present at the event and expressed his gratitude towards all the performers, children, stakeholders and participants of Ganga Utsav 2022. The 6<sup>th</sup> edition of Ganga Utsav 2022 is significant, he noted, as Ganga represents not just our National River, but also, our cultural heritage and traditions associated with it.

#### Morning Session

The morning session of the event commenced with Ganga Kalash that conveyed different sources of water and the need for water conservation followed by Namami Gange Anthem sung by Trichur Brothers. The event also saw captivating performance of Siddha Veena by Pandit Siddharta Banerjee. The dance performance by Megha Nair and team also enthralled the audience. The team performed a mix of Mohiniyattam and Bharatanatyam dance forms to an engrossed audience. A folk dance group from Uttarakhand also performed in the morning session.

Sh. G. Asok Kumar, DG-NMCG introduced the panel discussion on Women and Water by discussing how traditionally women have been responsible for fetching water. This makes women at the core of water and sanitation as they are the most affected. He noted that with women at the head of the initiative concerning clean water ensured that they are not only benefited from it, but also are the driving force in bringing about change within the society at a local level. He mentioned that Hon'ble Prime Minister Shri Narendra Modi's initiatives Swachh Bharat Mission and Jal Jeevan Mission has been a boon to the women of the country.

He thanked GIZ for initiating the dialogue and doing such wonderful work in the field. He further expressed gratitude towards women who are the driving force in the water conservation from different walks of life, be it technology, academics, administration and media on the panel. Ms. Anupama Madhok, moderated the session that included Ms. Archana Verma, MD, National Water Mission, Dr. Nupur Bahadur, TERI Dr. Lata Pandey, Music Teacher, Uttarakhand, Ms. Kanchan Rajput, Jeevan Dhara Namami Gange Foundation. The panel discussion on Women and Water initiated a dialogue on the achievements of women in the area of Ganga rejuvenation.

The discussion aimed at giving leadership opportunities to women towards social transformation and its need in the water sector. The discussion concluded with the hope for a long series of dialogue of women and their fight for Ganga rejuvenation. The trailer of the movie - Ek Ank – was also screened in the morning session showing how individuals



Namami Gange



Union Minister for Culture, Tourism & DoNER Sh. G. Kishan Reddy along with MoS Jal Shakti & Tribal Affairs Sh Bishweswar Tudu & DG NMCG, Sh G. Asok Kumar

can be a part of river conservation. A folk musical performance-Dhariya Chaufila Nritya-by the Uttarakhand group made the atmosphere even more enthralling. Another special segment began with Ms. Seema Wahi Mukherjee wherein she did a mesmerizing storytelling on Gangetic Dolphins. She gave a message on protection of water bodies and living organisms within them. Ms. Megha Nair and her team gave another performance on the fusion of Mohiniyattam, Bharatanatyam, Odissi, and Kathak. Nukkad Natak was also performed to raise awareness on keeping the Ganga clean and encouraging individuals to their part in this cause.

#### **Evening Session**

The main event of the evening session was the performance by Padma Shri, Ms G. Padmaja Reddy and her group on the journey of Ganga. The evening session commenced with Ganga Arti and Namami Gange Anthem. Shri Pankaj Kumar, Secretary, Do WR, RD & GR, Ministry of Jal Shakti and Sh. G. Asok Kumar, DG- NMCG felicitated partner NGOs who are doing Yamuna River Ghat Clean ups, a Namami Gange initiative, on a regular basis. These involved Yuva Sangharsh Social Foundation, Swachh Yamuna Abhiyan, Swami Dayanand Hospital and National Nurses Organisation, Tree Craze Organisation, and Say Earth. Dr. Chitra Roy from Art of Living gave a beautiful satsang that created a mesmerizing atmosphere of the evening. Jal Tarang was performed by Bimal Jain and invoked the strength of water through a musical performance. Rajasthani Dance Performance filled the crowd with vigour and added new energy to the event. Shri Gajendra Singh Shekhawat felicitated 17 major contributors to the Clean Ganga Fund.

The other attractions of the event were Puppet Show, Film Screening, Painting, Pottery & Nest Making Workshop, Book Stall, and Food Stalls offering scrumptious food roped in the younger crowd to the Ganga Utsav 2022. The film screening and the storytelling session by Ms. Rituparna Ghosh offered new insights on the river rejuvenation and opened dialogue on inventive ways to counter waste management. The event highlighted the significance of river- people- connect in the mission of Ganga revival and brought focus on stakeholder engagement and public participation towards Ganga rejuvenation.









The 7<sup>th</sup> India Water Week was graced and inaugurated by Hon'ble President Smt. Droupadi Murmu. The event was also graced by Hon'ble Governor, Uttar Pradesh Smt. Anandiben Patel, Hon'ble Chief Minister, Uttar Pradesh, Shri Yogi Adityanath, Hon'ble Union Minister of Jal Shakti Shri Gajendra Singh Shekhawat, Hon'ble Ministers of State for Jal Shakti Shri Prahlad Singh Patel, and Shri Bishweswar Tudu at India Expo Centre, Greater Noida on 01.11.2022. Shri Pankaj Kumar, Secretary, DoWR, RD&GR, Ministry of Jal Shakti welcomed all the dignitaries for the 7<sup>th</sup> India Water Week.

The event commenced with the auspicious ceremony of "Jal Bharo" by our Hon'ble President Sh. Droupadi Murmu and Dignitaries present in the dias by pouring water into the vessel, strengthening the vision of Jal Shakti. This ceremony symbolized the immense importance of water conservation. Hon'ble President of India, Smt Droupadi Murmu, praised the initiative of Ministry of Jal Shakti in safeguarding precious water. Mentioning water as a vital resource for life, she discussed the relevance of saving water for a futuresecure Nation. In her inspirational address to the conclave, she accentuated that these five day-long events will embrace key players and address the issue of water sustainability. Over the course of the events Smt. Akli Tudu, Water Warrior, Jharkhand & Smt. Hira ben, Water Warrior, Bhuj, Gujarat narrated their experience in water conservation in their areas citing various initiatives, cases of rejuvenation and crops raised in the command areas.

The Plenary session was also held under the chairmanship of Shri Gajendra Singh Shekhawat, Hon'ble Union Minister for Jal Shakti. H.E. Mr. Shoimzoda Jamshed, Hon'ble First Deputy Minister of Energy & Water Resources, Republic of Tajikistan, HE Eng. Maryprisca Winfred Mahundi, Hon'ble Dy. Minister of Water, Tanzania, Dr. Asit K.Biswas, Visiting Distinguised Professor, University of Glasgow, Shri A.D. Mohile, Former Chairman, Central Water Commission, Shri Mark Smith, Director General, IMWI took part in the session and deliberated their views on the water security and conservation and the challenges in climate change, etc. Hon'ble Union Minister Shri. Gajendra Singh Shekhawat Ji also





inaugurated the Exhibition at the  $7^{th}$  edition of India Water Week 2022. He also attended the cultural program which showcased incredible performances. Water and culture are inseparable elements of human life

The second day of 7<sup>th</sup> India Water Week displayed similar fervor as the first day with large number of participants reaching the venue. Multiple stakeholder participation was its remarkable feature. A series of insightful sessions were attended by large number of delegates to share their viewpoints and came up with shared ideas and solutions. A high-level policy dialogue on "Accelerating SDG-6 achievements through Multi Stakeholder Partnership" was help under the Chairmanship of Hon'ble Union Minister of Jal Shakti Sh. Gajendra Singh Shekhawat.

The special address for the event was delivered by Shri. Kailash Choudhary, Hon'ble Union Minister of State for Agriculture, Government of India. The main objective is to identify and find solutions on several bottlenecks impeding greater progress on SDG-6 acceleration. Hon'ble Union Minister Sh. Gajendra Singh Shekhawat gave an enriching perspective on multi stake holders approach and reiterated the quote of Vasudev Kutumbakam (the world is one) to corroborate the fact that the countries have unified and come together to deal with the Sustainable Development Goals rather than

focusing on geographical difference which is the need of the hour.

Shri. Kailash Choudhary, Hon'ble Union Minister of State for Agriculture talked through the innovative measures of rural agriculture and climate resilient Crops that requires less irrigation and yields more productivity

Ms. Gayatri Sharma, a water warrior in the field of water conservation narrated her success stories from Jal Siksha to Jal Suraksha. She talked about the challenges she faced and overcame during her path breaking journey.

Hon'ble Union Minister Shri Gajendra Singh Shekhawat addressed the conclave on Rural WASH Partnerships -Way Forward with his valuable and inspirational insights. He launched the Swachh Survekshan Grameen Tool Kit, SSG-2023 Dashboard and Retrofit Twin Pits Module. The enthusiasm remained at peak for the  $3^{rd}$  Day of the  $7^{th}$ India Water Week as the crowd arrived at the venue with new energy. The day brought new set of enthralling sessions full of valuable insights. There was one technical session on "Emerging technological solutions for efficient water management", three Panel discussions on Water education, Public awareness - role of Media, Decentralized solutions for water management and Role of Civil society in efficient water management. On the third exciting day of '7th India Water Week' various interesting activities were organized like drawing











competition, Nukkad Naataks and debates around the theme, "Awareness of Children on Water". Such activities are a way of expressing thoughts in a unique way. With great enthusiasm, about 250 students and 30 teachers attended the events. About 90 children participated in painting competition also.

Hon'ble Minister of State Shri. Bishweswar Tudu visited the enthralling and interesting exhibition showcasing the innovative ideas and practices by various organization

On day 4, an objective session on India-EU Water Partnership was held to contribute on the shared vision by India and the EU for a sustainable management of water resources and tackling the challenges posed by water management in the context of growing population, competing water demands and climate change. The session aimed to contribute with possible ways on Water Security for Sustainable Development with Equity. The India- EU Water Partnership is an outcome of the 'Joint Declaration on India- EU Water Partnership adopted by the EU and Government of India during the 13<sup>th</sup>EU-India Summit.

The EU and India have agreed to scale up cooperation on water management in the framework of the EU-India Water Partnership, notably to tackle water pollution in line with the water-related Sustainable Development Goals and underlined the importance to address water challenges in the context of climate change.

Hon'ble Minister of State, Jal Shakti Sh. Prahlad Singh Patel also visited the stalls at the 7<sup>th</sup> India Water Week

enticing exhibition. He paid visit to each stall and his presence amplified excitement in the arena.

The Valedictory session of "7<sup>th</sup> India Water Week" was graced by the auspicious presence of Hon'ble Vice President Sh. Jagdeep Dhankhar ji in the presence of Sh. Narendra Singh Tomar, Hon'ble Union Minister of Agriculture & Farmers Welfare, Sh. Gajendra Singh Shekhawat Hon'ble Union Minister of Jal Shakti, Sh. Prahlad Singh Patel, Hon'ble Minister of State for Jal Shakti, Sh. Bishweswar Tudu, Hon'ble Minister of State for Jal Shakti, Sh. Swatantra Dev Singh, Hon'ble Minister of Jal Shakti, Uttar Pradesh.

Hon'ble Vice President Shri. Jagdeep Dhankhar Ji during his address appreciated the effort and vision of Ministry of Jal Shakti in bringing about a change in the field of water sector. He corroborated that with several initiatives, an ordinary man now is close to living a better life. He appreciated the efforts of Swachh Bharat Abhiyan and the new dimension it has given to the meaning of Sanitation and Cleanliness. With his wise words he appealed everyone with special emphasis to Media to propagate a thought-process on optimum and efficient use of water resources and generate awareness. The Vice President in his speech appreciated the vision of Hon'ble Union Minister of Jal Shakti Sh.Gajendra Singh Shekhawat.

He appreciated the hardwork and dedication put by Sh. Pankaj Kumar, Secretary, DoWR, MoJS GoI, Smt. Debashree Mukherjee, Special Secretary, DoWR, MoJS







and Sh. Bhopal Singh, Director General, NWDA for bringing together the delegates from around the world in one platform to share their vision and valuable insights.

Hon'ble Union Minister of Jal Shakti Shri. Gajendra Singh Shekhawat shared his words of wisdom and emphasized that people gathered for 7<sup>th</sup> India Water Week has played major role in bringing solutions for water management under one roof. He pointed that these five daylong events have reiterated the phrase of "Let us all come together and let us all think together." The delegates from around the world, the panelist discussions and success stories have inspired and set an example for us all and has opened a lot of doors for solutions. This mega event has brought about a change in perspective & added value for everyone.

He corroborated that the five-day mega event has enriched our knowledge and insights and this event has opened so many doors to bring meaningful change in the water sector and sustainable development. He also thanked Denmark, Finland and Tajikistan for their participation and valuable contribution to the event.

Hon'ble Union Minister of Agriculture & Farmers Welfare Sh. Narendra Singh Tomar, addressed the gathering and emphasized on the need to bring new and innovative technologies to strengthen agriculture. Shri. Pankaj Kumar Secretary of Department of Water Resources delivered a key note address appreciating the participants, stakeholders, panelists and young minds, for enriching the event with their beautiful insights.

Smt. Debashree Mukherjee Special Secretary, DoWR, MoJS, GoI delivered a key note address by sharing her valuable insight on the event and how the event has played a key role in enriching the theme of Water Security for Sustainable Development with Equity.





# 41<sup>st</sup> Water Talk



The 41<sup>st</sup> Water Talk, organized by National Water Mission, was delivered by Dr. Lior Asaf, Water Attache, Embassy of Israel, New Delhi on the topic "Opportunities and Challenges of India Water System: An Israeli Perspective".

Ms. Archana Varma, Mission Director, National Water Mission, welcomed the speaker and in her opening remarks, highlighted the importance of Water as the nourisher and sustainer of our greatest ancient civilizations which developed on the banks of the mighty rivers. She highlighted that it was water which made primates into sapiens. She also informed that India was home to more than 18 % of the world's population, but had access to only 4% of the world's renewable water resources. As per the data of Central Agencies, India on average received 4000 BCM of precipitation, out of which utilizable water resource was 1123 BCM consisting of 690 BCM of ground water and 433 BCM of surface water.

As India was growing at fast pace, the demand for water had also increased from 710 BCM in 2010 to 850 BCM in 2025 and was expected to reach 1180 BCM by 2050, which was even higher than the available utilizable water resource of 1123 BCM. To deal with these impacts of climate change, she highlighted, that the National Water Mission was conceived in 2011 under NAPCC and was currently addressing the challenge through its five goals. MD, NWM also mentioned the different schemes launched by Ministry of Jal Shakti to deal with the challenges of water availability.

Mr. Lior Asaf initiated his talk by mentioning the water availability in India and that more than 91% of its use was for the agricultural sector and even after that 48% of agricultural land was dependent on rain fed agriculture. India was currently using more water than that of combined use by China and USA and continuing that kind of use would raise higher challenges in future.

The speaker highlighted that in India, to address these challenges the works were being done in silos i.e., water to agriculture, to industries, to urban supply and others were being dealt by different Ministries/stakeholders and that may be challenge while doing long term integrated water planning. However, India was investing a lot in water and sanitation infrastructure through Jal Jeevan Mission, AMRUT and Namami Gange programs/schemes and next decade would be a window of opportunity for India to develop a economic, social and engineering model, for the water and sanitation program to be run efficiently and sustainably.



On Israel, he said that Israel was initially dependent on aquifers, then tried to transfer water from surplus region i.e., sea of Galilie to southern part of Israel, but this was not a sustainable solution as it was very energy consuming and also resulted in water crisis in sea of Galilie itself. This crisis had forced Israel to devise a new way of sustainable water resource solution of re-use of waste water and desalination of water. Until 1988 the natural water was the only water resource available to them and after that Israel started desalination project and by developing a new water resource, they succeeded to decrease the natural water consumption to its sustainable value. Further, wastewater reuse national policy called for the gradual replacement of freshwater allocation to agriculture by recycled effluent sewage water. Israel presently treated 97% of its municipal wastewater, out of which they reused 82% and released 18% to rivers or the sea. The success factors behind Israel's model, he stated, was an Integrated Water Authority, subsidies for construction of Wastewater treatment plants, transparent regulations, development of alternative source of water resource by desalination, Enforced regulations and Technological Innovation.

In case of India, Dr. Asaf suggested that desalination may be resorted to in the areas along the coastal line, need of efficient water distribution system from resource to root, resort to drip irrigation etc. Thus the way forward for India is "to create water source at farmer level by connecting STPs to farmers; eliminating uncertainty i.e., generating stable, known water availability at farmer level; Using smart agriculture and irrigation to increase farmer's output.

AS&MD, NWM in her closing remarks stated that while Israel's policy were significant, India due to its size and statutory framework was different from Israel and so strategies were not directly transposable. She also highlighted, some of the wonderful water structures from the past. She thanked Dr. Lior Asaf for the wonderful deliberation and key insights.

## सर्वश्रेष्ठ ग्राम पंचायत - सियालसीर, मिजोरम





सियालसीर गांव भारत के मिजोरम में सिरचीप जिले के पूर्वी लूंगदार उपखंड में स्थित है। राज्य के सबसे पुराने गांवों में से एक सियालसीर गांव की आबादी तकरीबन 350 है। इस गांव के लोगों ने जनभागीदारी का सटीक उदाहरण देकर जल संरक्षण के क्षेत्र में काम करके गांव को जल समर्थ बनाया है। जल की गंभीर कमी से जूझ रहे सियालसीर गांव के जल समर्थ बनने का यह सफर बेहद दिलचस्प और प्रेरक है। जल चर्चा के इस अंक में हम सियालसीर गांव में जल संरक्षण मुहीम के सफर पर बात करेंगे।

सियालसीर गांव मुख्य रूप से ग्रेविटी सिस्टम स्किम पर निर्भर है जिसमें गुरुत्वाकर्षण बल का उपयोग करके, पानी को पाइपवर्क द्वारा घरों के पास बनाए गए नल के स्टैंड में ले जाया जा सकता है इससे पानी ले जाने की मेहनत थोडी कम हो जाती है। मौजूदा योजना 1998 में कमीशन किया गया था और कमीशनिंग के समय यह योजना आईवीएसएस के साथ 40 एलपीसीडी (लीटर प्रति व्यक्ति प्रति दिन) दर पर पानी की आपूर्ति प्रदान करती है, लेकिन जनसंख्या में वृद्धि के कारण और साल-दर-साल जल स्रोत का कम होने की वजह से वर्तमान में पानी की आपूर्ति दर मात्र 7.5 एलपीसीडी है जो जीवित रहने और पानी की कमी के स्तर के लिए न्यूनतम है। गांव में पानी की सप्लाई गांवों की आबादी के हिसाब से अपर्याप्त थी और वाटर वर्क्स सिस्टम के पुराने व खराब होने के कारण पूर्ण प्रतिस्थापना की आवश्यकता थी जिसके लिए नाबार्ड 2016-2017 के तहत सियालसीर वर्षा जल संचयन कार्यान्वित किया गया और वर्ष 2018 में इस योजना को पुरा किया गया। योजना नाबार्ड के तहत 3 लाख लीटर क्षमता के 9 कंक्रीट सीमेंट जलाशय पानी के भंडारण के लिए बनाई गई जिसकी कुल मिलाकर भंडारण क्षमता 27 लाख लीटर है।

वर्तमान में, गांव 55 एलपीसीडी के स्तर पर पानी की आपूर्ति में आत्मनिर्भर है। वाटर वर्क्स की देखरेख सियालसिर WATSON समिति द्वारा की जाती है जो पानी के कार्यों का रख रखाव व ऑपरेशन कार्यों की देखरेख के लिए पूरी तरह से जिम्मेदार है। सियालसीर निवासी पोधरोपन और आरक्षित वन क्षेत्रों के निर्माण व वर्षा जल की मात्रा को संरक्षित करने में अपना समय का उपयोग करते है। गांव के निवासीयों ने चेक डैम का निर्माण किया, जिससे बारिश के पानी को मिट्टी की सतह से धीमा बहने में मदद मिले और भूमिगत वर्षा-जल संग्रह हो। यहां वाटरशेड विकास कंटूर ट्रेंचिंग और वृक्षारोपण के लिए किया जाता है, कंटूर ट्रेंचिंग एक कृषि तकनीक है जिसे शुष्क उप-सहारा क्षेत्रों में आसानी से पानी संरक्षण और कृषि उत्पादन बढ़ाने के लिए लागू किया जाता है।

इसने गांव की अर्थव्यवस्था और सामाजिक जीवन को भी ऊपर उठाया है। अब ग्रामीणों को झरने के स्रोतों से पानी इकट्ठा करने और उन्हें मैन्युअल रूप से ले जाने में अपना बहुमूल्य समय बर्बाद करने की आवश्यकता नहीं पड़ती, अब लोग कुछ ऐसे काम में अपना समय बिताते है जिससे उनकी आय में सुधार होता है। इसके अलावा, उन्हें अब निजी विक्रेताओं से पानी खरीदने के लिए अपनी बहुमूल्य मेहनत की कमाई खर्च करने की ज़रूरत नहीं पड़ती है। सियालसिर गांव के निवासियों द्वारा किए गए विभिन्न प्रयासों के माध्यम से, गांव अब पानी की उपलब्धता में आत्मनिर्भर है। इससे गांव के जन स्वास्थ्य और स्वच्छता में काफी सुधार हुआ है। इन्हीं प्रयासों को देखते हुए भारत सरकार ने तीसरे राष्ट्रीय जल पुरस्कार में सर्वश्रेष्ठ ग्राम पंचायत के प्रथम पुरस्कार से सियालसीर गांव को सम्मानित किया था।



जल और हम

### वर्षा जल को क्यों संग्रहित किया जाना चाहिए ?

### भारत में कितना जल संग्रहित किया जाता है ?

भारत में वर्षा का केवल 8% जल संग्रहित किया जाता है।

### वर्षा जल को कैसे संग्रहित कर सकते हैं?

वर्षा जल बांध, छोटे बांध और तालाबों से संग्रहित किया जा सकता है। इसके अलावा, भवन की छतों पर गिरने वाला जल टॅंकीयों में संग्रहित किया जा सकता है।

### छत पर गिरने वाले वर्षा जल का उपयोग कैसे करें ?

यह जल निम्न स्थानों में संग्रहित कर सकते हैं:

- टॅंकी
- 🔹 कुएं या ट्यूबवेल
- रिसाव तालाब, खेत तालाब
  - संग्रहित जल का उपयोग कृषि या घरेलू कार्यों के लिए किया जा सकता है। इसे थोड़ा प्रसंस्करण द्वारा पीने योग्य बनाया जा सकता है।

यह करके देखें एक साधारण वर्षा मापक यन्त्र बनाकर अपने क्षेत्र में होने वाली वर्षा को मापें।

### वर्षा से भारत को कितना जल प्राप्त होता है ?

हर साल वर्षा से भारत को लगभग 4,000 घन किलोमीटर (1 घन मीटर = 1000 लीटर) जल प्राप्त होता है । परंतु ...

- अधिकतर वर्षा केवल मानसून के दौरान (जून से सितंबर) होती है ।
- कुछ स्थानों की तुलना में अन्य स्थानों पर बहुत कम वर्षा होती है । जैसे, कोंकण की तुलना में मराठवाडा में कम वर्षा होती है ।
- वर्षा का अधिकांश जल देश भर की प्रमुख नदियों के माध्यम से समुद्र में मिलता है । जल की थोड़ी मात्रा मिट्टी में अवशोषित होती है और उससे भी कम मात्रा जलाशयों में संग्रहित होती है।



### वर्षा जल को क्यों संग्रहित करना चाहिए ?

भारत में लगभग 80 % जल का उपयोग कृषि के लिए किया जाता है । इसमें से अधिक जल जमीन के भीतर से निकाला जाता है । हम जमीन में रिसने वाले जल की अपेक्षा जमीन से अधिक जल खींच रहे है । इसलिए, यदि हमने भूजल के उपयोग को कम करके वर्षा के जल का उपयोग नहीं किया तो भविष्य में भारी जल - संकट का सामना करना पड़ सकता है ।

### गणना करें कि वर्षा का कितना जल एकत्रित किया जा सकता ?

- अपने क्षेत्र में औसत वार्षिक वर्षा का पता लगाएं। आप यह जानकारी समाचार - पत्र या अन्य स्रोत से पा सकते हैं। आप खुद भी वर्षा मापक यंत्र बनाकर वर्षा को माप सकते हैं।
- उस स्थान के क्षेत्रफल को मापें जहां वर्षा के जल को एकत्रित किया जा सकता है। जेसे: अपने स्कूल या घर की छत।
- इस सूत्र का उपयोग करके पता लगाएं कि कुल कितना घन मीटर जल एकत्रित हो सकता है: वार्षिक वर्षा (मीटर में) क्षेत्रफल (वर्गमीटर में)









## शहरी स्थानीय निकाय सुधार

कच्छ गुजरात राज्य का एक जिला है, जिसका मुख्यालय भुज में है। गुजरात की यात्रा कच्छ भ्रमण के बिना अधूरी मानी जाती

है।अमिताभ बच्चन द्वारा कही गई लाइन "कच्छ नहीं देखा तो कुछ

नहीं देखा"..... एकदम सही प्रतीत होती है। गुजरात घूमने आए और आपने कच्छ नहीं देखा तो गुजरात की यात्रा व्यर्थ है। ऐसा

इसलिए क्योंकि कच्छ संस्कृति, कला और परंपराओं का गण है।

यहां आपको एक नहीं बल्कि कई तरह की कलाओं और समुदाय के लोगों से रूबरू होने का मौका मिलता है। कच्छ का शाब्दिक

अर्थ कछ ऐसा है जो रुक-रुक कर गीला और सखा हो जाता है।

इस जिले का एक बडा हिस्सा कच्छ के रण के रूप में जाना जाता

है जो उथली आर्द्रभूमि है व बारिश के मौसम में पानी में डूब जाता

'रहिमन पानी राखिए, बिन पानी सब सून। पानी गए न ऊबरे मोती

मानुष चून' नीतिवाद से प्रेरित वर्षो पुराने इस दोहे को भुज के लोगों

ने गंभीरता से लिया, क्योकि भुज जैसे शुष्क क्षेत्रों में पानी एक

अनमोल संसाधन है, इसलिए यहां के पूर्वजों ने 100 वर्ग किमी. में

भुज की स्थापना की। शहर में पानी की आवश्यक्ता को पूरा करने

के लिए बडे-बडे झीलों व 70 से अधिक तालाबों का निर्माण

कराया। कच्छ शहर में मांडवी, भचाऊ, रापर, नलिया जैसे शहरी

केंद्र सड़क से अच्छी तरह जुड़े हुए है। भुज शहर नगर पालिका

द्वारा शासित है। यहां वर्षा अत्यधिक स्थानीय होती है और भारी

है और अन्य मौसमों में सुख जाता है।

मात्रा में होती है। आम तौर पर, प्रत्येक 10 वर्षों में, तीन वर्ष लगभग शुष्क होते है और एक वर्ष औसत से अधिक वर्षा होती है। कच्छ में समुद्री वातावरण में भी बड़े हिस्से बनते है, जो स्वाभाविक रूप से खारे भूजल का मुख्य कारण है। पानी की कमी के मुद्दे से निपटने के लिए रामदेवनगर-भुज में भूरे पानी के पुनर्चक्रण के रूप में स्थायी समाधान, विकेन्द्रीकृत अपशिष्ट जल उपचार प्रणाली प्रदान की गई है और अक्टूबर-2020 से चालू है।

यह प्रणाली गुजरात सरकार की राजीव आवास योजना के 116 परिवारों वाले क्षेत्र में प्रति दिन पुन: उपयोग के लिए 15,000 लीटर उपचारित पानी प्रदान करती है। इन्ही गतिविधियों के सफल कार्यान्वयन के लिए विभिन्न गतिविधि जैसे पानी बचाओं और पर्यावरण बचाओं, सोशल मीडिया आदि विषय पर पोस्टर बनाने की प्रतियोगिता के माध्यम से व्यापक सामाजिक जागरूकता पैदा की गई। क्षेत्र में 45 लाख रूपये की अनुमानित लागत से पानी का उपयोग मुख्य रूप से गैर-विकेंद्रकृत अपशिष्ट जल उपचार संयंत्रों के लिए पीने योग्य खपत और घरेलू तैयारी के लिए उपयुक्त है।

जैसा की माननीय प्रधानमंत्री नरेन्द्र मोदी जी का कहना है- जल से जुड़ा हर प्रयास हमारे कल से जुड़ा है. इसमें पूरे समाज की ज़िम्मेदारी होती है। इसके लिए सदियों से अलग-अलग समाज, तरह तरह के प्रयास लगातार करते आये हैं। ऐसे ही उदाहरण योग्य कच्छ जिला भी है जिसके जल के क्षेत्र में प्रयास सराहनीय है।





## **KARKARIA TARA MAA** Water User Association





Sit & Draw Competition on awareness of water uses

Water User Associations are continuously bringing together farmers for the purpose of managing a shared irrigation system. With similar goals, Karkaria Tara Maa Water User's Association of Nakashipara Block in Nadia District, West Bengal was formed with 69 benefitted farmers of a River Lift Irrigation (RLI) scheme constructed under West Bengal Accelerated Development of Minor Irrigation Project. It is functioning very well as a farmer's organization and playing a pivotal role to enhance the socio-economical condition of the small and marginal farmers as well as focusing on water management. The total command area of the scheme is 150 Bighas i.e 120 Bigha Agriculture land and 30 bigha orchard plantation land is being irrigated through this scheme.

This Water User's Association consisting of 69 members has a governing body headed by President, Secretary and Treasure. There are some sub-committees who maintain and distribute the work and are active to conduct meeting monthly/season-wise as per the requirement.

The Association work diligently towards crop planning and irrigation. To continue with the smooth functioning, WUA has installed distribution pipe by their own corpus fund to distribute irrigation water to minimize water seepage in the ground and also use new agricultural technology to minimize the loss of irrigation water. The installation of RLI scheme has converted the land to triple cropped area which was mono cropped before the



Paddy Seedling Transplanting

installation. The optimum and judicious use of irrigation water has allowed the farmers to cultivate pulses, oil seeds, Rabi crops. In addition to this, they persistently try to implement many innovative water saving technology like Mulching, SRI, Drip Irrigation, Mixed Cropping. To generate awareness, WUA conduct various types of awareness programs like Water Day, National Farmer's Day, Women's Day and World Soil Day or disseminate information on best irrigation techniques, water saving and management practices and good agricultural practices.

The members of the Association as well as the villagers have taken up the practice of watering the kitchen garden with excess household water. They use vermincompost as organic manure for vegetable cultivation in their fields and try to minimize the use of water in irrigation through various innovative techniques such as Paira Cropping Technique. Such innovative and adaptive practices have also led to increased income.

To conclude, one must draw inspiration from Karkaria Tara Maa Water User's Association as they have continuously tried to share their good agricultural practices among the people of their neighborhood for holistic development of the entire community. Such Associations does not only set an excellent example for others but also their enthusiasm and flair for innovation helps them to work towards the betterment of the Village.

## National Water Informatics Centre



### Meetings on the IWCIMS project

A meeting was held on 20<sup>th</sup> October 2022 on conclusion of feasibility study of IWCIMS. A presentation was made to Honourable Minister of Jal shakti covering various important topics such as:

(i) Project background from conception stage to MoA with WAPCOS

(ii) Unification of all IT based systems of MoJS, integration of all data within MoJS and from other ministries/organizations into a single platform, avoidance of duplication of systems and deciding the technology, software, relevant applications, implementation methodology etc.

(iii) Finalization of IWCIMS system with 9 Themes, 68 Applications, 218 Use cases with 1200 plus data points.

(iv) Data point identification and their availability status

(v) Proof of Concept developed by HARSAC

(vi) O&M for all the applications and required manpower

(vii) Procurement and other project related activity such as BSR Finalisation, data cleaning, adding of additional data streams, standardization of GIS Geo tagging, coding standards etc.

(viii) Total cost effectiveness

The meeting was attended by the representatives of HARSAC, JJM, WAPCOS and NWIC officials.



### Training on setting up of swic

A three-day online training programme from 17<sup>th</sup> to 19<sup>th</sup> October 2022 was organised by NWIC for professionals from Water Resources Department, Govt. of Punjab for setting up of SWIC. In the training, NWIC experts explained the benefits of setting up a State Water Informatics Center (SWIC) as a state water data repository to facilitate better management of water resources data across the state.

The NWIC team also provided a thorough explanation of the role and support that NWIC will offer to states in order to establish SWIC and develop State-WRIS.

#### Meeting with NIC-JJM on Existing Jal Jeevan Mission (JJM) Applications

On 27<sup>th</sup>October 2022 and 31<sup>st</sup>October 2022, a meeting with NIC-JJM was held to finalize requirement of additional MSSQL DBMS licenses for existing JJM system for IMIS, WQMIS & Mobile App. A presentation was made by NIC-JJM covering details on proposed deployment architecture and challenges in the existing system which was followed by detailed discussion on the queries raised by NWIC to finalize the additional licenses requirements including:

(i) The approach adopted for assessing the license requirements with the assumptions considered like time period, user load, concurrency etc.

(ii) The maximum number of concurrent user load experienced by the application till date.

(iii) The trend of increase in user load on various time frequencies like monthly, yearly etc. for last two years

(iv) The operations having latency issues.

(v) The load testing results of the applications.

The meeting was attended by the NIC team, HARSAC, WAPCOS and NWIC officials.



### Trainings on india-wris & wims

In October 2022, NWIC conducted various trainings for the NHP implementing agencies on India-WRIS Data Input Builder: Artificial Recharge Structure & Online Web Editor and WIMS modules (Station Management, MIS Dashboard, Email and SMS, and Manage Contacts, on Data-Entry, Data View, Data View Management, Import Tool, Data Validation & Data Download).

The participants were briefed about the user interface and functionalities of the modules, followed by a live demonstration by the NWIC expert.



## West Bengal Enhancing agricultural productivity through state- of -the art project



West Bengal is a beautiful state that attracts a significant number of tourists every year as the State is jeweled with mesmerizing landscapes, snow-clad mountains, gushing sea, blossoming tea gardens, enormous deltas, lush green forests, plentiful wildlife, ancient temples and magnificent British monuments. The Tiger Hill, the Howrah Bridge, the Tea Gardens are some of the famous tourist spots which offer an insight into the vast culture and history of the West Bengal. The culture of the State is adorned by colorful fairs and festivals every month. A vast number of famous pilgrimages also attract a large number of tourists of all faiths and beliefs.

However, the State deals with issue of water resources management in water-scarce region of West Bengal, an eastern region State of India, where the majority of rural population depends on agriculture for their livelihood. The State of West Bengal tries to provide a replicable framework as a solution to ecological inequality in the face of looming impacts of climate changes. WB ADMI Project (West Bengal Accelerated Development of Minor Irrigation Project) is a World Bank supported project implemented by Water Resources Investigation & Development Department (WRI&DD) Government of West Bengal since 2012-2019.

The project objective is to enhance agriculture production in the rainfed and underprivileged areas of the State by creating assured irrigation facilities. The project works through Water Users Associations (WUAs) and extends the agriculture support services including agriculture, horticulture & fishery activities to the beneficiary farmers to maximize the returns from agriculture.

Key learning of the WBADMI Project is that any standalone irrigation infrastructure development without community involvement is not sustainable. In this project community involvement has been ensured through integration of agriculture support services like agriculture, horticulture and fishery activities in the irrigated command area of the minor irrigation schemes. In existing system of governance these sectors are handled by different Government Departments. In WBADMIP the focus is on outcome and there is an effective convergence through community participation. Integration of these together helps in improving effectiveness and continuously growing command area. This has resulted into a better ownership of the community. Farmers are organized in the form of Water User Associations (WUAs) which take active part in the project right from the stage of conceptualization to operation and maintenance. WUAs formed in this project are today involved in operation & maintenance of the minor irrigation infrastructure, better water management practices & crop planning to maximize the command area, production of high value crops and various



Picture from the study area of IWMI field team visit

fish species. WUAs collecting water charges for the water service provided to its beneficiaries on agriculture, horticulture & fishery purpose. which has created a sustainable model for infrastructure management in this sector. Engagement with WUAs in this project is on ethical principles which have led to their empowerment. The major components of the project are Strengthening community-based Institution - Water User Associations (WUAs). Development of Minor Irrigation (MI) schemes, Agriculture Support Services- Agriculture, Horticulture & Fishery Project Management. A total of 1292 minor irrigation schemes have been introduced that are, Check dams, Solar Dug Well, Water Detention Structures, Tube wells etc. Also WUA's have come up with water conservation structures such as, Hapa, Farm Pond, Pit development, Trenches, Orchard Development, Indara(Dug well). Also, 138 Solar irrigation system has been introduced and installed which is managed by the WUA.

WBADMI Project is an innovative project to reach out to the small & marginal farmers particularly tribal men and women. More importantly, Water Users Associations (WUAs) have been organized and empowered to operate & maintain their irrigation schemes and better manage available water resource in a sustainable manner. The project provided the full flexibility, human & financial resources and single window delivery system to demonstrate integrated development model around irrigation. WBADMIP created irrigation potential for almost 75000 Ha covering 1, 14, 000+ farmers (small & Marginal Farmers-83%, Tribal-12% and Women-17%).

WBADMIP has clearly demonstrated the importance of community involvement as WUAs for long term sustainability of the project interventions. Facilitation for the adoption of agriculture, horticulture and fishery activities has helped in improving more effective & efficient functioning of the irrigation schemes. Crop diversification, introduction of Pulses & Oil seed crops in cultivable waste land, development of private wastelands, facilitating adoption of good practices & technologies, organic practices and entrepreneurial activities particularly fisheries has helped in improving the socioeconomic status collectively.

### Cabinet approves signing of a MoU between India and Denmark on cooperation in the field of Water Resources Development and Management



The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, was apprised of a Memorandum of Understanding (MoU) signed between India and Denmark on cooperation in the field of Water Resources Development and Management.

The MoU will thus broadly strengthen cooperation in the field of water resources development and management; rural water supply; and sewage/ wastewater treatment through direct collaboration between officials, academics, water sectors and industry in the areas under scope of cooperation.

A Letter of Intent was signed between Ministry of Jal Shakti, Gol and Ministry of Environment, Govt. of Denmark on 03 May, 2022 during visit of Shri Narendra Modi, Prime Minister of the Republic of India to Denmark. As a follow up of Letter of Intent,



an MoU between DoWR, RD & GR, Government of India and Ministry of Environment. Government of Denmark was signed on 12.09.2022 during visit of Hon'ble Minister of Jal Shakti to Denmark.

### "Preventive Vigilance - A key tool to Efficient Management at WAPCOS & NPCC"

WAPCOS and NPCC organised a conference on "Preventive Vigilance - A key tool to Efficient Management at WAPCOS & NPCC" on 4th November 2022 at CSOI Auditorium, Chanakya puri, New Delhi. Shri Pankaj Kumar, Secretary, DoWR, RD&GR, Ministry of Jal Shakti, Govt. of India was the Chief Guest. Shri Shailendra Singh, Chief Technical Examiner, CVC and Dr. Nitin Deep Blaggan, DIG & Head of Branch/AC-I, CBI, New Delhi also attended the conference.

Shri R.K. Agrawal, CMD, Shri Pankaj Kapoor, Director (Finance), Shri Anupam Chandra, CVO, and senior officers from WAPCOS & NPCC were present in the event. CVOs & VOs of organisations under DoWR, RD&GR, Ministry of Jal Shakti also attended the event. Shri Pankaj Kumar highlighted about the importance of Vigilance in everyday life and urged all present in the conference to follow the 'Panch Pran' as per the call given by Hon'ble Prime



Minister Narendra Modi towards his vision for a corruption free developed India. The Chief Guest also released a Compendium of Instructions & Guideline sat WAPCOS & NPCC during the event which will promote transparency in day-to-day functioning of the organisations. Presentations were also made by Shri Sanjeev Sharma, National President Anti-Corruption Foundation, New Delhi and Shri D.R. Randa, Principal Scientific Officer (Retd.), Central Forensic Science Laboratory, New Delhi.



## News in Brief





Special Campaign 2.0 Before and After Scenario of Tatiianaram Lake #CleanlinessDrive by CGWB, Hyderabad



Cleanliness drive Special campaign 2.0 by CGWB State Unit Office, Agartala at Dhaleswar Road, Agartala.



Officers of CGWB, Nagpur presented and shared the NAQUIM Report of Gadchiroli District, Maharashtra with Sh Sanjay Meena, IAS, District Collector, Gadchiroli, Maharashtra.



Cleanliness Campaign 2.0 was inaugurated in CGWB, ER, Kolkata, in compliance with the prescribed Guidelines of CHQ. The Cleanliness Campaign was attended by Dr. Anadi Gayen, Regional Director, CGWB, ER, officers and officials of the Region.



An Outdoor Cleanliness Programme was organized by CGWB, NWHR, Jammu under Special Campaign 2.0 at Baba Sakta Sadh Pond Devsthan in village Khairi Keran, Block-Bhalwal, District-Jammu.



Special campaign 2.0 on cleanliness organized by CGWB, Thiruvananthapuram on 7<sup>th</sup> October 2022 and carried out cleaning of Mangannoorkonam pond, Thiruvananthapuram and its surroundings.



Cleanliness Drive Special Campaign 2.0 by Central Ground Water Board, CHQ, Faridabad at Leisure Valley Park, Faridabad.



The 5<sup>th</sup> India EU Water Forum on Water Cooperation was held Lalit Hotel, New Delhi. Sh Tapan Chakraborty, Scientist E, CGWB participated in the Session : How to address future Water Challenges? Perspectives from EU & India.

## News in Brief





Fourth SGWCC meeting was held under the Chairmanship of Additional Chief Secretary, Minor Water Resources, Govt.of Bihar. Meeting was attended officers from CGWB and other line departments.



State Level Committee meeting held for the State of Gujarat for approval of Ground Water Resource Assessment, 2022.



A Team from Denmark visited Central Ground Water Board, Jaipur and discuss Issues & Challenges regarding Water Sustainability Programme in Amrut cities, Rajasthan.



CGWB, Nagpur conducted Tier III Training Programme on "Groundwater Management and Budgeting at local level" in Ratnagiri, Maharashtra under 75 years of India's Independence, Azadi Ka Amrit Mahotsav. Sh.Keerthi Kiran H. Pujar, IAS, CEO, Zilla Parishad, Ratnagiri District was the Chief Guest.



Tier III training program has been organised by CGWB, Patna at Government Engineering College, Aurangabad on 'Local Groundwater issues and Participatory groundwater management'. District Magistrate Sh. Saurav Jorwal graced the occasion as chief guest.



CGWB, Hyderabad organised Tier III Training program on NAQUIM Outcomes, Ground Water Development and Management in Bhadradri Kothagudem District, Telangana. Sh Anudeep Durisetty, IAS, District Collector, Bhadradri Kothagudem district inaugurated the program.



The 4<sup>th</sup> consultation meeting with party states to arrive consensus for implementation of Godavri (Inchampalli) - Cauvery (Grand Anicut) link project held under the Chairmanship of DG, NWDA on 18.10.2022 at Bengaluru in Hybrid mode.



The Director General, NWDA and Chief Engineer (HQ) attended the meeting to review the status of  $7^{\text{th}}$  IWW-2022 held under the Chairmanship of Secretary, WR, RD&GR, on 29.10.2022 at Shram Shakti Bhawan, New Delhi.



## **"KNOW YOUR WATER SOURCE"**

Online competition organized by National Institute of Hydrology (NIH) Roorkee for the month of September 2022



### HARSH DILIP JADHAV (Bhiwandi, Maharashtra)

This pond is in Village Dugad, Tehsil. Bhiwandi, Dist. Thane, Maharashrashtra. My maternal home is in this village. The pond is a traditional water harvesting structure in the village. It is being used for livestock, agriculture, horticulture, and fishery. A ghat is built on the embankment of the pond where villagers do ritual ceremonies like Ganesh idol immersion.



### BHARATH G (Udaipur, Rajasthan)



The pond also helps to recharge groundwater. The pond is fed by runoff from the village as well as from hilly and agricultural areas. It is an important water resource for the village. But, people dump garbage in the pond which pollutes the water.

Also, water hyacinth is present in the pond. I want to increase awareness to save this pond from pollution so that, livestock can drink the water, and fish, turtles, and water birds can swim in the pond.



Fateh Sagar Lake is one of main attraction spot in Udaipur for tourists, it is not only useful for recreation part, it also contains so many varieties of aquatic fauna and flora and excess water from Lake, flow towards other connecting lake and the same water used for agricultural activities.

Nowadays tourist and local people are making pollution by putting garbage and leaving domestic disposals and also the plastics which was thrown in surrounding roads will get into lake through wind and rain.

My suggestion is to take strict action against those people and make the surrounding place as plastic free zone so that we can expect clean and beautiful Fateh sagar lake.

### Ministry of Jal Shakti Leaves No Stone Unturned to Observe **THE SPECIAL CAMPAIGN 2.0**





The Government of India announced Special Campaign 2.0 from 2<sup>nd</sup> October to 31<sup>st</sup> October 2022 with a focus on Swachhata and reducing pendency in the Government. The Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti left no stone unturned to observe the Special Campaign 2.0 in its true spirit. A comprehensive plan was made in the preparatory phase, an action-oriented strategy was devised for the implementation phase of the Campaign. The main focus was on space management and beautification of indoors and surrounding of the areas of the office premises.

The hard work put behind the Special Campaign 2.0 was a huge success and turned out to be fruitful. Timely monitoring was done and data was collected from all offices on a daily basis and a portal of 'Special Campaign for Disposal of Pending Matters' was created for quick redressal of the issues.

Department of Water Resources Generated Over 68 Lakh Revenue & Freed up 65,844 sq. Ft. Area Under Special Campaign 2.0. Around 21626 were weeded out and 60513 files were reviewed. All offices and organizations under the Department were asked to



submit, with photographic proofs, the 'Before' and 'After' situation of a particular space both inside and outside the office premises. Number of review meetings were taken by the Secretary to ensure that the targets are met in time bound manner. Secretary has also inspected all the sections and rows of Divisional Officers.

Secretary Shri. Pankaj Kumar held regular review meetings to ensure timely completion of targets 'Special Campaign for Disposal of Pending Matters'. A number of best practices that emerged from Special Campaign 2.0 were showcased. NGOs and civil societies were involved in the whole process. An initiative to improve record management practices and identification of underutilized assets were undertaken through various efforts along with saving government expenditure from getting wasted and using those freed resources for better utilization.

An integrated campaign was run on the social media platforms of the Department, which garnered huge response. Regular updates on the Special Campaign 2.0 were done on the social media and audience was engaged short videos on the subject matter. A total of 65 posts were uploaded on Department/Organization's Twitter,



### Ministry of Jal Shakti Leaves No Stone Unturned to Observe **THE SPECIAL CAMPAIGN 2.0**



Facebook, Instagram, and KooApp Accounts. 5 Press Releases were issued through Press Information Bureau and 10 films with #SpecialCampaign2.0 were uploaded (1 Department, 6 FBP, 2 WAPCOS, 1 NIH)

A number of best practices that emerged from Special Campaign 2.0, such as space were freed up; obsolete papers were identified and recycled for reducing the total quantity of waste. NGOs and civil societies were involved in the whole process. Improvement in record management practices and identification of underutilized assets. Saving government expenditure from getting wasted and using those freed resources for better utilization.

Our department works effectively for water management and generating awareness on the importance of keeping our water bodies, especially, rivers clean. Various organizations took up cleaning activities around rivers, lakes, ponds etc. in a holistic and integrated manner.

A quintessential for this was the efforts put in by the Central Ground Water Board (CGWB). A holistic approach was undertaken by the department to organize cleanliness activities both indoors and outdoors of the office premises. The cleanliness drive was organized by CGWB in schools, parks, office premises, lakes, ponds, riversides, etc.

CGWB, Lucknow carried out an external cleanliness drive at Kudia Ghat on the bank of river Gomti, Lucknow, and brought incredible change is the existing conditions of the surrounding areas. Special attention was given by the department to clean the surrounding areas of various water bodies like ponds, lakes, and rivers in various cities across the nation. CGWB, Nagpur & Division-VI Nagpur organized Cleanliness Program under the Special campaign 2.0 at Police Talab, T Junction, Nagpur, Maharashtra. Central Water Commission is another department showcasing noteworthy efforts in this field.

The employees and officers at the Ayodhya site under the Upper Ganga Basin Organization of CWC took an oath to maintain a plastic-free campus by organizing



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### Ministry of Jal Shakti Leaves No Stone Unturned to Observe **THE SPECIAL CAMPAIGN 2.0**"



cleanliness and awareness programs under the Special Cleanliness Campaign 2.0 Officers and staff from the National Water Academy conducted a cleanliness drive on the bank of the Khadakwasla Dam as part of the campaign. Giving further impetus to the campaign objective, NMCG organized a cleanliness drive inside the office by identifying and eliminating redundant files.Similarly, the office of NWDA, CSMRS, and CWPRS also carried out noteworthy efforts to reduce pendency in their respective departments and ensure cleanliness in and around the office premises.

Farakka Barrage Project, NIH and WAPCOS were the organizations which showcased the best practices under the Campaign. FBP developed beautiful garden on both sides of emerging point of Feeder Canal (Head Regulator). An unproductive land was situated near the FBP office converted into a recreational spot and cafeteria. Removal of scraps, vehicles, old machineries etc. was also undertaken.

NIH undertook the effort to renovate and restore the

Ground Water Recharge Structure to give boost to ground water. WAPCOS Limited has carried out a special initiative to identify and remove scraps, auction the suitable scraps, and weed out unwanted files by the volunteer. The Special Campaign 2.0 places a greater emphasis on field/outstation offices in addition to the Ministries, Departments, and their subordinate offices. The Department of Administrative Reforms and Public Grievances (DARPG) oversees the implementation of the campaign.

India is one of the fastest growing countries in the world, with India becoming the center of economic activities. Under these circumstances, it is cardinal for India to adopt modern practices of governance and shed traditional value systems. Digitization of government records, quick decision making and doing away with inefficient practices is the need of the time. Special Campaign 2.0 aims to achieve these objectives which are necessary for India to move on the path of progress and enable the citizens to derive the best experiences.







#### #Indiawaterweek @rsshtrapatibhvn





7.00

1 India Water Week - 2022 Retweeted

Gejendra Singh Shekhawat 🥥 Egsajodhpur - Nov 1 ----जलवायू परिवर्तन से मानव जीवन पर आ रहे बुरे असर को क्रम करने में भारत वैश्विक रूप से अपनी भूमिका मजबूत कर रहा है।

इस उद्देश्य के साथ ग्रेटर नोएठा में 7वें इंडिया वॉटर वीक का गुभारंभ महामहिम राष्ट्रवति श्रीमती द्रोयदी मुर्मू जी द्वारा किया गया।

#### Grashtrapatibhyn

#### MindiaWaterWeek





#IndieWaterWeek #WaterConservation



#### Top mention earned 4,681 engagements



Mohan Pargaien IFS @pargaien · Nov 9

How good forest improves groundwater recharge? @IUCN\_Water @veenas\_water @WorldBankWater @ParveenKaswan @ishafoundation @byadavbjp @MoJSDoWRRDGR @KTRTRS @water\_conflicts #forests #water4climate #SaveSoil #saveforest pic.twitter.com/i1EVsupaPs



♠ 114 \$3 608 \$ 1588



Nemeni Genge 💙 @cleanganganmog - Nov 4 हेपा के सबसे बड़े नहीं उसक का हुआ आगाह।

भी Swehenreddybig, माननीय वर्णटन, संस्कृति व उत्तर-पुर्वी क्षेत्र विकास मंत्री, भी @Bahweener\_Tudu माननीय राज्य कल शक्ति मंत्री, भी @esceip, तीजी, ममामि गी व उपस्थित अतिथिगणों ड्रारा जत कलवा" के साथ हुई #GangaUtase की युरुआत

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Namami Gange 😋 @cisanganganmog - Nov 4 Participants from across all the ages enjoying painting & pottery making and nest making activities at #GangaUtaev2022.

to atta



Top media Tweet earned 3,287 impressions शिव पुराण के मुताबिक भागीरथ ने माँ गंगा को पृथ्वी

पर लोने के लिए कठोर तप किया और तप से प्रसंत्र होकर माँ गंगा पृथ्वी पर आने के लिए तैयार तो हो गई लेकिन धरती, माँ गंगा के वेग को सहन नहीं कर पाती। #GangaUtsav pic.twitter.com/BySFEiubPC



4.4 43.42 9/12

#### Top Tweet earned 2 12M impressions

आइए इस वीडियो में मैप की सहायता से जाने की गंगा नदी का उद्गम कहाँ से होता है और किन प्रमुख नदियों से मिलकर गंगा नदी बनती है ! pic.twitter.com/YQup7oGd5F



€ 855 €3 10058 € 42008

Creative activities like 'Wiedom Tree of Ganga' inviting participants to paste any fact on River #Ganga turned out to be a huge crowd puller.

#GangaUtaav2022 #GangaUtaav #NationalRiver #CelebratingRivers #NamamiGonge

@McJSDoWRRDGR @gasjodhpur @PMOIndia





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## In Newspaper

### अंतरराज्यीय जल विवादों से बचें राज्य : जगदीप धनखड़



इंडिया एकसपी मार्ट में इंडिया फाटर बीक के समयन कार्यक्रम में पहुंचे उपराष्ट्रपति जपदीप धनखड़ का स्वयणन काले केडीय अल्प्लीका मंदी गाउँड सिंह होरहायत । जोगे- एल्ट्राजे

अगवश्यकाता पर गडन विश्वार किरण । केंद्रीय कृषि मंत्रे नोंद्र सिंह लोगर ने आहा कि सिखई में टेक्नोलीकी का उपयेग होना चाहिए। उन्होंने सुरुष डिवर्ड चरियोजन को बेलार बतते हुए कल कि 70 लाख से अधिक

ग्रेटर नोएडा (एसएनबी)। उपलप्तर्पत जनमेत चनखड़ ने कहा कि राज्यों को जल किछड़ों से क्यूने हुए इसका हान निकालना पहिए। विवादी से किसी को पाषध जो होगा। धनसङ् साठी इंडिय कटर गोक 2022 के सम्पन्न पर्श्वक्रम को संबोधित कर रहे थे । एनदेने सिर्वचन्त्र ज्यान स्वेत्यता प्रकृतर के लिए जान अधिक सीमानाय के कार्यकारों पर प्रकाश लागत।

सातवें इंडिया वाटर वीक-2022 का समाधन

उन्होंने स्वच्छ भारत अभिष्यन की खरीफ करते सा जनवा कि इसकी चारत की महिलाओं के सामग को रखा हुई है। उन्होंने कहा कि ऊर्ज और प्रकृतिक संस्थापनें का उपयोग अहाँबेक समयत्रम्या के आध्यार पर नहीं किया जा सकता है। सभी को संसाधनों का बराबर उपयेग करने का हक है। केंद्रीय जल शक्ति मंडे गर्नेद्र सिंह शेखाका ने कहा कि जनसंग्रम और जल भी उपलब्धत में विषयत पर संभोधत से विषयर हो। उन्होंने खेती में नवापत पर हॉप मेर हॉप का नारा टिया। उन्होंने बादर वॉक को सफल बतते हुए कहा कि इसमें 2000 प्रतिमाधी और 28 देखें के विशेषज्ञ प्रतिनिधियों ने हिस्सा लोकत जान प्रबंधन और

### Shah highlights Modi's effort in taking water to every Guj household

DeDr. With the composing ity \$100 activity managed of Wards entral endra Moli ar Di Ing the achieved

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Telangana scoops

Swachh Survekshan Gramin, 2022 award

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### माइक्रो इरिगेशन से की जा सकती है पानी की बचत : कैलाश चौधरी

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Ber itreft i the much and it are of such such ure every is guit for yours at an अधानिको पाठ कर अगरीतित किए पर्न हाली बेट्रीम अल ब्रॉन्ट राजे गाँह जिब्द केव्हावर य light with out factors warners countil 

भाष्ट्र कि भाष्टर जीवन के हैन्द्र प्राने भी प्रको सालमां भगवा जल सप्ताल पाले लाम और प्रेम लाम ment same meit it. shift in fire filteend ait if se अस्त के 151 में पार्ट भार राज्यों अधिक विषय कि स्वरणों करे दी भार राज्यों अधिक विषय की स्वतिकी rite that is free

R on R, with the Step manual integer प्रभाग का गई है। उसरे नाले गावल में हम उस दियां में जमा नाहे कि पाली के संपन्न का भागमा है और बुझे हैं। में पुंच है uren à pu fois à encleve f untils not fix, and from all offs.

ft finn ft upt mit ut a uftern will forgrenn if & welfer sorauft to uftern & finneli so uftern der fafter And to store some \$1 some the \$1 pp string त्रियोगा चुनि स सहायो इतियम से दोने को जा सी है। को 2014 से लेकर साथ स्थ the estate all she is samp officer in

main \$1 west mux shift is free सामात्र की लोग में to they all effecti facerel sch

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In Sey many any av nit 2, will war है कि देव में जूनि का उत्पादन बाह है। विद्यान जना तरिज नहीं प्रवेद निव imper i thi is not al span is one

अगुपैन अट्राव्यकात के उद्धान की देशाने हुए कहा कि बोर्टरिंगक ताल के लाग केट्रिय करने के बायय लाग विकास ल्लानी में लियाने के लिए एक को मेख करने के लिए पर पर में कर औ and it ten frank all severe to get this of he sees al more fi nell an



लोग इसे अपना चुके हैं। कृषि में ऐसे बीजों का इजाद

फिया जार, जिसमें प्लल का उत्पोल कम हो सके।

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का संस्थान की डिस्टान से अपसार ; उन्होंने

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### Swachhta Diwas: DJB cleans ITO Chhath Ghat of Yamuna along with Namami Gange

OUR CORRESPONDENT OFW INFLHE: The Delhi Ial

even control out Statulity (Sat-pated to the classing of the Collecth Global of Visionese Sweakhing Directs (Meth. In Benefic Contry year on Can-bernet). al Massaue for CS (NMOCI) with with doubing the r

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All participants took the plodge to take the memory of the Father of the Nation Mahama Gandhi's that clean-liness to the other tarm of Gail to its original form. Dath hit found and all other ether turns of God of the city and will

empertance of the Gam, als neuro of public participation and socras of public participation to to the comparison to Tatma Ghain Chemistrana Mintern with the ultimate good to the decostor store.

### Groundwater scheme being linked with other segments in Rajasthan

#### The Hindu Bureau IAIPUR

An ambitious scheme for checking the decline in groundwater level, operative in 38 panchayat samitis of 17 districts in Rajasthan, is being connected with agriculture, forestry and

water harvesting works for capacity enhancement. The scheme has been implemented in the State with the participation of local communities.

Chief Secretary Usha Sharma said here on Wednesday that the Atal Bhujal Yojana, supported by the

Centre and the World Bank. would be operative till 2025 and would play a significant role in groundwater management through convergence with other schemes. Ms. Sharma reviewed the scheme's progress in the presence of officers of the Union Jal Shakti Ministry.

## In Newspaper





Inaugurating Water Week on Tuesday, President Droupadi Murmu said water is linked to national security as it can be weaponised by countries [



#### Shared water resources can be used as weapon

## by any nation: Murmu

### अंतरराज्यीय जल विवादों से बचें राज्य : धनखड

इंडिया एक्सपो सेंटर एंड मार्ट में 7वें इंडिया वाटर वीक-2022 के समापन पर बोले उपराष्ट्रपति

अभार उजाल अगरे

ग्रेटर भोएडा। इंडिया एक्सपो सेंटर एंड कई में जनिवार को म्लामें हरिया करर सीच-2022 के स्वापन का उक्ताल्पनि जगरीय धनखड़ ने कहा, राज्ये को अंतरराज्यीय जल विजादों से बचते हुए ant feaster safette antrepale it माटर मोब में जान शकित मंत्रालय, भारत she febre is utification is used all सगरन को ।

स्वच्छ भाग अभिषय को छारेब करते हुए धनखड़ ने कहा इससे देश की महिल्हाओं के सम्पन के तथा हुई। सभी ut stat alt under utmoit ut धरावर उपयेग करने का हफ है । संसाधनी का समुचित उपयेग करने आहत कराने होगी, जिसारे जान की कर्बाटी म हो। इस चीके पर जल्दलीका मंग्री गर्नेद्र सिंह र्मायापार के काल कि पार प्रांताना लेने का



'सिंचाई में तकनीक का उपयोग जरूरी'

करीं पांसी गरिंद लोगर में करत कि चर्ड में देवनीलॉजी का उपलेग होना पाहिए। युक्त सिंग्सों परिपोलन को बेहता बचाते हुए उपनि कहा कि 70 लाख से अपिक लोग इसे अपन uie ?. en we ie shit ut fiere बिन्ह जार, जिसमें जान का राष्ट्रके कम हो सके : वर्षा आधारित क्षेत्र में जान राजय के लिए रहेर और afeware all sit fietre render bis offerse were the

भोगों को संबोधित करने उप्यालयों।

state it for one steare is fire are बुख करें। जनसंख्या और जल की उपलब्धत में विषमत पर राभीरत से विचार हो। उन्होंने खेती में नवाचर 'पर

चेन्र-2022 को सपाल बताते हुए उन्होंने भाग कि जाये 2000 प्रतिमार्थ और 28 टेली के विशेषप्र प्रतिनिधनी ने हिन्छत लेकर जल प्रकेश और आवश्यकल प gfe ubr gfe' un une fom uner men funt fante.



### Jal Mahotsav is back!

The tent city in Hanuwantiya, Madhya Pradesh, is coming with its seventh edition of Jal Mahotsav that will be held from November 28, 2022 to January 28, 2023. India's largest water carnival was developed with the sole purpose of improving tourism in the region. The reservoir created by Indira Sagar Dam, offers water sports such as jet ski rides, zorbing, cruise, speed boat, etc. Apart from these, it also hosts activities like ziplining, land parasailing, tethered hot air balloon ride, ATV bikes and angling to name a few.

### Geospatial economy will grow to ₹61,000 cr by 2025: Report

and this birth Missister Ca-in Singh Stellawar on lay said that the country's arised extracting is expre-cision the 600,000-cross in that send three period (Te present Tal, 200

eleming the report on Ges-dening the report on Ges-al. Attractory for Authors' Approach here at the tracg-function of the Gen Smart a 2012 on Transley, he soul defines and intelligence. tilities, urban development infrastructure development, apriculture, utilities and land administration would drive the of the proposal

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J&K pride of every Indian, time to take

advantage of new possibilities: Modi







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#### जल चर्चा |Nov-Dec 2022



## ज्ञानोदय विद्या मंदिर - दामोह, मध्य प्रदेश



ज्ञानोदय विद्या मंदिर मध्य प्रदेश के नरसिंहगढ़, दामोह में स्थित है।
ज्ञानोदय विद्या मंदिर सीबीएसई से संबद्ध है और इसकी स्थापना
1986 में हुई थी। यहां छात्रों को शिक्षा का पाठ पढ़ाने के साथ ही
पर्यावरण और जल की महत्ता पर भी मुख्य रूप से शिक्षा दी जाती
है। जल इस धरती पर उपलब्ध अमृत के समान है जिसे संरक्षित
करना जन-जन का कर्तव्य है। यहां प्राथमिक कक्षाओं से ही
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संरक्षण, पर्यावरण व जल के महत्व का ज्ञान अलग से अर्जित ना
करना पड़े। जल का बचाव आदतों में शामिल हो ऐसी शिक्षा युवा
पीढी को जल जागरूक बनाने की दिशा में महत्वपूर्ण व आवश्यक

कदम है। ज्ञानोदय विद्या मंदिर, ग्रीन स्कूल कार्यक्रम का एक सदस्य है जो पर्यावरण बनाने की दिशा में सराहनीय पहल है जहां बच्चे हर दिन स्वस्थ भोजन और शारीरिक गतिविधि का आनंद ले सकते है। ज्ञानोदय विद्या मंदिर के छात्र परिषद ने स्कूल के जल नीति को बनाने के लिए कर्मचारियों के साथ काम कर हाइड्रेटेड रहने के लिए कक्षा में पानी पीने की अनुमति व छात्रों को शारीरिक गतिविधि के दौरान पानी पीने के लिए प्रोत्साहित किया। छात्रों और कर्मचारियों के लिए पानी की बोतलों को भरने के लिए 21 नल उपलब्ध है। छात्रों को अपनी पानी की बोतलें किसी भी तरह की गतिविधि में साथ ले जाने के लिए प्रोत्साहित किया जाता है और डिस्प्ले बोर्ड के माध्यम से पीने के पानी और पानी के बोतलों की सफाई के बारे में जागरूकता को बढ़ावा दिया जाता है। ज्ञानोदय विद्या मंदिर में अथक प्रयासों के बाद जल स्तर का ग्राफ लगातार बढ़ रहा है।

यहां पीजोमीटर द्वारा वार्षिक रूप से लक्ष्य की जांच की जाती है। इस वर्ष जून में 22.0 मीटर जल स्तर था, पीजोमीटर ने सितंबर के महीने में 7.60 मीटर की रीडिंग दिखाई तो ऐसे कुल वृद्धि स्तर 15.40 मीटर उपलब्ध है। पौधे और अन्य गैर-पीने योग्य उपयोगों को पानी देने के लिए जल संग्रह प्रणाली की स्थापना की गई है। स्कूल परिसर के चारों ओर 5000 से अधिक पौधे लगाए गए है। पानी पीने के क्षेत्र, वॉशरूम और परिसर में ड्रिप सिंचाई प्रणाली में प्रेशर नॉब टेप जैसे कम प्रवाह वाले पानी की बचत के लिए नियमित दूरी पर स्प्रिंकलर लगाए गए हैं।

ज्ञानोदय विद्यालय मंदिर यथार्थ रूप से अपने विद्यार्थियों को जल व प्रकृति के प्रति जागरूक कर रहे है। इस विद्यालय को भारत सरकार, मानव संसाधन विकास मंत्रालय द्वारा 2017 में 'स्वच्छ भारत स्वच्छ विद्यालय एक मिशन' स्वच्छ विद्यालय पुरस्कार में जल सहित सभी पांच श्रेणियों में पांच सितारा रेटिंग के साथ जिला स्तर का पुरस्कार भी मिल चुका है। यदि छोटे बच्चे पानी के महत्व को समझ रहे है तो हम और आप भी समझ सकते है और इस नेक काम में अपनी भागीदारी दे सकते है।

## Peoples Service Society, Palakkad Kerala





Palakkad District is the most drought ridden district of the state of Kerala. The Eastern part of Palakkad district including Chittur Block is declared as the most water stressed block of the Kerala state. The average rain fall of the district is 2100 mm with variation in different regions. The Ground Water Level of this highly critical area have been depleting every year for the last 15 years due to over exploitation by industries, institutions, households, and the farmers through their unscientific flood irrigation practices.

The drinking water source of more than 60% of the population of Palakkad district were open dug wells and bore wells for their daily drinking water needs. Unfortunately, due to the unscrupulous over exploitation at different levels, 70% of the bore wells and 60% of dug wells dried up or abandoned. This is due to the unscientific water management and conservation practices. The biological, physical and chemical parameters of the water are not up to the mark.

Peoples Service Society Palakkad as an NGO with more than 42 years of experience initiated a few innovative water conservation / Management/ Quality management interventions with the help of different stake holders both internal and external and have created successful replicable models in conserving and managing the water resources.

Various praiseworthy activities were carried out and completed. Rainwater harvesting and dug well recharging of 2600 open dug wells were completed and recharges an average of 1.5 lakhs liters of water per dug well and strengthening the aquifer along with the water quality improvement created during the year 2020. Soil and water conservation structures including soil bunding were completed in 8 Gram Panchayats. 112 abandoned traditional public open wells were revived, rehabilitated and handed over to user groups and supplement the drinking water needs of the people. Around 34 public ponds were deepened, strengthened, and their storage capacity was increased. The wells were incre

34 public ponds were deepened, strengthened, and increased their storage capacity. Introduced injection well based ground water recharging and aquifer strengthening attached with all these restored ponds. 147 Rainwater Harvesting Structures were constructed attached with the schools / Anganawadies and other community institutions for harvesting roof rainwater for drinking as well as recharging the surplus purified water to the adjacent water bodies. Initiated the bore well recharging technology for the recharging of rainwater through the abandoned bore wells for aquifer strengthening.

Installed wastewater/grey water treatment units attached with the hand washing stations of 17 Schools and Milk Cooperative Societies for recycling, purification and reuse of used water. Constructed check dams and diversion channels attached with the storm water and installed injection wells at streams for strengthening the aguifer. As a part of Green Campus Campaign program, the NGO initiated the institution level storm water recharging k. Farms bunds (Soil Bunds) has been done in 7 Gram Panchayats to check the velocity of run off and to carry the excessive rainfall safely downstream and to let off stream flow in natural channels. Jal Suraksha Army was set up which consists of skilled workers in the age group of 18 to 45 years specialized in plumbing and water conservation activities. Community mobilization and Sensitization programs were organized where we have implemented the multifarious water conservation activities with the participation and support of all sources, services, systems, and institutions.

The efforts of NGOs in bringing about a change in the field of water conservation and management play a cardinal role in bringing about a change in the water sector and setting an example for the rest in the nation.





ऐसा कोई काम बता दो, जो इसके बिना संपन्न हो पाए, जल के बिना तो, धरा पर भी कम्पन हो जाएं।

व्यर्थ बहाकर हमने जल को, अगली पीढ़ी का दोषी नहीं कहलाना है, मिलकर सबने पानी की, बूंद बूंद को बचाना है।

ना कोई रंग है,ना कोई आकार है, बुनियाद पर जिसकी,जिंदगी का संसार है, अनुपम धन है,अनोखी बड़ी कहानी है, शीतल है, पवित्र है, नाम धराया पानी है।

कहीं बर्फ में, तो कभी बादल में, तो कहीं ओस बनकर,मोती सा ठहरा, रुप तो इसके अनेक हैं, तन-मन को शीतल कर दे, कार्य भी बड़े नेक है।

> पानी का काम पानी करता है, विकल्प न इसका दूसरा कोय, जल के बिना तो जीवन की, कल्पना मात्र भी न होए।।

> > -कीर्ति छाबरा