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Proceedings of the Sixteenth Water Talk held on 21st August 2020

National Water Mission (NWM) has been organizing a seminar series-'Water Talk' -to promote dialogue and information sharing among participants on variety of water related topics. The 'Water Talk' is intended to create awareness, build capacities of stakeholders and to encourage people to become active participants in conservation and saving of water. NWM has so far organized 15 'Water-Talks' on the range of topics dominating the sector concerns. Last 4 water talks including 16th Water Talk were e-Water Talks held on virtual platform.

Sixteenth Water Talk in this series was held on **21 August 2020** on a virtual platform- 'CISCO WEBEX' due to Covid-19 pandemic in the country. The talk by **Ms Jyoti Sharma, Founder, FORCE NGO** was organized by NWM with the help of Water Digest, the official media partner for the webinar. **Shri U.P. Singh,** Secretary (D/oWR, RD & GR) M/oJS, **Shri G. Asok Kumar**, Additional Secretary and Mission Director, NWM and officials of NWM attended the webinar along with more than 500 participants. The webinar included participants from across the country from various spheres of life. The talk was also live-streamed through various social media platforms (like facebook, twitter and instragram) of the 11 organizations under DoWR, which according to Water Digest, had logged over 70,000 views.

Shri G. Asok Kumar, Addl. Secy. & MD, NWM welcoming the speaker and participants, informed that encouraged by the participation of over 39000 viewers in the last e-water talk on 17th July 2020, NWM had written to Chairman, CBSE; Commissioner, KVS; and to VCs/Principals of about 50 Universities & institutions across the country to join the web talk throughvarious social media platforms (like facebook, twitter and instragram) of about 11 organizations under DoWR.He gave introduced NWM and its 5 goals, 39 strategies and the successful campaigns like **'SahiFasal'** and **'Catch the Rain'**.

The topic of the e-Water Talk by Ms.Jyoti Sharma, was "Each one a Jal-Rakshak – Care for Water, Work for Water, Be like Water." Opening her talk, she said that we should move from just talking about the water problem to focusing on how each of us can contribute to solve water crisis. Though 70% of earth is made up of water, out of which only 3% is fresh water and 20% of the available fresh water is found in form of ground water. Majority of water is found in the form of ice cap and glaciers while lakes, rivers and other water bodies put together form just 1%.

We need water for every aspect of our life, including domestic, industrial and agriculture. India has 4% of world's water resources catering to about 18% of the world's population showing that per capita water availability in comparison to other countries is much lower. If the exploitation of water continues at the current pace, the gap between the water availability and requirement would reach an alarming 55% by 2050. But, quoting statistics from sample states, she showed that per capita availability of rain is much more than the requirement, hence there is need to "catch the rain" and conserve the rain water.

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According to her calculations, Delhi, with its very high population receives 148 litres of rainwater per person per day while other states like Puducherry, Tripura, Madhya Pradesh and Uttarakhand receive about 1500 lit, 17500 lit, 10600 lit and 22000 lit respectively of per capita rainwater per day. India, being a monsoon country, collects 80% of its water during its monsoon from July to October. Hence, our problem is not the lack of overall rains, but total rains being concentrated during a few months. There are no definite and effective mechanisms to collect and utilize the rainwater in a way so that it meets our demand of fresh water throughout the year. In other words, there is enough water, however, there is a need to learn to manage it an efficient manner. Ms Sharma felt that the water crisis can be averted if everyone collectively works towards it by turning "JalRakshaks" and take a pledge to "Care for Water", "Work for water" and "Be like water".

Having access to water is a fundamental right, but it also carries with itself a grave responsibility towards the precious resource. Ms Sharma maintained that one must take individual responsibility towards water and be alert about their surroundings to assure that water is being used judiciously. Although 90% of people are aware of the water issues, less than 2% are willing to work for water. There is a misconception that change can be brought about only if industries and agricultural sector (largest users of water) take necessary steps to save water.

Ms. Sharma introduced the 5 R's or Mantras propagated by her organization-Reduce wastage, Reuse water at-least once, Recharge ground water, Recyclewaste water and Respect water. Citing practical examples from her presentation, she explained each R of the mantra in detail, in the course of her talk. In respect of first 'R' i.e. Reducing wastage, with the help of statistics, it was shown that every individual wastes about 45 litres of water on a per day basis in India, in the form of overflowing tanks, during brushing, bathing etc. In Delhi (population of 1.85 crores) alone if every individual saves one bucket of water, 27.75 crore litres water can be saved per day and a total of 10128.75 crore litres of water can be saved in a year. Ms Sharma also emphasised the need of our students understanding the concept of water footprint and how every entity in our surroundings including the clothes we wear and the food we eat requires water for its creation directly or indirectly. Gaining awareness about the same can help us make better choices and help us reduce the wastage of water. For eg: 11000 lit water is required to make one pair of jeans and 5520 lit of water is required to produce one kg of Goat meat.

The 2nd 'R' ie. Reuse of used water without recycling it. Some examples under this include using dirty aquarium water to water plants, use of waste RO water & AC water to clean floors, washing clothes, flushing toilets, use of waste water in washing cars. The 3rd 'R' is also extremely important as the future of water conservation lies in recycling of waste water. Although the quantity of fresh water can neither be increased nor reduced but the usage of available water can be multiplied using this technique. Citing successful examples, she shared that 80% of Israel's sewage water is recycled and then used for irrigation. Singapore's wastewater recycling plant uses

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advanced membrane techniques to produce water that is clean enough to be used for the electronics industry and be bottled as drinking water. India's recycling capacity is about 35% and similar experiments have been carried out in the organic sector. Once the waste is filtered from the water leaving behind nutrients like Nitrogen, Phosphorus and Potassium can be extremely healthy and beneficial for plants. The 4th 'R' stands for recharge of groundwater which holds the most significance in a monsoon country like India. NWM's 'Catch the Rain' campaign also nudges stakeholders to store and conserve rainwater "where it falls" and "when it falls". The key is to collect the rainwater directly or store it for groundwater recharge and extract it through wells and tube-wells during times of need. India's dependence on groundwater is extremely high with 90% of irrigation needs being met using groundwater. While 70-80% of drinking water needs in the rural areas being met through groundwater, about 50% of urban water needs are also met through groundwater reserves, causing immense water stress on our underground tables. The only solution is to adopt rainwater harvesting to recharge groundwater and raise water tables. Some of the advantages of Rainwater Harvesting include removing of water logging (that cause flooding of roads during rains), improving of quality and quantity of groundwater reserves, improving of soil moisture, preventing of drying up of tubewells, helping in preventing global warming, saving 0.4 KWH of electricity for every 1metre rise in water table and lastly, helping reduction in water bills. Some popular types of Rainwater harvesting systems include the trench with recharge pit with recharge well, Rooftop rainwater harvesting, revival of dry lakes, revival of waste water filled lakes, creation of wetlands and protection of floodplainsto enable free flow of rivers during the monsoon. The 5th& last 'R' stresses on having 'Respect for water'and treat it with care and compassion to make it last for future generations. Water is a 'gift from God' that is precious and must be treated with utmost respect. MsJyoti Sharma concluded her presentation with a prayer dedicated to water-

> "Om Jalah Namo Nama Gyansagar Jalah Namo Namah Sarvavyapak Jalah Namo Namah Guruwam Jalah Namo Namah"

Shri U.P. Singh, Secretary, M/oJS thanked the speaker for her simple, yet factually detailed presentation. He shared that the intent behind starting the "Water Talk" series was to educate and engage common people in various aspects of water. There is a deliberate attempt to call water warriors and activists in the water talk who have worked at the ground so as to share experiences from their journey and inspire people. There is a need for a shift from supply side management to demand side management to battle the crisis of water.

The talk was followed by a session of questions and answers where members from the audience were invited to discuss their queries with the speaker. The webinar saw some interesting and unique questions from people across the country.