RAINWATER HARVESTING : THE NEED OF THE HOUR

Our country gets about 4000 billion cubic meters of water from the sky. Out of which only about one-fourth of this is actually usable, as the rest runs off into the sea and evaporates. This quantum remains more or less constant, though there are regional variations subject to local landforms and rock structures. Whatever we could do for impounding water has been done to a large extent, there are about 4500 large dams in our country and thousands of small water-holding structures.

Over the last century or so, India's population has quadrupled. The average availability of usable water has correspondingly decreased from about 6000 cubic meter per capita per day to 1500 to 1800 meter per capita per day.

Since ages, natural water bodies have been satisfying the quench, of the inhabitants of this state. Unfortunately, in the last 4-5 decades owing to negligence and greed of 'we' the consumers, fresh water resources have witnessed a considerable decline in their water quality and quantity. The ever-increasing groundwater depletion is a major threat to people. Studies have revealed that there is a decrease of 1ft. to 4ft. annually in the ground water level of this region. We have to stop being the victims of the vagaries of nature, it calls for tightening our belts and starting a mass revolution.

Realizing this, Janhit Foundation since 2003 has started working towards it by promoting Rain water Harvesting. Since then 55 rain water harvesting structures have been set up in Meerut, to name a few that have been installed are, at, Mahila Police Thana, Meerut College, NAS College, MDA Building, Avas Vikas office building and others across the city.

A Rain Center has been set up at 180/7 Shastri Nagar by the organization. This is a platform for a permanent exhibition house that seeks to spread water literacy among urban Indians. It defines the role played by every Indian citizen in harvesting rainwater and using it to combat the menace of water scarcity. The Rain Centre is intended to be a museum and a laboratory rolled into one. As a museum, it intends to showcase how an installed Rainwater Harvesting system works. Here one can get pamphlets, important publication fliers and buy books on rainwater harvesting. It is also equipped with National reports, thesis, important dissertations, water atlas and other important publications. As a laboratory, it is intended, to demonstrate a working version of the Rainwater Harvesting. It also collects and displays statistics of how much rain water has been accumulated over time. In future it will have a water testing facility on site wherein people can test the purity of water.

This is the second Rain Centre in the country, the first of its kind in North India. It was set up in July, 2004 in collaboration with the Centre for Science and Environment (CSE), New Delhi. The

Meerut Rain Centre has pictures and data in the form of colorful panels in an exhibition room. These panels portray the significance of rain in the Indian way of life, its influence on the customs, traditions economy and politics of the country. A library has been established where information in the form of books, CDs, newsletters, video films etc. on water is available. The Rain Centre building has a live model of rooftop rainwater harvesting with an area of 185m2. It harvests a total volume of 1,10,437 liters of rainwater on an average annually. In short, the Rain Centre provides people the complete know-how for harvesting rainwater.

It equips the civil society to take leadership in the movement to conserve water. The Rain Centre also helps to begin the process of rebuilding a society of 'water literates'. Janhit Foundation staff has been trained in rainwater harvesting techniques by experts from the Central Groundwater Board (Govt. of India). They are equipped to provide training to professionals, engineers, architects, and officials of development organizations to enable them to construct rainwater harvesting structures. Rainwater harvesting structure designing is provided to private builders free of cost.

Some of the common queries that play on the minds of people are, What is rain water harvesting? Does it work? Can we harvest rain in our own house? Who benefits? What will be the quality of water? How much does it cost? To put it simply, Rain water harvesting means catching and holding rain where it falls and using it. We can store it in tanks or can use it to recharge groundwater.

Our ancestors harvested rain just as naturally as they tilled the ground to grow crops. We lost touch with these local solutions. But now, as the taps dry up, more and more people are reviving this age-old system and practicing it very successfully. Structures to harvest rain require little space. A dried bore well, a row of soak pits or a tank concealed below the ground are all that we need. The open spaces, rooftops and ground can be used as catchment (surface to catch rain). By this, our groundwater will be recharged, and as groundwater moves, our neighborhood will gain too. While doing it we have to be careful not to direct sewage water into it. Rain water is like distilled water. Water is in its purest form as rain, if we do not mix it with other contaminants. Cost is calculated based on the size of the building and various other considerations.

We have to realize the importance of conserving water and take it as our own responsibility to rectify the situation and not look towards the Government for everything. It is so easy to sit comfortably in our homes and criticize others and the government for not doing anything, we have to awaken to the fact that we are the ones creating the problem so we should be the ones to solve it. Unless each and every one of us do our little bit the problem will worsen.

- *Sonakshi Hudda*
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