



Cover Story

TAHAAN – makes water available - Shri Vinod Hande



जलसंवाद



जलसंवाद तर्फे इ पुस्तके

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- (२) जाणून घ्या आपले पाणी : डॉ. दत्ता देशकर
- (३) जल-सुसंस्कृततेच्या दिशेने : श्री. गजानन देशपांडे (आगामी)
- (४) Towards Excellence in Water and Culture :
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- (७) जलक्षेत्रात काम करणाऱ्या संस्थांचा परिचय : श्री. विनोद हांडे (आगामी)
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Jalsamvad



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Catch the rain where it falls

Climate change has disturbed the rainfall pattern. Previous rainfall pattern was bimodal in distribution, i.e. two rises and two falls. First showers of Mansoon were received in the month of June. Then there was a continuous increase, month by month till September. Rainfall in the month of September was proportionately less. But again, in the month of October and November rainfall used to increase and then the rainy season would come to an end.

This distribution divided the agricultural operations in two parts, i.e. **Kariph and Rabbi seasons**. These seasons were not manmade but Nature was responsible for this division. Cultivators used to select different crops in these two seasons suitable to the climate and this practice was followed for generations. But due to climate change in recent years, unimodal distribution has replaced this bimodal distribution, where there is only one rise and one fall in rainfall pattern. Month of June receives scanty rain fall. The real rainy season starts in the month of July. Month by month rainfall increases and by November the rainy season comes to an end. Thus, the two seasons which were prominently noticed (i.e. Khariph and Rabbi) have intermixed and the cultivators are utterly confused as to when one season starts and the other ends.

This impact has disturbed the routine and the cultivators are living in a period of uncertainty. They are not in a position to face this uncertainty as their normal decisions of sowing and harvesting become totally vulnerable. In the month of June when the sowing operations used to start, now enough humidity is not there in the soil. Due to some scanty rains, the cultivators start sowing and ultimately repent as germination does not take place due to poor humidity. Even when the sowing is done properly, during harvesting season heavy rains affect the yield. For Rabbi season, good humidity is there at the time of sowing but as plants grow, it decreases and growth is thwarted. Ultimate result is, failure of the rabbi crop. Thus, the cultivator is a looser in both the seasons.

What is the solution to this problem? The only solution to this problem is to create adequate storage of water. This reserved stock of water can work as a protection to both the crops. In June, at the time of sowing, If enough humidity is not there, he can wet the land and then sow. There onwards, if there is a gap in rains, that can be filled by this storage. Similarly, even after humidity decreases in the month of November, this storage of water can assist him keeping the crop alive.

There is no reason in start shouting that Nature is not cooperating. You have to help yourself. You must have learnt the proverb – **God Helps them who help themselves**. Let the Nature behave in its own fashion. We can, with our own efforts, help our crops to survive. This storage of water can be above the soil or below the soil. You can construct a farm pond where enough rain water can be collected and stored. However, there is a danger to this storage. That danger is of evaporation. Heat created by sunshine and the wind flow are responsible for this evaporation. If you want to do away with this, the storage of water can be done below the soil. That is what we call as ground water recharge.

If the cultivator wants to survive, this is the only alternative left before him. There is a phrase in is English – do or die. If you **do** nothing to store water, be prepared for the **DEATH**.

Dr. D. G. Deshkar
Editor.

Organization - Tahaan

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Since 2016 Tahaan is actively working in areas of water conservation and providing clean drinking water. They are working in villages and cities to plan the water resources and increase green cover. Tahaan means 'Thirst' in Marathi. The organization started with the motive of 'Let no one remain thirsty on this earth'. Report of Tahaan on water crises says that "by 2030 India will have a water deficit of 50 percent". Further they say that nearly 76 million people in India do not have access to safe drinking water as polluted rivers and poor storage infrastructure has created a water deficit which becomes unmanageable in the future. In short, India is heading towards an unmanageable water crises.

Current and future requirement of water.

Current requirement is 1100 billion cubic metres, by 2025 it will be 1200 billion cubic metres and 2050 it will be 1447 billion cubic metres. Objectives of Tahaan are providing permanent solutions to the water crises in India by undertaking rainwater harvesting projects, water sanitation facilities, providing emergency water tankers and also plantation of trees to protect ecology.

Every year India faces shortage in major part of the country. As per report half of Indian population will face water shortage by 2030. Currently more than 163 million people in India do not have access to clean water. In 2016 when Maharashtra faced one of the biggest droughts Tahaan provided water tanker to the affected villages near Amaravati. Seeing the situation they realised that working one year is not enough to control the situation. If they want real change they have to work hard for the good cause.

Though Tahaan is actively working from 2016 but it is established in 2018 with head quarter at Pune. Tahaan is a group for all those who want to bring a positive change in society. The main activities of the group will be to focus on water conservation efforts. This is ranging from as little as putting small bowls of water for the birds to drink in summer to providing water tankers in drought affected area. Tree plantation drive, water awareness drives etc. are also the part of activities of 'Tahaan'. Ravina More is the founder and President of Tahaan organization. Tahaan believes in strength of unity. You can achieve wonderful results when there is teamwork and collaboration among them says Tahaan. Achievement of Tahaan up to 2019 are listed as below,

- 17 Villages adopted.
- 29 lakh gallon of water supplied
- 7000 trees planted
- 1.4 lakh people benefited

It is already mentioned in above paragraph that Tahaan started their activities from 2016 so lets look at their achievement for that year.

- They have provided more than 520 tankers to the different drought affected villages to meet their immediate water need. Project cost was around 7 lakhs.
- They have conducted more than 24 street plays across above villages to spread awareness about water conservation.
- They have planted more than 4500 trees in above villages under Maharashtra govt. program and also ensured their survival.
- In 2018 they have started tree plantation

program in Pune, Marnewadi and Baramati.
A good slogan from Tahaan –“ Life depends on water and availability of water depends on you”.
Projects under taken by Tahaan.

Rain water harvesting –

Rainwater harvesting is the most effective method of water conservation. It is used to collect and store rainwater for use by human, animal, agriculture and industries. The rainwater in this process is collected at the surface before it is lost as surface runoff. The ground water is then charged artificially through the process. This is the most useful method for developing country like India, where there is huge gap in demand and supply.



Water Wheel Donation :

As per UNICEF 200 million hours women and girls spend every day for collecting water. In current practice of fetching water requires heavy pots to be carried on the head by the ladies and young girls of the rural areas.

The Water Wheel is beneficial by reducing the labour of water collection for women. They can use their time in more productive work to increase productivity. To provide relief from the head load Tahaan donated Water Wheels to needy families. Head loading leads to chronic pain and can also cause complications during childbirth. The capacity of Water Wheel is 45 litres that is double than the conventional pots used for head loading. This Water Wheel also saves 50 percent less time of water fetching. This time they can spend to grow income and educating their children.

Filter Donation :

Tahaan says clean water is very important for public health, whether it is used for drinking,



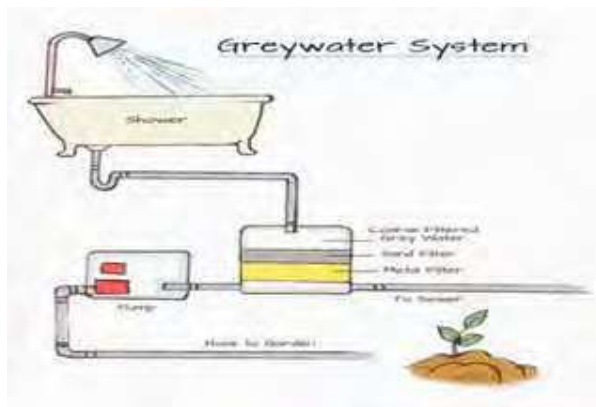
domestic use, food production or recreational purposes. Due to unclean water many people suffer from waterborne diseases like kidney stones, liver and kidney damages and many types of skin diseases. To provide clean drinking water Tahaan donated water filters and also arranges awareness program in tribal villages.



Grey Water Recycling :

Greywater is generally a water from our bathroom, sinks, shower, tubs and washing machines. It is not water that comes in contact with faeces, either from toilet or from washing diapers. It is important to note that greywater if released into rivers and lakes it pollutes the water but for plants they are valuable fertilizers.

Tahaan promotes greywater reuse as a way to increase the productivity for sustainable backyard ecosystem that produce food, clean water



and shelter wildlife. Such system recover valuable “waste” products, household compost and reconnects their human inhabitants to ecological cycle. Below given diagram is self explanatory.



Tree Plantation :

Trees play a key role in capturing rainwater and reducing the risk of natural disaster like floods and landslides. Their root systems act like filter that is removing pollutants and slowing down the water’s absorption into the ground. This process prevents harmful waterside erosion and reduces the risk of flooding. A mature evergreen tree can capture more than 15000 litres water every year. To protect trees Tahaan conducted tree plantation drives in villages and cities. They have conducted these drives during June, July and August. They have conducted following types of drives,

- Village Community Plantation
- School and College plantation
- Corporate Employee Drives



- Birthday Special drives



Tree Adoption :

Tahaan takes care of the future by taking care of the existing trees. Planting a tree is one of the most powerful way by which we can make the difference for the environment. Here Tahaan is not asking anyone to plant a tree they are asking us to adopt one tree. Because they need our help not only for planting but bringing it to life and being responsible for its growth.

Tahaan took up the initiative of propagating “tree Adoption program” in Pune at Taljai hills. Here till now 450 trees have been adopted and they are looked after by the people who adopted them individually.

Urban Gardening :

Theme of Tahaan- ‘To plant a garden is to believe in tomorrow’.

Urban gardening is the process of growing plants of all types and varieties in an urban environment. Urban gardening is also known as urban horticulture or urban agriculture. As per Tahaan urban gardening provides below mentioned many environmental, social and health benefits.

- Provides a local source of food.
- Brings communities and families together.
- Educates urban children about the origins of food.
- Adds green space to cities.
- Helps prevents soil erosion.
- Helps filter air and rain water.
- Mitigates the urban heat.

Plant Watering :

Mother nature too needs care and protection. Show her you care by caring for her trees. As per general principal plants absorb water from the roots. This means we have to soak the soil so that plant can take water through roots to the rest of the plant. For that you should water long enough for the water to seep well below the surface. This keeps the roots as deep as possible. At Tahaan they understand that plants need regular care and mostly in the summer. Every summer they conduct plant watering activities in Pune Taljai Hills. In this program volunteers and citizens join Tahaan to care and protect plants and trees.



FT (Financial Times) Broadcast is an online media company had a conversation with Ravina More on 15th May 2017, about their organization. Few questions of their discussion are highlighted here.

Q) What inspired you to take up this particular field of social work?

A) While all of us were aware of the judicious use of water, the water drought of 2016 that prevailed across 3/4th of Maharashtra really shocked us. When we visited the drought affected villages for survey, we saw that each and every well in the villages had dried. The little water that was available was dark brown in colour and so dirty that one would not even want to touch it. The road to ease the situation that faces these villages yearly is long, but we need to start somewhere. Hence we decided to get together and start working to solve the water problems.

Q) What are the various projects have you undertaken till date?

A) We have supplied water to more than 20 villages in the western part of Pune district during last year's drought. More than 500 tanker trips were done in all. We also conducted street plays for awareness drives in these villages. This was followed by tree plantation activity supported by govt. of Maharashtra where we planted more than 5000 trees in the villages. This year we started tree adoption program on Taljai hill at Pune. We have also conducted a drawing competition for the tree adopters families. We plan to expand to other hills also. We are also starting rural projects in the next week to supply water to the drought affected villages and improve the water literacy. There are more programs we are looking at, but it is too early to talk about them now. We started off in 2016, so we are still young as a team.

Q) Is there any striking experience of yours, in this journey, which you would like to share with our readers?

A) Recently a new volunteer has joined the team, his name is Laksh. While the team was having a meeting last week at Sambhaji Garden, to discuss the water problems in some villages, he was silently listening. And he said, "But I have a question. If these villages know that they are going to have water shortage, why do not they save the water from the beginning itself?

Laksh is just 7 years old, our young volunteer. If a kid at his age can understand that the solution to such a big problem is so simple, why do we, as adults, still fail to remember it every day? Nature has enough for everybody's needs, not everybody's greed.

Other activities of Tahaan

Wall painting : Good art can educate and create awareness, and awareness leads to change. For Tahaan wall art is not a tool for decoration, it is means of awareness raising. They work with artists and volunteers in order to beautify spaces and educate people about taking care of the environment and water conservation.

Water Aerator : An aerator can help cut the water flow by less than half to 6 litres of water per minute. An Aerator is a small attachment that is fitted at the

end of water taps or can be inserted inside the spout. The purpose of an aerator is to maintain a constant rate of water flow, which is not affected by pressure fluctuations. They come in the form of mesh screen that divide the flow of water into multiple small streams by adding air in between. The volume of water flowing from the tap gets reduced as the water stream is diluted with air. This results in water savings and aerator also minimises splashing in sink.



For other activities and projects of Tahaan readers can visit their website.

Organizations that supports Tahaan in their work are listed below.

- Rotary Club of Aundh
- Connect For
- Toastmasters International
- Pune Smart City
- Tata Trust
- IIM Ahmedabad
- MTC Group
- Bharatiya Jain Snaghatna

- Voice of the Youth for Unity
- Thermax. Etc.

Donation :

One can donate to Tahaan in following ways because not all of us can do great things, but we can do small things with great love.

- Donation for Tahaan’s sustenance- You can support Tahaan through corpus donations. The corpus fund is important to the organization as it helps during the times of distress and there by help them to achieve their goal.
- Birthday Tree plantation- Restore the environment by planting trees for a wedding, birth, birthdays, anniversaries and other special occasions. Give your loved ones joy by giving them a special present. From Tahaan you will receive online certificate for your contribution and number of trees that will be planted on your behalf.
- Water Wheel Donation- About water wheel it is already mentioned above in Tahaan’s Water Wheel Project.

- Donate Candle Water Filter- More than 163 million people in India do not have access to clean water. Help them to provide the relief from unclean water. It will help Tahaan in providing access to clean, safe and reliable water to families who lives in tribal village of Maharashtra.

- Donate for Rainwater Harvesting Projects.

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Save Water. Save Maharashtra.



Inter-connected Disaster Risk Report-2023-
Some Excerpts about Groundwater use.

A risk tipping point is reached when the systems that we rely on for our lives and societies cannot buffer risks and stop functioning like we expect it to. Today, we are moving close to the brink of multiple risk tipping points. Human actions are behind this rapid and fundamental change to the planet, driving us towards potential catastrophe.

Luckily, we are able to see the danger ahead of us. Changing our behaviours and priorities can shape a path towards a bright, sustainable and equitable future.

Key Numbers 21 of 37 world's largest aquifers being depleted faster than they can be replenished 70% global groundwater withdrawals used for agricultural production 2 billion people relying on groundwater as a primary source of freshwater

A strong relationship between groundwater and global food production means that local problems can quickly have far-reaching consequences. For example, the High Plains aquifer in the United States supplies one third of all groundwater for irrigation used in the country and supports over \$35 billion worth of crops such as wheat and soy. However, as unsustainable groundwater extraction continues, around 40 per cent of the aquifer's area will not support irrigation by the year 2100. Since the United States exports almost half of its groundwater-dependent crops to other countries, places like Mexico, China and Japan will also suffer the impacts. Additionally, India is the world's largest user of groundwater, exceeding the use of the United States and China combined. The north-western region of India serves as the

breadbasket for the nation's growing 1.4 billion people, with the states of Punjab and Haryana producing 50 per cent of the country's rice supply and 85 per cent of its wheat stocks. However, 78 per cent of wells in Punjab are considered overexploited, and the north-western region as a whole is predicted to experience critically low groundwater availability by 2025.

Agricultural intensification combined with new technologies and policies that make groundwater cheaper to use has accelerated extraction rates, leading to alarming levels of aquifer depletion. We can no longer consider groundwater as a boundless source of easily-accessible freshwater. Instead, we can now see that it has limits and is becoming increasingly inaccessible, with worrying implications for its use as a coping mechanism when rains fail. We need drastic changes in our global agricultural system to be mindful of the limits of groundwater systems and our ability to access this water. We need regulations and technologies to ensure the sustainable use of groundwater and preserve this resource for when we need it most.

Tipping point: When the water table in a given aquifer drops consistently below the well depth, access to groundwater will become problematic, increasing the risk for farmers to be unable to irrigate their crops.

One example of such a risk tipping point is the depletion of groundwater needed for agriculture (Groundwater depletion). Groundwater is an essential freshwater resource stored in underground reservoirs called "aquifers". These aquifers supply drinking water to over 2 billion people, and around 70 per cent of withdrawals are

used for agriculture. However, more than half of the world's major aquifers are being depleted faster than they can be naturally replenished. As groundwater accumulates over thousands of years, it is essentially a non-renewable resource. The tipping point in this case is reached when the water table falls below a level that existing wells can access. Once crossed, farmers will no longer have access to groundwater to irrigate their crops. This not only puts farmers at risk of losing their livelihoods, but can also lead to food insecurity and put entire food production systems at risk of failure. This is not a theoretical threat. Some regions, like Saudi Arabia, have already surpassed this groundwater risk tipping point. In the mid-1990s, Saudi Arabia was the world's sixth- largest wheat exporter, based on the large-scale extraction of groundwater for irrigation. But once the wells ran dry, Saudi Arabian wheat production dropped and they had to rely on wheat imported from elsewhere. Other countries, like India, are not far from approaching this risk tipping point, too.

In an interconnected world the impacts of risk tipping points such as this are felt globally, as they cause ripple effects through food systems, the economy and the environment. They affect the very structure of our society and the well-being of future generations, and they also affect our ability to manage future risks. Groundwater, for instance, is relied upon to mitigate half of the agricultural losses caused by drought, a scenario we can expect to occur more often at many places in the future, due to climate change. If the groundwater has been depleted, this is an option we will no longer have.

Solutions

1. Being a good ancestor

Future generations are at the mercy of the choices we make. This can start with designing our systems with the recognition of potential future risks, considering future generations as stakeholders in our plans today, and acting out of precaution for negative impacts down the line rather than maximizing short-term gains over long-term losses.

2. Being one with nature

Letting go of the idea that the Earth is subject to human ownership will help risk reduction, as this new mindset will no longer ignore the idea that humans are a species that depend on other species for survival, such as for food, water and clean air. There cannot be separate spaces for humans and nature, because humans are part of nature.

3. Creating a world without waste

Creating a world without waste involves valuing our resources beyond human-use value and respecting all living and non-living things in their own right. We would need a circular resource model that recognizes the intrinsic value of all materials and we would need to be innovative about how we use them, effectively eliminating waste from our socioecological systems.

4. Cultivating a global neighbourhood

No single actor, community or country can tackle all interconnected risks alone, making cooperation a necessity. This requires governments, organizations, communities and individuals to show trust, respect, empathy and compassion for each other worldwide.

5. Designing an economy of well-being

The prevailing growth-based economic model is destined to fail on a planet with finite resources. However, there has been an increasing desire to replace materialistic values centred on maximizing production and income with post-materialistic values of personal freedom and well-being and the need to strive for human well-being within planetary boundaries . The concept of a "well-being" economy lies at the core of these ideas, aiming to improve the overall well-being of individuals and communities and encompassing social, economic, environmental, physical and cultural aspects.



Punganur Cow: The world's smallest and cutest

cattle breed from India

By - Shuvangi B

This cow breed is small than a Great Dane!

What if you were told that there is a cattle breed that is smaller than a Great Dane, but produces milk that is richer than cream? You might think it's a joke, but the truth is that they exist. Meet the Punganur cow, a rare and unique breed that originated from the Chittoor district of Andhra Pradesh in southern India.

Punganur cows gained popularity and attention recently when Prime Minister Narendra Modi fed and caressed the cows at his residence on the occasion of Makar Sankranti on January 14, 2024. He posted a video of him feeding the cows on his Instagram account, which went viral on social media. People were amazed and curious about the breed and its characteristics. PM Modi's gesture was also seen as a way of promoting the conservation and awareness of the indigenous cattle breeds of India. By showing his love and respect for the Punganur cow, he also showed his appreciation for the rich and diverse heritage of India. The Punganur cow is a treasure of India that

deserves to be preserved and promoted.

The origins of this amazing cow breed

Punganur cow is named after the town of its origin, Punganur, in the Chittoor district, situated at the southeastern tip of the Deccan Plateau. The Rajas of Punganur developed the breed and used them for milking and other light agricultural operations. The breed is believed to have descended from the Ongole cattle, which the Vijayanagara kings brought to the region in the 15th century. The local hill cattle and the Sahiwal cattle from Pakistan also influenced the breed. Punganur cow has a long history of being revered by the locals for its cultural and economic significance.

Characteristics and features of the Punganur cow

It is among the world's smallest humped cattle breeds, with an average height of 70-90 cm and an average weight of 115-200 kg. It has a broad forehead and short horns that are crescent shaped and often loose, curving backward and forward in bulls and lateral and forward in cows. It has a long, thin tail and a small hump. It is mainly white and light grey in color, but sometimes it can also be light brown, dark brown, or red. It has a gentle and friendly temperament and is easy to handle. It is well adapted to the harsh climatic conditions of the region and can survive on dry fodder such as grass, straw, hay, and so on.

Milk production and quality

This breed of cow is mainly used for milk production. Its milk has a high fat content





majority of the population, cows are considered sacred. They are associated with Lord Krishna, the god of compassion. Beyond religious significance, cows provide essential sustenance through milk, particularly vital during scarcity. Revered as symbols of wealth and abundance, they are adorned during festivals. They are also prized for their gentle temperament and adaptability to harsh climates, many Indians regard cows as maternal figures, symbolizing

compared to the milk of other cattle breeds. Generally, cow's milk has 3 to 5 percent fat content, but Punganur cow's milk contains about 8 percent fat content. Its milk is also rich in nutrients such as omega fatty acids, calcium, potassium, and magnesium, which are essential for maintaining good health. Its milk is also said to have medicinal values and is used for making ghee, butter, and curd. The cow has an average milk yield of 3 to 5 liters per day and a daily feed intake of 5 kg.

Conservation prospects and popularity of the cow

The Punganur cow is a rare and endangered breed, with only a few animals remaining. The breed is not officially recognized as a breed since there are only a few animals remaining. The Livestock Research Station, Palamaner, Chittoor district, attached to SV Veterinary University, is the main center for conservation and breeding of the Punganur cow. The breed is also being promoted by some NGOs and farmers who are interested in preserving the indigenous cattle breeds of India.

India's devotion to cows

India's connection with cows is deeply rooted in history, culture, and spirituality. With Hindus, forming the

nourishment and protection. This relationship extends beyond religious devotion, embodying a source of national pride, gratitude, and profound affection.

Can they be kept as pets?

The Punganur cows, owing to their small size, make great pets in many Indian homes. Traditional and rural homes in India usually keep these cows as pets for they require less space but still can be used for dairy purposes.

Nutrients in other cow milk

Cow milk is packed with important nutrients like calcium, phosphorus, B vitamins, potassium and vitamin D. Plus, it's an excellent source of protein as per experts, drinking milk on a daily basis is a healthy practice. It is said that regular consumption of milk and other dairy products may



BCCL



prevent osteoporosis and bone fractures and even help you maintain a healthy weight.

Cows of India

In India, there are numerous cow breeds, but the most famous cattle breeds from India and South Asia are the Nelore cattle, Brahman cattle, Guzerat cattle, and Zebu cattle. Sahiwal, Gir, Rathi, Tharparkar, and Red Sindhi. As per reports, they are the best milking cow breeds in India.

High-milk-yielding cows

When it comes to which Indian breed of cow yields the highest quantity of milk, it is Sahiwal. Sahiwal is an indigenous breed of cow that originates in Punjab. It can produce, on average, 15–18 kg of milk per day.

Facts about cows

Cows have a strong sense of smell. They can perceive smells at a distance of up to ten kilometres. Cows are moving constantly during grazing and can cover 13 km per day.

What's more???

You will be surprised to know that cow does not know the difference between red and green. Also, cow's heart beats 60 to 70 times in a minute and cow's hearing power is better than humans.

Importance of cow milk

As per studies, protein found in Indian cow's milk is important in curing heart attack, diabetes and mental illness. Also, it has also been revealed that the cow of Indian breed has sun glands, which convert its milk into medicine with nutritional value.

Did you know?

Cows are structured in a way that they stand up and lay down almost 14 times in a day. Also, they can spend 10 to 12 hours just lazing ways and sitting around. Interestingly, they do not sleep for more than 4 hours a day.

How do they communicate

As per experts, besides the 'mooing' cows use their body language, such as the position of the head, limbs and tail, as well as facial expressions, in order to communicate.



27000 trees are cut every day for toilet paper

Important news- : We are from nature, nature is not from us, raise your hands to save it

Today is World Environment Day. A day in the year to remind us that we are from nature, not nature from us.

In the name of development, man cut down forests, polluted the water of rivers and seas, produced things in bulk that we did not need. More than five thousand billion tons of toxins were released into the environment and today the situation is such that more than 12,000 species have become extinct and thousands are on the verge of extinction.

Nature's ecosystem is getting damaged. Temperatures are rising, glaciers are melting.

The ten hottest days ever recorded in nature have all occurred in the last decade. In the summer of 2022, the Meteorological Department was saying that this temperature has broken all records of the last 122 years. The country has never experienced such heat before. But then came 2023 and it broke the heat record of the last 2000 years. This year's heat has also broken the record of last year.

This is not just the condition of India. The whole world is burning. Everywhere in Vietnam, Singapore, Indonesia, Malaysia, Mexico, the temperature is touching the sky breaking the records of thousands of years.

If we do not wake up even today, then you can imagine

what kind of world we are going to leave for our children.

It is the government's job to take big policy decisions to protect the environment, but as citizens our responsibility is no less. If 1.25 crore people of this country make small changes in their daily lives, take small steps, and think before every action about the impact it will have on nature, then change is possible to a large extent.

The pot gets filled drop by drop.

Today in the news of need we will talk about those small changes.

The country with the least population is spreading the most pollution

The US has a population of about 340 million, which means only 5% of the world's population lives there. But they can use the most resources in the world after China and release the most carbon into the air, about 6 million tons.



China is number one in this case, which emits approximately 14 million tons of carbon. India is number three with 35 lakh tons of carbon. America disposes so much plastic in the environment every year that it can be used to circle our earth five times.

Before moving ahead, look at some environment related facts in the graphic below, which are scary.

It will take 1000 years for a plastic bag to decompose

According to the Center for Global Change and Earth Observation, 400.3 million metric tons of plastic are produced every year around the world.

We produce 353.3 million metric tons of plastic waste every year. Only 15 percent of the plastic produced is recycled. The rest remains in the environment as waste. It takes 1000 years for plastic to decompose.

From water bottles to packets of chips, from waking up in the morning and brushing your teeth to going to sleep at night, plastic is present everywhere in our lives. We feel that plastic has made our lives easier, but the truth is that after the atom bomb, it is man's most dangerous invention.

Plastic is not only harming nature but also our lives. According to a study by the University of New Mexico, plastic is damaging our liver, kidneys and brain.

So, as far as possible, avoid using it in your daily life. Especially the use of such plastic which will remain as garbage in nature and which will not be recycled.

If you go to the vegetable market, do not take a plastic bag. Carry a cloth bag from your home. Reduce plastic from your life as much as possible.

Consumerism will destroy the Earth

Whatever we buy, waste is produced in its production and that waste harms nature. Think about it, do we really need all the things we

have filled our houses with? We keep buying new things every day just because we are bored with the old ones. We pick up the old things and throw them in the garbage. This garbage thrown by us stays in nature for thousands of years, harms marine life and pollutes the air.

So avoid consumerism. Buy as few things as possible. Use what you have bought. Recycle old broken things and reuse them. Before buying any new thing, think whether you really need it. Do not buy anything that comes with a 'use and throw' tag.

Being economical, buying fewer things does not mean being miserly. It means being sensitive and responsible towards nature.

Reduce the use of paper

Trees have to be cut down to make paper. Do you know, every year 27000 trees are cut down all over the world just to make toilet paper. On an average, 60 crore 50 lakh paper bags are used every year in a supermarket. Due to cutting of trees, heat increases, there is no rain and the ecosystem of nature gets damaged.

Therefore, your small contribution to this campaign can be that you use paper as little as possible. Do not take paper bags to the supermarket. Carry small cloth bags from home.

ride a bicycle, use public transport

This is not miserliness. This is prudence and wisdom. We have to understand and fulfill our responsibilities towards nature.



Enhancing Women's Participation and Expertise

in Water Resource Management

Smt. Nilam Pandit, (M) : 9823948048



Enhancing Women's Participation and Expertise in Water Resource Management : An Essential Step for Sustainable Development

The interconnection between water resource management and women's empowerment is increasingly recognized as critical for sustainable development. This article explores the need to elevate women's expertise and active participation in water management, particularly in the agricultural sector, and the necessary changes in legal and institutional frameworks to support this goal. The historical and cultural significance of water and women as life sources is emphasized, along with the importance of addressing gender disparities in water access and management. Case studies from rural India illustrate the transformative impact of women's involvement in water conservation and sustainable practices.

Introduction

Water is the essence of life, sustaining ecosystems, economies, and communities. However, despite its abundance, many rural areas face significant water scarcity, disproportionately affecting women who are often responsible for water collection and management. Historically, water and women have been seen as life sources, and it is crucial to recognize the importance of water for women and women for water. This paper argues for increased women's participation and expertise in water resource management as a pathway to achieving sustainable development goals and gender equality.

Women and Water : Historical and Cultural Context

In many cultures, water and women are intertwined in both mythology and daily life. Women have traditionally been the custodians of water, managing household water needs and agricultural activities. In rural India, women are often seen carrying pots of water over long distances, symbolizing their crucial role in water management. Despite their significant contributions, women are frequently marginalized in decision-making processes related to water and agriculture.

The Burden of Water Scarcity on Women

Water scarcity exacerbates existing gender inequalities, placing a disproportionate burden on women. The physical and emotional toll of water collection is significant, often impeding women's ability to engage in education and economic activities. This burden extends to realms of societal and economic inequality, where women's contributions are undervalued and overlooked.

Empowering Women in Water Management

To address these challenges, it is essential to empower women as active participants and leaders in water resource management. This involves not only alleviating their burdens but also recognizing and enhancing their roles as stewards of sustainability.

Legal and Institutional Reforms

Achieving this goal requires changes in laws and institutional frameworks to support women's participation in water management. Policies must ensure women's rights to land and water, acknowledging their critical role in agriculture and

resource conservation. Legal reforms should promote women's involvement in decision-making processes at all levels, from local water user associations to national water policies.

Case Studies: Women's Impact on Water Management

In India, initiatives led by women have demonstrated the transformative potential of their participation in water management. For instance, Kavita Devi, a farmer from Barmer, Rajasthan, spearheaded a community-led initiative to revive traditional water harvesting techniques, transforming barren lands into productive fields. Such examples highlight the importance of women's knowledge and leadership in achieving sustainable water management.

Strategies for Enhancing Women's Participation Capacity Building and Education

Investing in women's education and capacity building is crucial for enhancing their participation in water management. Training programs should focus on technical skills, sustainable agricultural practices, and leadership development. By equipping women with the necessary knowledge and tools, they can effectively address water-related challenges and contribute to policymaking.

Collaborative Approaches

Effective water management requires collaboration between government agencies, civil society organizations, and local communities. Partnerships that include women as key stakeholders can harness their unique perspectives and expertise, fostering innovative solutions to water scarcity and conservation.

Promoting Sustainable Practices

Conservation and enhancement are two paradigms essential for sustainable water management. Conservation efforts should focus on preventing overexploitation of groundwater, promoting optimal utilization of wastewater, and protecting natural water bodies. Enhancement strategies include rainwater harvesting, afforestation, and constructing eco-friendly water storage structures.

Conclusion

Empowering women in water resource management is not only a matter of equity but also a necessity for sustainable development. Women's extensive knowledge and active participation can significantly improve water conservation and management practices. By implementing legal and institutional reforms, investing in capacity building, and fostering collaborative approaches, we can ensure that women play a central role in shaping a water-secure future. Recognizing the intrinsic link between gender equality and sustainable development, it is imperative to support and empower women as custodians of our water resources.

References

1. United Nations Conference on Environment and Development (1992): Recognizing the importance of women's participation in environmental conservation and sustainable development.
2. Dublin Statement on Water and Sustainable Development (1992): Highlighting the crucial role of women in ensuring water supply and sanitation.
3. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA): National initiative supporting rural employment and water conservation projects.
4. 2011 Census of India: Providing demographic data and highlighting the role of women in agriculture and water management.
5. Case studies from rural India: Examples of women-led water management initiatives transforming local communities.

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Rainfall Alert

By Shyamu Maurya

Rainfall Alert: There will be heavy rain in 20 states this year, Meteorological Department released forecast

The Indian Meteorological Department has released a new update regarding monsoon. According to IMD, India is likely to receive more than normal rainfall this time in the 2024 monsoon season and La Nina conditions are expected by August-September.

Monsoon Update Today: There is good news for the countrymen of India. This year the monsoon will be good and there will be heavy rains in more than 20 states. As per the comprehensive rainfall forecast for the Southwest Monsoon season 2024 released by IMD, the entire country is likely to receive above normal rainfall during the Southwest Monsoon season from June to September 2024, which bodes well for crops. There will be more than normal rainfall in most parts of the country.

Giving information about the rainfall of the 2024 south-west monsoon season, Dr. M. Ravichandran, Secretary, Ministry of Earth Sciences, said that it is expected to be 106 percent of its long period average (LPA) with a model error of $\pm 5\%$. is likely to. The LPA of monsoon season rainfall over the entire country, based on 1971-2020 data, is 87 cm. This year, most of the country is expected to receive below normal rainfall, except some areas of northwest, east and northeast India, where rainfall is likely to be below normal. There is a possibility of more rain than normal in parts. Expected La Nina, positive IOD and below normal snow cover in the Northern Hemisphere will be favorable for rainfall during the southwest monsoon 2024 season.

Effect of El Nino will be visible

IMD Director General Dr. Mrityunjay Mahapatra said that at present, moderate El Nino effect conditions prevail in the equatorial Pacific region and climate model forecasts indicate neutral till the beginning of the monsoon season and La Nina effect in the second half of the monsoon. Are. Snow cover in the Northern Hemisphere was below normal during the last three months (January to March 2024), reflecting excess rainfall this monsoon. Snow cover extent in winter and spring over the Northern Hemisphere as well as over Eurasia is generally inversely related to subsequent monsoon rainfall. IMD will release its updated forecast of monsoon rains in the last week of May 2024.

Rainfall Forecast During South-West Monsoon Season 2024

During monsoon (June to September) the entire country is likely to receive above normal rainfall ($>106\%$ of the long period average)

Quantitatively, seasonal rainfall over the country is likely to be 106% of LPA with a model error of $\pm 5\%$.

The LPA of season rainfall over the entire country, based on data from 1971-2020, is 87 cm.

Currently, moderate El Nino conditions persist in the equatorial Pacific. Climate model forecasts indicate neutral El Nino conditions till the beginning of the monsoon season and La Nina conditions during the latter half of the monsoon season.

Presently neutral Indian Ocean Dipole (IOD) conditions prevail. Climate model projections indicate that positive IOD conditions are likely to develop during the monsoon season.

Snow cover in the Northern Hemisphere was below normal during the last three months (January to March 2024). The extent of winter and spring snow cover in the Northern Hemisphere as well as Eurasia is generally inversely related to the rainfall of the subsequent monsoon season.

Know how the monsoon will be in which state

More than normal rainfall is expected in more than 20 states: Kerala, Tamil Nadu, Karnataka, Telangana, Andhra Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Rajasthan, Punjab, Chandigarh,

Haryana, Delhi, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Sikkim, Meghalaya, Arunachal Pradesh, Puducherry, Andaman and Nicobar Islands, Lakshadweep, Dadra and Nagar Haveli, Daman-Diu.

Normal rainfall expected in 4 states: Chhattisgarh, Himachal, Jammu and Kashmir and Ladakh.

Below normal rainfall expected in 6 states: Odisha, Assam, Nagaland, Manipur, Mizoram and Tripura.



Elephants did wonders, turned barren land into a green forest

Shri. Harikant Sharma

Agra News: The elephants have propagated many indigenous plant species around the centre premises, including mango, pumpkin, grapes. This lush greenery has led to an increase in bird species. There were only 15 when the centre started, which has now increased to over 70 species. Many of these birds are migratory and are now seen frequently during the season.

At one time there was only barren land all around. Today there are dense trees and forests at that place. Birds and wildlife reside here. Elephants have brought prosperity to the forest here. May 22 is World Biodiversity Day and the Elephant Conservation and Care Center in Mathura is an example of how elephants have transformed this place from barren to green.

The elephants have propagated many indigenous plant species around the centre premises, including mango, pumpkin, grapes. This lush greenery has led to an increase in bird species. There were only 15 species when the centre started, which has now increased to 70. Many of these birds are migratory, which are now seen frequently during the season. Butterflies, which were previously rarely seen here, now have at least six different species in the area.

During their long morning and evening walks, the elephants spread these seeds over kilometres. By eating the fruits from the trees, the elephants increase the diversity of vegetation within their habitat. This has led to the growth of various trees and plants at the centre, creating a diverse and vibrant ecosystem. Since the establishment of the centre, Wildlife SOS has seen a gradual increase in the variety of plant and animal species within the premises.

In 2010, when Wildlife SOS brought rescued elephants here from torture, there was barren land for miles. But with the presence of more than 30 elephants, the situation here gradually changed and this area turned into a lush green forest.

As they wander around the center, elephants play a vital role in the restoration and growth of local flora and fauna when they graze and defecate. They only digest 35-40% of the nutrients in their diet, which means their feces contain plenty of undigested seeds and grains. This is a valuable food source for a variety of animals, including deer, birds and small mammals, but also acts as a natural fertilizer, promoting the growth of new plants.



Earning 21 lakhs annually by selling cow dung

and earthworms

Shri. Naveen Lal Suri

Earning 21 lakhs annually by selling cow dung and earthworms, read the success story of Shahjahanpur farmer Gyanesh

Young farmer Gyanesh Tiwari said that currently I have 40 animals. We use their dung to make vermicompost. If there is less dung, we buy it from other farmers. 12 employees handle all the work from packaging to other work.



Gyanesh Tiwari, a farmer from Nabipur village in Shahjahanpur (Photo-Kisan Tak)

UP Farmer Success Story: Due to the bad effects of chemical pesticides, the use of organic fertilizers has increased in farming. In this episode, the importance of using vermicompost (earthworm compost) has also increased. Cowdung and earthworms changed the life of a progressive young farmer of Shahjahanpur. This farmer is now

earning lakhs of rupees a year. In a conversation with Kisan Tak, Gyanesh Tiwari, a resident of Nabipur village in Shahjahanpur, said that vermicompost fertilizer made from cowdung and earthworms is in great demand in the market today. Today most of the farmers are using vermicompost fertilizer in their fields, because all the essential nutrients are found in vermicompost. Due to which the crop yield is good.

He told that he is earning 12 lakh rupees annually by preparing vermicompost from the dung coming out of his dairy. At the same time, he earns about 8 to 9 lakh rupees annually by selling earthworms. Gyanesh tells that he got a B.Ed degree from Meerut in 2010 and opened a dairy farm in 2014. In 2016, he took training in making vermicompost and started preparing vermicompost on his dairy farm. Today we prepare vermicompost in 200 feet.



There are around 40 buffaloes in the cowshed

Gyanesh further said that along with vermicompost, he also sells earthworms. Gyanesh is selling about 70 quintals of earthworms in a year. Farmers from nearby areas as well as from other districts and states come to buy earthworms. He said that he earns about 20 to 21 lakh rupees a year by selling vermicompost and earthworms. Gyanesh Tiwari, a resident of Navipur, a small village in Nigohi, a development block area of Shahjahanpur, said that he prepares about 1700 quintals of vermicompost in a year from cow dung. The prepared vermicompost is used by farmers as well as in nurseries and kitchen gardens. The price of 1 quintal of vermicompost is Rs 700. Usually, there is a profit of 40 to 50 percent in vermicompost.

Earthworm compost is an excellent bio-fertilizer rich in nutrients.

Young farmer Gyanesh Tiwari said that currently I have 40 animals. We use their dung to

make vermicompost. If there is less dung, we buy it from other farmers. 12 employees handle all the work of the unit, from packaging to other work. Today, there is a demand for my vermicompost in many cities including Shahjahanpur, Pilibhit, Lucknow. Many farmers come to my unit and take manure and earthworms. Our manure is sold both online and offline.

This is how to prepare fertilizer

Gyanesh told that earthworm compost is an excellent bio-fertilizer rich in nutrients. It is made by earthworms by decomposing vegetation and food waste etc. There is no smell in vermicompost and flies and mosquitoes do not grow and the environment is not polluted. After putting earthworms on the bed, cow dung and garbage are put on it. Earthworm compost is ready in three months.



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जलसंवाद हे मासिक मालक व प्रकाशक डॉ. दत्ता
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Oxygen level in the ocean is decreasing

By Shubhrangi Goyal

Oxygen level in the ocean is decreasing, pollution on the surface has increased 6 times in 64 years; these countries will suffer huge losses due to acidic water

Due to climate change, there is a decrease in oxygen in the ocean. Its water is becoming increasingly acidic, due to which the temperature on the surface of the ocean is increasing rapidly. Due to the lack of oxygen in the ocean, a big danger has arisen for ocean creatures, fishermen and people living in coastal areas. Due to this, the centers of fish production will also change.

Agency, New Delhi. Due to climate change, there is a lack of oxygen in the sea. Its water is becoming increasingly acidic, due to which the temperature on the sea surface is increasing rapidly. Due to the lack of oxygen in the sea, a big danger has arisen for ocean creatures, fishermen and people living in coastal areas. It is being said that due to this, the centers of fish production will also change.

Danger rising in Japan and China
Seeing all this, researcher Jol Wang of Zurich University, Switzerland has expressed fear about Japan and China. He said, there will be a shortage of fish in the coastal areas of many countries like Japan and China. Due to increasing temperature, fish will migrate permanently to the sea. One reason for this is also human activities; burning of

forests at many places, heaps of garbage have increased the heat. Researcher Jol Wang further says, if this continues, it will be difficult to handle the coming situation. The condition of the sea in 20 percent of the earth is becoming very bad.

IUCN had also issued a warning

Earlier, the International Union for Conservation of Nature (IUCN) had also issued a warning about oxygen shortage. They had said that 700 places have been identified around the world where the amount of oxygen is low. Before that, in 1960, there were only 45 such places where there was a lack of oxygen. Then gradually the number of such places has increased four times. According to research, now it has increased 6 times as compared to 1960. Where there is no oxygen at all. Marine organisms are facing hot temperatures, excessive fishing and plastic pollution.



Why is the water getting hot under the earth?

Why is the water getting hot under the earth? Understand why this is a big tension. Heat can be extracted using heat pumps powered by electricity from renewable energy. Geothermal heat pumps are growing in popularity for space heating across Europe.

The warming is visible in temperature measurements taken in boreholes around the world. Darwin/Halifax:

The world's largest water reservoir is right beneath your feet. Groundwater accounts for 97% of all usable freshwater. Where is it? In voids and cracks within rocks. We see it when it comes to the surface in springs, in caves, or when we pump it for use. While groundwater is often hidden, it strengthens ecosystems around the world and is a vital resource for people.

You might think that groundwater would be protected from climate change, because it's underground. But that's no longer the case. As the atmosphere warms, more and more heat is penetrating underground. There's already ample evidence that the subsurface is warming. The warming shows up in temperature measurements taken in boreholes around the world.

Our team of international scientists has pooled their knowledge to model how groundwater will warm in the future. Under a realistic greenhouse gas emissions scenario, with a projected average global atmospheric temperature rise of 2.7°C, groundwater will warm by an average of 2.1°C by 2100 compared to 2000.

This temperature varies by region and is delayed by decades compared to the surface, because the underground mass takes time to warm up. Our results are accessible to everyone globally.

why is it important?

You might be wondering what the consequences of warmer groundwater will be. First, the good news, heat moving below the land surface is trapping 25 times less energy than in the ocean, but it is still significant. This heat is stored in layers tens of meters deep, making it easy to access. We can use this excess heat to heat our homes sustainably from just a few meters below the surface.

Heat can be extracted using heat pumps powered by electricity from renewable energy. Geothermal heat pumps are growing in popularity for space heating across Europe. Unfortunately, the bad news can outweigh the good news. Warmer groundwater is harmful to the rich array of life found underground - and to the many plants and animals that depend on groundwater for their survival. Any change in temperature can disrupt the conditions they are adapted to.

To date, the greatest groundwater temperature increases have occurred in parts of Russia, where surface temperatures have increased by more than 1.5°C since 2000. In Australia, significant changes in groundwater temperature are expected to occur within the shallowest layers. Groundwater regularly flows to feed lakes and rivers around the world, as well as oceans, supporting a range of groundwater-dependent ecosystems.

If warm groundwater flows into your favorite river or lake, it will add extra heat from the sun. This can mean that fish and other species will find it too hot to survive. Warmer water also contains less oxygen. Oxygen depletion in rivers and lakes has already become a major cause of mass fish deaths, as we have seen recently in Australia's

Murray-Darling Basin.

Cold-water species such as Atlantic salmon have adapted to the water temperature window provided by constant cold groundwater discharge. As these thermal refuges warm, it will disrupt their breeding cycle.

Groundwater is important

In many parts of the world, people rely on groundwater as their main source of drinking water. But warming groundwater can worsen the quality of the water we drink. Temperature affects everything from chemical reactions to microbial activity. For example, warmer water can trigger more harmful reactions, where metals leach out into the water. This is particularly worrying in areas where access to clean drinking water is already limited.

Industries such as farming, manufacturing and energy production often rely on groundwater for their operations. If the groundwater they

depend on becomes too warm or more polluted, it can disrupt their activities. Our study is global, but we need to find out more about how groundwater is warming and what effects it may have at a local level. By studying how groundwater temperatures are changing over time and in different regions, we can better predict future trends and find strategies to adapt or mitigate impacts.

Comments

Global groundwater warming is a hidden but very important consequence of climate change. Although the effects will be slow to appear, their impact will be far-reaching and widespread. They will affect ecosystems, drinking water supplies and industries around the world.

(This news has not been edited by the NDTV team. It has been published directly from the Syndicate feed.)



World Oceans Day: Why is World Oceans Day

celebrated? Know the history

By - Priyanka Joshi

Today the whole world is celebrating World Ocean Day, but very few people know its history and importance. So let us know the reason for celebrating it in our article today.

World Oceans Day 2024: Every year 8 June is celebrated as World Ocean Day . The main objective of celebrating it is to make people aware about the importance of oceans and conservation of marine resources . In fact, for the last several years, the problem of pollution has been big all over the world , from which the oceans are also not untouched . World Ocean Day inspires to take steps towards finding a permanent solution to the indiscriminate exploitation and conservation of oceans .

What is the history of World Ocean Day ?

The initiative to celebrate World Ocean Day worldwide was first proposed by the Canadian government in the Earth Summit held in Rio de Janeiro, Brazil in 1992 , which was highly appreciated by the delegates and supporters present there . After this, for the protection of the oceans, the United Nations General Assembly passed an official resolution to celebrate June 8 as ' World Ocean Day ' . Since then, World Ocean Day is celebrated every year on June 8 .

What is the importance of celebrating World Ocean Day ?

Oceans cover more than half of the Earth . World Ocean Day is celebrated every year to conserve marine systems , adopt sustainable fishing practices , reduce pollution of the oceans and initiate appropriate measures regarding other major

ocean-related problems .

On this special day, people are made aware about marine conservation . Apart from the continuous exploitation of ocean resources, many programs are organized by government and non - government organizations to make people aware about the harmful effects of pollution caused by it . This spreads awareness about oceans among the people .

What is the theme of World Ocean Day 2024?

This time the theme of World Ocean Day is to inspire sustainable fishing practices. So that these can be used in the future and the oceans and the organisms living in them can be protected from any kind of dirt and pollution. Let us tell you that the Earth is surrounded by five oceans, out of which the Pacific Ocean flowing between Asia and America is the largest and deepest ocean. Apart from this, there is Atlantic Ocean , Indian Ocean , Arctic Ocean and Southern Ocean on our Earth .



From Fields to Future: Support MANAVLOK

in Empowering Rural Communities

Story



Marathwada is a drought-prone region with 80% dependence of rural families on agriculture. Extreme climate change has resulted in exponentially increasing dry spells, reduced yield, depleted groundwater levels, dried-up rivers, and a shortage of drinking water. Droughts led to crop failures, leaving farmers with no income. This immense financial stress on farmers pushes some to the brink of despair, leading to farmer suicides. Marathwada has alarmingly high incidences of farmer suicides and sugarcane cutter laborers. Sugarcane cutting is a labor-intensive and physically demanding job. The sugarcane industry employs a substantial labor force, often including a large number of women who work as sugarcane cutters during the harvesting season. These women endure long hours of strenuous labor in the fields. Prolonged exposure to such conditions has adverse health effects. As a result, many of these women are also forced to undergo hysterectomies.

In 1982, Dr. Dwarkadasji Lohiya and Dr.

Shaila Lohiya laid the foundation of MANAVLOK, a voluntary organization, working for the socio-economic upliftment of the rural poor in the Marathwada region of Maharashtra State in India. For the past 40 years, MANAVLOK has been running programs in Watershed Development, Agriculture, Health, Disaster Relief Services, Women Empowerment, Human Rights, Community Kitchens for Senior Citizens, Empowering Youth through Sports, Self Help Groups (SHGs), and Education as the holistic approach to integrated rural development.

"Organic farming turned out to be the most profitable option. We earned over one-lakh twenty-five thousand for just one acre of organic whereas we couldn't generate even sixty thousand from one-acre chemical-based farming." - says Mukundraj Jadhav- a farmer and a beneficiary of MANAVLOK's organic farming program.

During the drought of 2015-2016, 660 farmers committed suicide in the Marathwada region. The drought took everything away from the





farmers. Young adults started migrating to cities leaving their old parents behind with no food and water.

"At that time Distress Migration was at its peak. We knew we had to do something. With the ideology Gaanv ka Pani and Gaanv ke log, Gaanv mei hi rehne chahiye, we started multiple interventions to hold, store, and conserve the rainwater." - says Aniket Dwarkadas Lohiya, Secretary, MANAVLOK.

MANAVLOK started rejuvenating old water bodies by removing the accumulated silt. The desilting of waterbodies exponentially increased the water holding capacity. Moreover, the fertile silt was transported to the farmlands of the farmers to increase its yield. The intervention had a huge impact in overall increasing the water table of the region.

Initially, we had to make extreme efforts to get water. The tanker water was for some, but not for everyone. It was only for the people with power. These people used to fill their barrels from the tanker and transfer them to their own wells. There were terrible quarrels among the villagers just to get the tank water. Yet, the one who didn't have the power



didn't get the water at all.

But now it has become easier, especially for women. We don't have to go to far-off places in search of water. At present, we have a sufficient amount of water for the toilet and to carry out our all domestic chores."- says Santabai Shendge, a beneficiary of the Rejuvenation of Waterbodies program.

So far, we have impacted 400+ villages in the Beed, Osmanabad, and Latur Districts of Maharashtra. More than 100+ programs have been implemented to support the underprivileged.

Yet, countless rural communities are still facing the harsh realities of poverty, unemployment, and limited access to education, water, healthcare, and basic amenities.

"We are trying our best but we need your support to maximise our efforts. Together, we can make a profound difference in the lives of people."- says Aniket Dwarkadas Lohiya.

Help MANAVLOK create more impact and touch more lives by contributing to this fundraiser so that together we can build a better India for all of us.

Pledge your support, and donate now!



There is no dam in Himachal to stop the water of Yamuna river

Himachal: There is no dam in Himachal to stop the water of Yamuna river, how will it give water to Delhi

Sanvad News Agency, Paonta Sahib (Sirmaur).
Published by: Ankesh Dogra

Summary

There is a demand to release water from Himachal to Delhi, but there is no dam in Himachal border to stop the water of Yamuna river flowing on the Himachal-Uttarakhand border.

Expansion

There is a very serious situation of water shortage in Delhi. In this, there is talk of releasing water from Himachal to Delhi. There is no dam in Himachal border to stop the water of Yamuna river flowing on the Himachal-Uttarakhand border. The

water of the tributary rivers Tons, Bata and Giri river is already going to the Hathnikund dam in Haryana through Yamuna. At present, there is no provision and process to release water directly from Giri river to Delhi.

Let us tell you that the water coming from Yamunotri of the neighboring state of Uttarakhand is stopped at Dakpathar Barrage of Uttarakhand. After generating electricity at Asan Barrage through the tunnel, the water reaches Haryana Hathnikund and Tajewala Barrage through the canal. It flows on the Himachal border for about 16 km from Uttarakhand near Bhagani. No dam has been built in the Himachal region.

Only a nominal amount of water reaches Yamuna river from Uttarakhand's Dakpathar. In



such a situation, water from Himachal's Tons, Giri river and Bata tributary rivers merge into Yamuna river and reaches Hathnikund in Haryana. The place to stop water is Hathnikund Barrage. According to the information received, water from this barrage goes to Uttar Pradesh through Eastern Tunnel and to Haryana through Western Tunnel. The remaining water from Hathnikund reaches Delhi through Munak Panipat and Sonipat of Karnal through West Yamuna Canal.

Water goes to Hathnikund Barrage.

Former Himachal Pradesh Energy Minister and Paonta Sahib MLA Sukhram Chaudhary said that Himachal is not stopping the water. Dams on Yamuna river are built in Haryana and Uttarakhand only. There is no water storage dam in Himachal region to stop the water of Yamuna river. After

storing it for two to four hours at Jatoun Reserve Weir (Barrage) built on Giri river, water is released after generating electricity. It goes to Hathnikund Barrage in Haryana. Former Himachal Pradesh Energy Minister Sukhram Chaudhary said that the work of the proposed Renuka Dam project to supply water to Delhi has not started yet. In such a situation, the matter of Himachal stopping the water is beyond comprehension. If water is not reaching Delhi from Haryana Dam, then Himachal has nothing to do with it. At present, there is no provision and process to release water directly from Giri river to Delhi.



Miyawaki Forest: Children are making the forests green with the Miyawaki technique, know about this Japanese method

Two architects in Karnataka are making children aware about environmental conservation and planting trees using Miyawaki Technique so that dense forests can be grown in a short time.

Children of three families in Hosalli Pallakihara, just 5 km from Chikkamagaluru in Karnataka, have taken a unique initiative to protect the environment. To create greenery, these children have adopted the unique Japanese Miyawaki method. Two architects, Ashwini and Ajay, who are engaged in a new project on their property associated with Guru Nirvana Swami Math, are working on a plan to develop a mini forest by planting different species of plants in a quarter of the 16-acre Hosalli Pallakihara using the Miyawaki method.

Ashwini says that 600 saplings have been planted in this area and he plans to develop a forest three times bigger. During this time he came to know that many builders in Hyderabad are adopting the Miyawaki method to develop mini forests in residential areas. From Hyderabad he learned more about this method. Then he created awareness among his children and also explained the importance of forests to other children between 14-18 years of age. His experiment was successful and today the children of his families are engaged in this noble work.

Andita from Nirvana Swamy Matadamne, AN Dhruv from Aralaguppe family and Vedanti from Togarihinkal family started this social project by growing 600 saplings in an area of 4,000 sq ft in the



first phase. They planted local species like mango, jackfruit, pannarel, tamarind, nelli, guava, sampige, matti and atti.

What is Miyawaki Technique

The Miyawaki method was developed by Akira Miyawaki in the 1980s. In this, native species of trees and plants are planted to increase the natural forest cover in such a way that it creates dense, fast-growing forests. Its main features include the use of native species, dense multi-level planting, nutrient-rich soil and little maintenance. This method promotes rapid plant growth and the forest starts flourishing in 20-30 years. This forest develops ten times faster than a natural forest. It is being successfully implemented globally and it transforms degraded lands into green spaces, especially in urban areas.

From dumpyard to greenspace

Pallakihara was once an open space that was used as a garbage dumpyard. But today, the 4,000 sq ft area is secured with a 5km fence to protect a mini forest created using the Miyawaki method. The land was levelled using Hoback machines and divided into three blocks. A three-foot pit was dug, over which cow dung, sugarcane stalks and new soil were laid. Also, advanced machines were used to dig the pits, keeping a gap of three feet between each plant. Plants of different species have been planted here.

AB Sudarshan, president of Chikkamagaluru Golf Club, has appreciated the children for starting this new project. Miyawaki-type forest provides shelter to birds, small animals, butterflies and bees. This Miyawaki method has been a way to grow forests in small areas in cities and towns. Government organizations should show interest in this regard.

This photo of 12 ants drinking from a drop of water on a leaf.



The amazing thing is that they've divided themselves into four groups of threes, to balance the leaf, so that the drop of water doesn't slide off. These small marvels of nature never fail the surprise.

This is the kind of coordination that we people need to evolve as a decent society.

He would understand an ant understands the universe.

Note : While designing the issue of Jalsamvad - English we find very interesting news, information and articles specially on water and its management. That tempts us to include the same in our issues. Getting formal permission for this inclusion is that way difficult. Therefore our effort is to print them as it is in our magazine. We may kindly be excused for such inclusions. We express a deep sense of gratitude to the original writers.

Thanks.



डॉ. दत्ता देशकर यांनी लिहिलेल्या विविध पुस्तिका

- (१) चला, जलसाक्षर होवू या.
- (२) संकल्पना शाश्वत शेतीची.
- (३) चला , जलपुनर्भरण करू या.
- (४) पाण्याचे गणित.
- (५) बळीराजा सावध हो, दुष्काळ भेडसावतोय.
- (६) वनशेती. (*)
- (७) शेततळी. (*)
- (८) पाणी वापरा, पण जरा जपून. (*)
- (९) हिसाब, किताब, पानीका.
- (१०) चला, जलसाक्षर होवू या (चित्रमय पुस्तिका)



(*) ही पुस्तके महाराष्ट्र सरकारच्या प्रौढ शिक्षण संस्थेने प्रकाशित केली आहेत.

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