HARIT KHABAR

June, 2022



Know more about the 'World Migratory Bird Day' in our cover story on page 3







BROLOGICAL DIVERSITY WORLD MIGRATORY BIRD DAY

BIODIVERSITY DAY 22 MAY

average of the past 10 million years and accelerating" noted Antonio Guterres, the secretary-general of the United Nations (UN). This statement came on the occasion of International Day for Biological Diversity 2022. The message comes at a crucial time when the world is experiencing huge biodiversity loss and when the effects of human-induced climate change are quite visible.

If we are to achieve a sustainable future for all, we must act quickly to safeguard biodiversity, the web of life that connects and supports us all. It is in this backdrop that the International Day for Biological Diversity is celebrated every year on May 22.

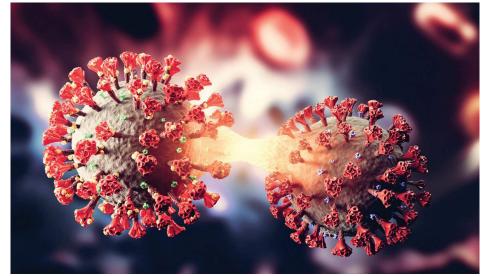
The day attempts to raise awareness and knowledge of biodiversity challenges across the globe and the theme for the day this year is 'Building a shared future for all life'.



What is Biological Diversity?

Biological diversity is commonly thought of as a wide range of plants, animals, and microorganisms, but it also comprises genetic differences within each species, for example, between crop varieties and livestock breeds, and the diversity of ecosystems (forests, lakes, deserts, and agricultural landscapes) that host a variety of interactions among humans, plants, and animals. (Source: FAO)

Increasing threat of Zoonoses Outbreaks



Constant harm to biodiversity will expose humans to wildlife, increasing the risks of outbreaks of zoonotic diseases. A 2016 United Nations Environment Programme (UNEP) report states that biodiversity loss could expand zoonoses. Zoonoses are diseases that are transmitted from animals to humans, and the virus that wreaked havoc on earth and caused the COVID-19 pandemic is also zoonotic. Keeping biodiversity intact maintains regular checks and balances in nature that helps in containing the spread of such viruses.

The UN website notes that current negative trends in biodiversity and ecosystems will hinder progress toward meeting 80% of the assessed targets for the eight Sustainable Development Goals (SGDs). This denotes that biodiversity is not only vital for the health of the planet but also to achieve the SDGs. However, the loss of biodiversity has even greater consequences which must be avoided at all costs.

Siruthuli honouring the legendary singer S. P. Balasubrahmanyam

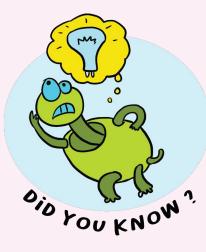
Siruthuli honoured the life and art of the legendary singer S. P. Balasubrahmanyam by developing an urban forest right in the city of Coimbatore, Tamil Nadu. Developing urban forests in cities is an effective technique to revive biodiversity amidst rising anthropocentric development.

The forest is a special tribute to the singer as only the trees that are used in making Indian musical instruments are planted, for example, teak, sanders, red sanders, ebony, rosewood, neem and bamboo. The forest is named SPB Vanam and is spread over 1.5 acres.

Human actions have profoundly impacted three-quarters of the land ecosystem and around 66% of the marine environment. In regions held or administered by Indigenous Peoples' and Local Communities', these tendencies have been less severe or avoided on average.

Reality Check

- Approximately one million species are on the verge of extinction, with many facing extinction within the next few decades.
- Industrial fishing covers roughly 55% of the ocean's surface.
- By the year 2000, more than 85% of the wetlands that existed in 1700 had vanished.
- Wetland loss is currently three times quicker than forest loss in percentage



The estimated total number of animal and plant species on Earth is 8 million (including 5.5 million insect species).

Source: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services



Environment Performance Index 2022

The recently put out Environment Performance Index 2022 by Yale and Columbia universities ranked India last in its progress towards improving environmental health, protecting ecosystem vitality, and mitigating climate change. The index uses 40 performance indicators across 11 categories such as biodiversity, water resources, air quality, waste management, etc to rank 180 countries regarding their environmental performance. With a score of just 18.9, India showed the worst environmental progress among the neighbouring countries, Pakistan (24.6), Bangladesh (23.1), Sri Lanka (34.7), Nepal (28.3), etc. European nations dominated the index as the top ten positions were bagged by them with Denmark leading the chart with a score of 77.9.

Dim The Light For Birds At Night!



Believe it or not, light has the potential to alter the migration patterns and routes of birds, as well as foraging their altitude and vocal communication. Migrating birds become disoriented when exposed to artificial light at night, especially when there is low cloud, fog, rain, or when flying at lower altitudes, and may end up circling in illuminated locations. They are also at risk of depletion, predation, and fatal accidents due to depleted energy reserves.

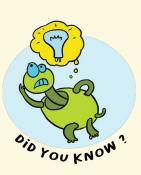
World Migratory Bird Day is celebrated twice a year!!

To gather attention to the increasing problem of light pollution and how it is threatening the lives of birds across the globe, the theme for this year's World Migratory Birds Day is 'Dim the Lights for Birds at Night'. World Migratory Bird Day is an international day that focuses on migratory bird conservation and habitat preservation and is commemorated twice a year once in May and then again in October. The day was first marked in 2006 when the United Nations decided to raise awareness on migratory birds and their connections across continents. Since then, a total of 118 countries have observed World Migratory Bird Day.

Amy Fraenkel, the Executive Secretary of the Convention on the Conservation of Migratory Species of Wild Animals, (CMS) says "Natural darkness has a conservation value in the same way as clean water, air, and soil. A key goal of World Migratory Bird Day 2022 is to raise awareness of light pollution and its negative impacts on migratory birds. Solutions are readily available, and we hope to encourage key decision-makers to adopt measures to address light pollution."

Bird Migration: A test for the planet's health

Migratory birds are key indicators of the shifting environmental patterns, especially in these challenging times when climate change is obvious. Their arrival and absence or change in their migratory route depict a change in the conditions of water bodies, grasslands, forests, wetlands and marshes.



According to the World Migratory Bird Day website, the cyclical nature of bird migration and the fact that there are different peak migration seasons in the northern and southern hemispheres are the reason why the day is commemorated twice a year on the second Saturday of May and October.

1.33 Lakh Flamingos visit Navi Mumbai

During the months of and flamingos can be seen flocking to the wetlands near Navi Mumbai. The fact that 1.33 lakh Flamingos were recorded during the 2021-2022 season has thrilled environmentalists and conservationists.



In order to celebrate World Migratory Bird Day in India, Maharashtra Chief Minister Uddhav Thackeray has approved a plan to establish a biodiversityrich Thane Creek Flamingo Sanctuary in the Thane-Navi Mumbai Belt. The sanctuary, if approved by the Centre, will cover 1690.5 hectares, making it the first of its sort in the Mumbai Metropolitan Region and the third in Maharashtra.

Around the World & in India

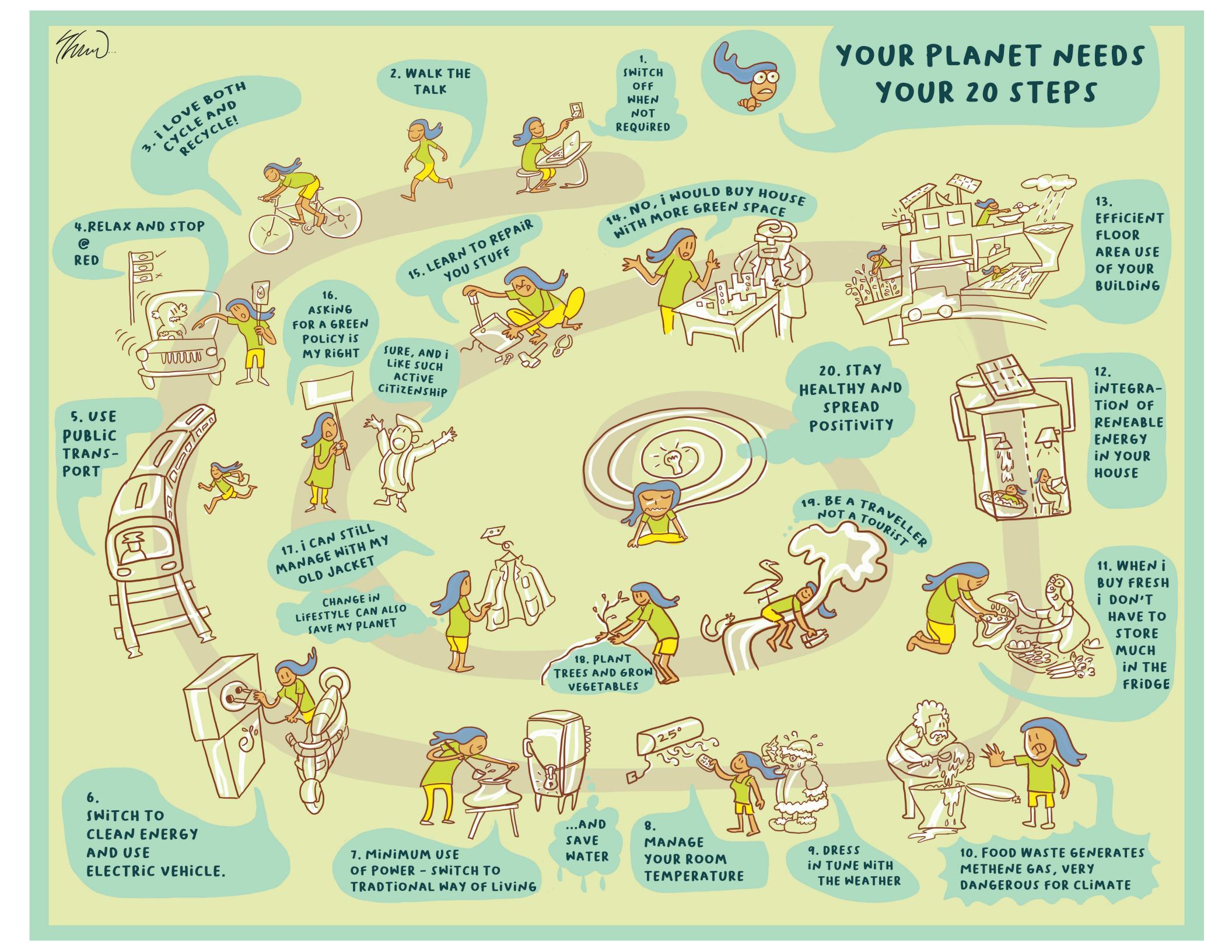


Photo: istock

Humans consider themselves great travellers. However, their pride can be put to shame if they observe the migration patterns of birds. Birds travel long distances in response to changes in food availability, habitat, or weather. According to a study, approximately 1800 of the world's 10,000 bird species are long-distance migrants.

According to government data, India also witnesses the migration of birds as a total of roughly 1,349 bird species have been recorded in the country as of 2019 out of which 78 species are native to the country, while 212 are globally threatened. India greets birds from 29 different countries every year during September and October, signalling the start of migration. Birds migrate to move from areas of low or decreasing resources to areas of high or increasing resources. The two primary resources being sought are food and nesting locations. (TheCornellLab)

The term migration describes periodic, large-scale movements of populations of animals. One way to look at migration is to consider the distances traveled (TheCornellLab). Falling under these categories, India also witnesses bird migration in many bio-geographies.



6 SUMMER MONSOON



A Parched Summer with a Silver-lining

It is the same old story every year – the only thing is it gets played in extremes and the extremity just increases with every passing year. This year, summer arrived a bit early as India recorded the hottest March in 122 years. Similarly, April too received extreme heat with spells of heatwaves.

However, the pattern changed slightly in May. Generally seen as the hottest month of the year, the modest heatwave conditions in May due to six western disturbances that moved across the Western Himalayan region according to the Indian Meteorological Department (IMD) was indeed a silver-lining that no one expected!

Moreover, the average maximum, minimum, and mean temperatures for the country during May were 35.07°C, 24.84°C and 29.96°C respectively against the normal of 35.17°C, 24.32°C and 29.74°C based on data from 1981-2010, according to IMD.

Water Water Nowhere?

This summer, water shortages have been reported from all over the country. Take Uttarakhand, for example, which is facing a parched summer. A stark difference is being observed between the demand and supply of water as only 649.86 million litres per day (MLD) can be delivered against a demand of 833.77 MLD, according to data from Jal Sansthan, the government entity responsible for water supply in urban households in the state. Other states & UTs such as Madhya Pradesh and Jammu & Kashmir have also reported acute water shortages. In some districts of MP, water is being supplied on alternate days according to an article by IndiaTimes.



Photo: istock

Choked to death!!!



Photo: Financial Express

As the mercury rose in the capital in the month of may, citizens prayed to the rain gods for some relief! Their prayers were heeded but a bit too loud and the capital was swept by a thunderstorm uprooting over 300 trees.

Taking note of the damage, the Delhi High Court observed "officer's callousness" as one of the reasons why the city lost hundreds of its trees. Justice Waziri noted in his judgement that "Majestic old trees have succumbed to the strong winds primarily because the roots had weakened courtesy the agencies owning the roads or permitting concretisation of the earth around it and indeed, callously disregarding care, upkeep of the tree,". Other than concretisation, depletion of groundwater also proves to be a factor for the uprooting of trees as trees with tap roots are no longer in touch with water, noted Pradip Krishen, an environmentalist, as reported by the Indian Express.

Floods in Assam, A Recurring Phenomenon

The state of Assam once again reeled under massive floods just before the onset of the monsoon. With a death toll of 15, the floods have affected over six lakh people in 27 districts according to the Assam State Disaster Management Authority. The Dima Hasao district has been the worst affected with disrupted rail and road connectivity due to floods and landslides.

The floods have proved to be catastrophic for the farmers as it has affected 46160.43 hectares of crop area in the state. Experts point out multiple factors for this unprecedented damage of which severe pre-monsoon rain is one. This year Assam received 719 mm of rainfall from March 1 to May 20, which is 65% more than 434.5 mm, the average rainfall for this period. According to the Indian Meteorological Department, this is a "large excess."



Sustainable Eco-Friendly Homes



Building houses with mud and lime, an architect couple from Pune, Priyanka Gunjikar and Dhruvang Hingmire make low-cost, sustainable, eco-friendly homes that remain cool in the scorching heat. While monitoring one of the homes they built, they found that the temperature inside the home was only 25°C when the outside temperature was 38°C.

Dhruvang mentioned that "The material used for making the home absorb water and let it out when it is hot from the outer surface. This causes evaporative cooling, similar to the principle used to cool water in an earthen pot. In contrast, cement traps the heat inside, which in turn makes the room hotter".

Photo: istock

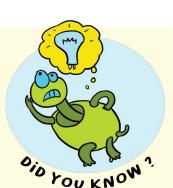
Brace up for a Normal Monsoon...

There is some good news for people reeling under the heat wave in most parts of the country. This year, the Indian Meteorological Department (IMD) has predicted a normal monsoon for India bringing relief and respite from the scorching heat of April and May. This year, the Southwest Monsoon arrived on 29th May 2022, two days earlier than the normal date of 1 June.

IMD has a set of parameters that certify the arrival of monsoon and one of them is the amount of rainfall. The IMD declares the arrival of monsoon if, after 10th May, 60% of the available 14 meteorological stations in Kerala and Lakshadweep receive 2.5mm or more rainfall for two consecutive days. Then, the onset of monsoon is declared on the second day in Kerala if other parameters are also met. This year, 10 stations out of 14 received widespread rainfall of 2.5 mm or more.

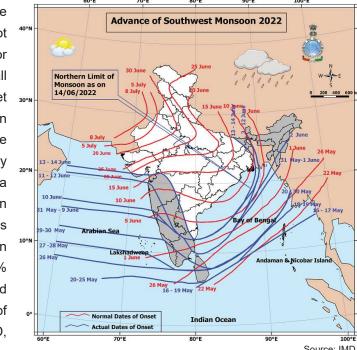
Southwest vs Northeast Monsoon

There are predominantly two monsoon periods in India, the first being June to September, known as the 'Southwest Monsoon' period, and the other being from October to December, known as the 'Northeast Monsoon' period. The Southwest monsoon starts from the extreme southwestern tip of the peninsula by the end of May and moves inwards in phases, eventually covering the entire country by mid-July. According to Indian Meteorological Department (IMD), the whole of India receives nearly 75% of its rainfall during the 'Southwest Monsoon' period. The 'Northeast Monsoon' is predominantly restricted to South India, covering areas like Tamil Nadu, Puducherry, Andhra Pradesh, Kerala and the southern interior parts of Karnataka, etc.



What does an Early Monsoon indicate?

The early or late arrival of the southwest monsoon does not impact the quality, volume, or regional distribution of rainfall across the country. The onset of the monsoon is just an event in the progression of the monsoon all over the country and IMD has predicted a normal southwest monsoon this year. The monsoon is considered normal rainfall falls between 96% and 104% of the Long Period Average (LPA). The LPA of rainfall, according to the IMD is the rainfall observed over a



certain region for a specified interval (such as a month or season) averaged over a long period (such as 30 years or 50 years). This year's prediction is based on the LPA for the 1971-2020 period, during which the country received 87 cm of rain on an average.

There are a total of five rainfall distribution categories as set by the IMD

Deficient – When rainfall falls less than 90% of LPA

Below Normal – When rainfall falls between 90-96% of LPA

Normal – When rainfall falls between 96% and 104% of LPA

Above Normal – When rainfall falls between 104-110% of LPA

Excess – When rainfall is more than 110% of LPA

Securing Food Production



The monsoon season is not only awaited for providing relief from the heat, but it holds an important position in the trajectory of agriculture and food production as well. The Indian economy is considered an agrarian economy and agriculture and food production in India are essentially dependent on monsoons. According to the Department of Agriculture and Farmers Welfare, rainfed agriculture occupies about 51% of the country's net sown area and accounts for nearly 40% of the total food production. This is the reason why the monsoon is also sometimes referred to as the 'Finance Minister of India'.

Historically Significant

The monsoon is a mighty season. Many dynasties' fates have been decided by it throughout Indian history, according to academics at the Indian Institute of Technology (IIT) Kharagpur. Several dynasties that flourished during excellent monsoons, such as the Sena in Bengal, the Solanki in Gujarat in the mid-13th century, and the Paramara and Yadav in the early to mid-14th century, collapsed during bad monsoons, demonstrating the historical significance and impact of monsoons.

Relief from Rain



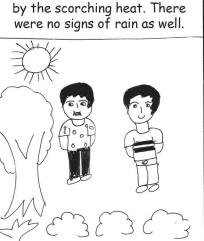




Kabir

This comic was made during a workshop in Gajuka, Rajasthan. Gajuka is a village of the Kanjar community, a Nomadic Tribe of India.

Once we were disturbed



Seed Bombs-Innovation In Plantation

Innovation is the prerequisite to development, and it is especially needed in the field of environmental protection considering the fast-paced climate change. The government of Assam has come up with an innovative technique for plantation – Seed Bombs.

Seed Bombing is a technique of planting trees by embedding organic seed balls in the ground according to MyGov.in. It is also known as aerial reforestation. Seed balls can be thrown or dropped in the ground to introduce vegetation to any area. The rainy season is the best time to carry out this procedure. Seeds planted using this method have a 50% success rate.

This novel initiative has been adopted in a few places in Assam. Having fertile soil, the condition in Assam is ideal for seed bombing.



Photo: MvGov.in

How to make seed bombs

- Wash and dry seeds but still maintain the moisture, which is essential.
- Make a paste of soil and cow dung in a 3:1 ratio.
- Slowly add water and shape the mixture into the small balls.
- Collect seeds of various medicinal plants and fruits.
- Press seeds into the balls and roll again.
- Let the balls dry in the sun.
- Once the balls are completely dry, they are ready for bombing.

The procedure, in addition to being appealing, would greatly aid in raising awareness of the need to conserve the environment.

.. News Scan

Vatsalya celebrating World No-Tobacco Day

With the support of HCL Foundation, **Vatsalya**, a Non-Government Organisation, organised an awareness drive on 31 May on the occasion of World No-Tobacco Day 2022. Adolescents made posters on the harmful effects of tobacco and raised slogans in the community.

The drive aimed at creating awareness of tobacco use and its relation to the spreading of non-communicable diseases.



FPA I POR PARTY IN CONTINUE OF THE PARTY IN CO

Planting trees to celebrate World Environment Day

To mark the importance of the World Environment Day 2022, the **Family Planning Association of India** (FPAI) with the support of HCL Foundation, organised awareness sessions and rallies in Bhangal, sector-82, and Asgarpur, sector-128 Noida that aimed at educating people on environmental issues.

FPAI educators and volunteers pledged to conserve the environment and planted trees at the Asgarpur campus.

Children leading from the front!

Understanding that there is no alternative to conserve our environment, children under **Study Hall Educational Foundation's** GyanSetu programme raised awareness and encouraged action to protect the environment on the occasion of World Environment Day 2022.

The GyanSetu programme is a network of microeducational ventures that support learning for children in marginalised areas.



About the publication

HCL Foundation and World Comics India's collaborative initiative 'Harit Khabar' is a monthly newspaper that aims to educate people on environmental issues and challenges and raise community participation towards the cause of the environment.

This publication has been launched to provide a platform to various partner organizations working in collaboration with the HCL Foundation's distinct flagship programme HCL Harit - The Green Initiative to showcase their work and accomplishments and also to create a network between them.

Through Harit Khabar we aim to stir meaningful debates on critical issues concerning our environment and ecosystem, accessibility to environmental education and public participation in decision-making processes in the country.

About HCL Foundation

HCL Technologies implements its Corporate Social Responsibility agenda through its CSR arm, the HCL Foundation. Various flagship programs and special initiatives of the Foundation endeavor to contribute toward national and international development goals, bringing about lasting positive impact on people and the planet through long-term sustainable programs.

About World Comics India

Advancing Grassroots Comics as an alternate tool of communication to local communities, World Comics India has been continuously working for the past 20 years. Many successful mass campaigns have also been organized using this medium of communication.

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