

Climate change is causing a rise in global temperatures and India is among the most vulnerable countries when it comes to extreme weather events. The country recorded its hottest February this year since 1901. On the other hand, in the month of March, North India witnessed several batches of unseasonal rains, thunderstorms, interspersed with dry days and high daytime temperatures. Scientific studies indicate that such extreme weather events are likely to become more frequent or more intense with human-induced climate change.

#### Hot weather could affect India's food security



.....

Between March and April 2023, there is a high probability of heat waves and temperature is expected to be 3 to 5 degrees above normal, according to the National Weather Bureau. Heat waves can cause crop damage and reduce the production of the winter crop in the year 2023. An abnormal increase in temperatures will further impact fruits, vegetables, animals and people in states especially in the northern region.

#### Unexpected weather events in March

Pre-Monsoon weather activities began quite early this year, with rain and thunderstorms making an appearance in the first week of March itself.

.....

Similarly, in the third week of March, rains, accompanied by hailstorms in some places have wreaked havoc on rabi crops, especially ready-to-harvest wheat, gram and mustard crops. So far, the March rainfall in 22 states was 29% above the normal level.

### Kerala fights intense heat waves

According to a report prepared by the Kerala State Disaster Management Authority (KSDMA), certain areas in the state have recorded a heat index of more than 54 degrees Celsius on March 9. While the highest recorded temperatures were between 35 and 37 degrees Celsius, humidity levels of 75-80% made it 'feel like' 'above 54-degrees Celsius.



The heat index is a pointer towards the heat one experiences with the combined effect of atmospheric temperature and humidity.

#### Forest fires in Goa

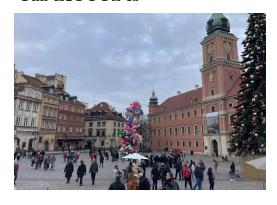
Described
as the worst
forest fires,
Goa is fighting
multiple
wildfires within
the wildlife
sanctuaries
of the state
(that cover



the hill ranges of the Western Ghats). At least 48 fires have been reported since March 5, according to the state forest department. Although the fire incidents in hill areas are attributed to rising temperatures, an enquiry has also been initiated to determine the cause. Goa, much like the rest of the country, has been witnessing above-average temperatures since February.

#### **Around the World**

# 2022: World's Fifth-Warmest on Record



NASA reported that last year tied up with 2015 as the fifth-warmest year since record-keeping began in 1880. It also states that temperatures are increasing by more than 0.2°C per decade, putting the

world on track to blow past the 2015 Paris Agreement's goal to limit global warming to 1.5°C to avoid its most devastating consequences.

### Cyclone Freddy could be the longestlasting tropical cyclone on record

Cyclone Freddy, which crossed the Indian Ocean over a span of more than five weeks, causing severe damage and destruction in its path, has resulted in the death of more than 500 people in Malawi, Mozambique and Madagascar. The World Meteorological Organization is setting up an expert committee to evaluate whether tropical cyclone Freddy has broken the record as the longest-lasting tropical cyclone on record.



Meteorologists suggest that climate change contributed to the intensity of Freddy. As the global temperature continues to rise, warmer ocean temperatures fuel the intensity of tropical storms and hurricanes.

# Global Greenhouse Gas Monitoring Infrastructure

The World Meteorological Organization (WMO) has introduced the Global Greenhouse Gas Monitoring Infrastructure, which aims to provide standardized and real-time tracking of greenhouse gases. The new platform integrates space-based and surface-based observing systems to improve the measurement of planet-warming pollution and



inform policy decisions. The data provided by this platform will be faster and sharper.

# Protecting animals and birds from the scorching heat

A team of volunteers from HCL visited Wildlife Rescue and Rehabilitation Centre's Bannergatta Rehabilitation Centre on 25th March to disinfect the animal enclosures and tie coconut leaf mats around them.

This was done to protect animals and birds from the scorching heat.



### Harit Champion- Dr Nirupama

#### Wildlife Rescue and Rehabilitation Centre (WRRC)

Dr Nirupama was born in Odisha to a defence personnel. Growing up, traveling from one place to another, she was always close to nature. She was deeply influenced by the poems of Mahalaxmi Devi about wild animals. When her father was transferred to Karnataka, she enrolled in the veterinary college for graduation.

She worked with Bannerghatta Biological Park for a period of 5 years as Veterinary officer where she took care of treatment, surgeries, management of animals in zoo, handling immobilization and translocation of wild animals in man animal-conflict situation, immobilization of various captive wild animals and transportation of animals.



She also worked as veterinary Officer in Kittur Rani Chennamma mini zoo, Belagavi, for a year, before joining WRRC in 2022.

She joined WRRC as a full-time vet, helping with medical treatment of injured wildlife. WRRC, in collaboration with the HCL foundation, has been conducting outreach programs at schools in and around Bannerghatta area in order to reduce Wildlife - Human conflict and Dr Nirupama travels to schools and educates students about wildlife through these programs.

She was awarded Best Wildlife Veterinarian in National congress on Wildlife Health & Annual Convention of Association of Indian Zoo and Wildlife Veterinarian in Bareilly in the year 2017. She has attended many national and international workshops and conferences for wildlife conservation.



### Harit Champion- Dr. Vediyappan

#### **Compassion Unlimited Plus Action (CUPA)**



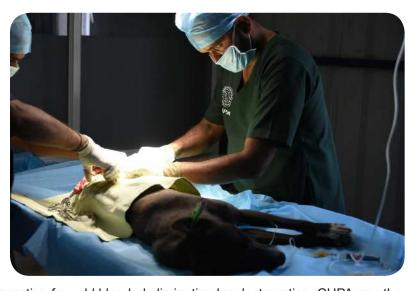
In February 2022, CUPA started the Spay & Neuter Centre on Sarjapur Road to address the problem of uncontrolled and growing dog populations in areas outside BBMP jurisdiction. The Spay & Neuter Centre is led by Dr. Vediyappan and managed by a dedicated team of attenders who work tirelessly in the field to capture dogs and provide postoperative care.

Dr. Vediyappan has been associated with CUPA for more than 10 years as a consultant vet and is now working as a full-time vet at CUPA. His expertise in the area of animal birth control is remarkable and

he has conducted over 50,000 surgeries throughout his career. Additionally, with the support of HCL Foundation he has sterilized over 600+ community dogs on

the outskirts of Bangalore city near Bannerghatta National Park. Sterilisation & vaccination of stray dogs not only controls their population but also controls the spread of communicable diseases such as canine distemper and rabies.

Dr. Vedi's dedication towards his work and the animals is what makes him a Harit Champion. CUPA is an animal welfare organization established in the year 1991. The organization aims to prevent cruelty to animals, protect them from injury and promote animal care and welfare. CUPA started the animal birth control (ABC) program on a small scale, where we neutered, housed, fed, vaccinated, and released 4 - 5 dogs per day.



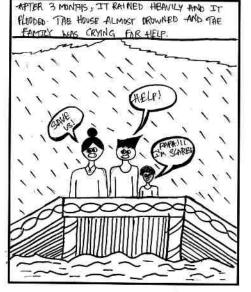
For decades, community dogs had been picked up by Bangalore municipal corporation for cold blooded elimination by electrocution. CUPA was the very first organization to start the ABC program for dogs. For nearly two decades, CUPA partnered with BBMP to sterilize and vaccinate stray dogs in the city.

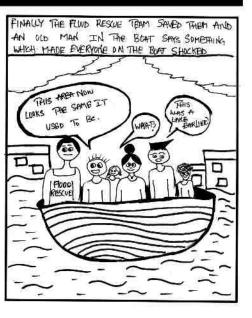
## RECLAIM





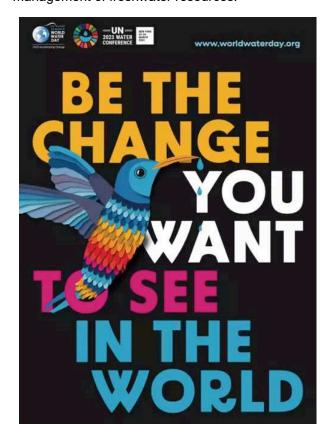






### World Water Day

World Water Day, celebrated annually on 22 March, is a means of focusing attention on the importance of freshwater and advocates for sustainable management of freshwater resources.



Even though water covers three-fourth of the Earth's surface, the percentage of freshwater is only 2.7% (out of which around 80% is present in frozen form). Globally, more than two billion people, most of whom are poor and disadvantaged, don't have access to safe, readily available drinking water.

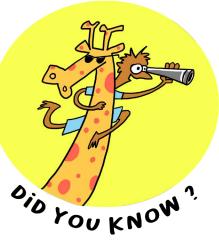


# Climate change, primarily a water crisis

Climate change is disrupting weather patterns, leading to extreme weather events, unpredictable water availability, worsening water scarcity, and contaminating water supplies. Moreover, increasing global temperatures cause water to evaporate and hence more frequent, heavy, and intense rains in the coming years.

This will lead to more floods since more water will fall than vegetation and soil can absorb. The remaining water, or runoff, drains into nearby waterways, picking up contaminants like fertilizer on the way.

Excess runoff eventually travels to larger bodies of water like lakes, estuaries, and the ocean, polluting the water supply and limiting water access for humans and ecosystems.



- India has 18 percent of the world's population,but only 4 percent of its water resources (The World Bank)
- 65% of all reservoirs in India are below-normal water levels, and 12% are completely dry. (Central Water Commission, 2019)
- Groundwater meets more than half of the country's need of water

supply (The National Bureau of Asian Research)

- In rural India, close to 90 per cent households do not have piped connections (Composite Water Management Index (CWMI), NITI Aayog)
- India is expected to be the most severely affected nation by water scarcity by 2050 (United Nations World Water Development Report 2023)
- About two billion people worldwide don't have access to safe drinking water today (SDG Report 2022), and roughly half of the world's population is experiencing severe water scarcity for at least part of the year (Sixth Assessment Report Fact sheet - Food and Water, IPCC).

HCL Harit, showing the way forward

Water is life, and is the core of all life on Earth. Understanding that water is central to nature conservation and building climate resilience, HCL Foundation under its flagship programme for environment action, HCL Harit, has been methodically investing and consistently working on water conservation through convergent community action and public-private partnerships. On the occasion of World Water Day, we bring to you some of the shining examples of water bodies restoration under HCL Harit.

#### Brining back to life a lost pond

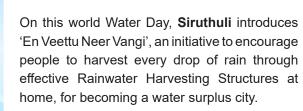


The lost 'Oorani' Nila Oorani (pond) located in Madurai Corporation (Tamil Nadu), slowly vanished from the memories of the locals and the corporation itself, except in revenue records when HCL Foundation, in partnership with **DHAN Vayalagam Foundation** with the support of Madurai Corporation and the revenue department took up the initiative of rejuvenating this 1.9 acres oorani, which was demarcated.

The initial topographical survey revealed that the water holding capacity was less than 10,000 litres. Later, the Oorani was de-silted to create storage with a water holding capacity of 10 lakh litres and the excavated silt was utilized to establish bunds. The 'Nila Oorani Conservation Association' was formed comprising of the interested community members, to monitor and maintain the Oorani for generations to come.

WORLD WATER DAY

# 'En Veettu Neer Vangi' initiative to encouraging rainwater harvesting



#### Restoring the health of waterbodies

To revive and ecologically restore freshwater lakes and ponds across the country, **Environmentalist Foundation of India (E.F.I)** partnered with HCL Foundation in 2018 to restore Kannagi Nagar Pond and the Alli Kulam in Chennai. Through this association, the organization was able to create a positive impact in the neighbourhood where these water bodies were located. The partnership with HCL Foundation later grew stronger as two other urban lakes were taken up for restoration in the year 2020 in the city of Vijayawada

Even as the pandemic waged on, the restorations were completed in time to host the showers from the 2020 North East Monsoons. The Chennai Ocean Project was launched in 2020 to conserve and protect Chennai's coastline, a fragile ecosystem that is known for the nesting site of the endangered Olive Ridley Sea Turtle. The ambitious project's efforts included mechanical removal of debris from the beach stretch, removal of glass bottles and upcycling them, and regular community engagement activities that involved local residents and volunteer groups. In a span of over 3 years, the association has benefitted over 1,80,000 people, and has conserved over 13.67 crore litres.



#### Saving lakes in Delhi NCR region



For more than 3 years now, HCL Foundation has been collaborating with **Green Yatra** to rejuvenate lakes & ponds around Delhi NCR region. The partnership began in 2019 with the restoration of Chauganpur lake which was filled with invasive weeds, garbage thrown by locals and with little to no sign of life. The lake is now a site of thriving wildlife and community space. Similarly, Salempur pond used to flood the village during monsoons. Green Yatra increased the depth of the pond by 12 Feet to increase its water holding capacity. The restoration work also involves local communities and engagement with local government bodies like Gram Panchayats. From the beginning, a Chaupal (meeting) is organised in the presence of the Gram Pradhan, reputed locals & all the villagers to raise awareness on water body conservation.

Once the lake is rejuvenated, it offers various opportunities to the local community like water chestnut farming, fisheries, irrigation purposes, groundwater recharge, etc. The partnership now includes many lakes and ponds like Azampur Gadi lake, Rampur Lake, Kot Lake, Roopwas Lake, etc. to name a few.

# A proud moment for HCL Foundation's water conservation efforts

HCL Foundation is proud to have participated in the historic UN 2023 Water Conference, as part of its official side-events agenda, in a session on 'PPP Model for Rainwater Harvesting and Enhancing Native Biodiversity– Use Cases from India,' that saw participation from cross-sectional, multi-stakeholder groups united for Water Action.

The session was organized in collaboration with and featured speakers from The Nature Conservancy, Ashoka Trust for Research in Ecology and the Environment, Indian Institute for Human Settlements, Gorakhpur Environmental Action Group (GEAG), and panellists from India Water Foundation and World Bank.

The discussion centred around case studies and success stories on the interlinkage of terrestrial aquatic ecosystem rejuvenation, native biodiversity, climate and community resilience — and how they're sustained and scaled by convergent community action and public-private partnerships.



## World Water Day Celebrations



World Water Day Celebrated at HCL Campus, Hyderabad by Animal Warriors Conservation Society (AWCS). The Employee-Volunteers participated and placed Water Bowls at the campus. They were briefed about Harit Initiatives and birds rescue initiatives at Hyderabad by



Over a hundred villagers gathered at Harit Upvan Sorkha to celebrate International Day of Forests and World Water Day organized by Give Me Trees Trust. Six civil society organizations also participated in the event.



Gorakhpur Environmental
Action Group (GEAG)
celebrated the day with
children in schools and
Police Lines GB Nagar where children pledged
to protect and conserve
water.



of India (E.F.I) in Chennai and Coimbatore engaged nature enthusiasts in varied activities on the occasion of World Water Day, bridging the gap between People and Our Planet

Pets are a great source of comfort and relief. That's the reason they have earned the well-deserving title of 'great companions for life'. Research on the possible health effects of human-animal interactions is still relatively new, but the therapeutic value of our relationship with our pets is increasingly recognized by researchers.

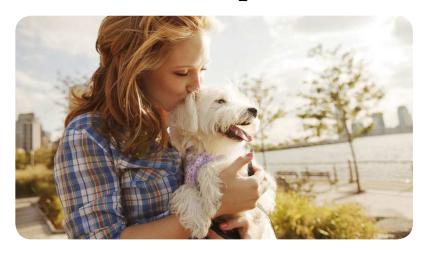


#### Healing with animals

Animal therapy or pet therapy refers to the use of animals as a way to help people cope with and recover from some physical and mental health conditions. Animal therapy builds on a concept called the human-animal bond, which describes people's desire to interact with and relate to animals.

Although it is not a separate form of therapy in itself, it is integrated with regular psychological therapy wherein the sessions are conducted in the presence of therapy animals. The presence of animals can be calming, which helps individuals to relax and become more open to therapy. In an ideal setting for pet therapy, the therapist, client and the animal would be together. The animal would be within the reach of the client, who could pet it, cuddle up to it, or interact with it in any other way they find comforting.

#### Health benefits of pets



Pets, especially dogs and cats, can reduce stress, anxiety, and depression, ease loneliness, encourage exercise and playfulness, and even improve our cardiovascular health. They also provide valuable companionship to older adults, and children who grow up around are more active and secure. Interacting with animals has been shown to decrease levels of cortisol (a stress-related hormone) and lower blood pressure.

### What is a Therapy Dog?

therapy dog dog improve the physical and mental health of patients with certain acute or chronic diseases. Therapy dogs and their owners work together as a team to improve the lives of other people in settings such as schools.



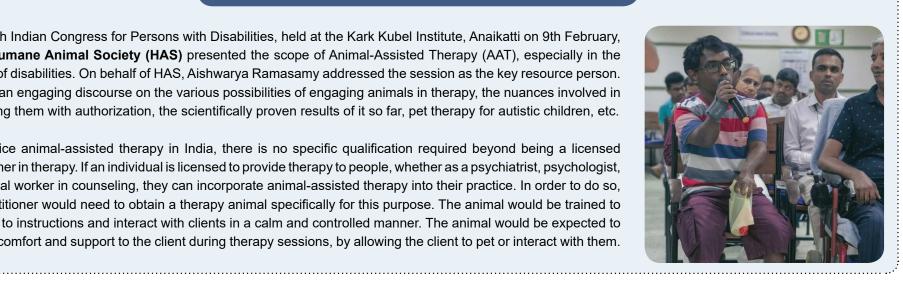
hospitals, and nursing homes. They are naturally calm, friendly, and affectionate to strangers, well-trained in basic obedience, and easily adaptable to novel noises, places, smells, and equipment.

.....

#### Scope of Animal-Assisted Therapy

At the 4th Indian Congress for Persons with Disabilities, held at the Kark Kubel Institute, Anaikatti on 9th February, 2023, Humane Animal Society (HAS) presented the scope of Animal-Assisted Therapy (AAT), especially in the context of disabilities. On behalf of HAS, Aishwarya Ramasamy addressed the session as the key resource person. She led an engaging discourse on the various possibilities of engaging animals in therapy, the nuances involved in expediting them with authorization, the scientifically proven results of it so far, pet therapy for autistic children, etc.

To practice animal-assisted therapy in India, there is no specific qualification required beyond being a licensed practitioner in therapy. If an individual is licensed to provide therapy to people, whether as a psychiatrist, psychologist, or a social worker in counseling, they can incorporate animal-assisted therapy into their practice. In order to do so, the practitioner would need to obtain a therapy animal specifically for this purpose. The animal would be trained to respond to instructions and interact with clients in a calm and controlled manner. The animal would be expected to provide comfort and support to the client during therapy sessions, by allowing the client to pet or interact with them.



# Pet Quiz



- 1) What was thought to be the first animal domesticated by humans? a) Horse b) Goat c) Dog d) Cow
- 2) What's the average life span of a tropical fish kept in an aquarium? a) Two to three years b) Five to six years c) Nine to ten years d) one to two years.
- About how long ago was the earliest known association between cats and humans? 3) a) 9,500 b) 250,000 c) 5,000 d) 15,000
- Hamsters originally came from where? a) Syria b) Lithuania c) Nepal d) India
- For about how many years have dogs lived with humans as hunting companions, protectors, or pets?
  - a) About 4,000 b) About 8,000 c) About 10,000 d) About 12,000

#### Nest making to mark World **Sparrow Day**



То mark World Sparrow Day. HCL Foundation under HCL Harit in partnership with Eco **Roots Foundation** recently organized making nest workshops multiple locations in Lucknow.

The aim workshop

create awareness on sparrows, the threats they are facing and steps one can take to conserve them. A total of 26 students and 27 volunteers participated and created over 30 bird nests. These nests will be placed in natural spaces within the schools and neighbourhood.

### Eco walk session at Buckingham Canal

**HCL** Foundation recently team conducted an 'Eco walk' session for 24 Scouts and guides students in Chennai along with the NGO partner Thuvakkam Buckingham Canal urban forest. Students learned about various indigenous species,



their medicinal, environmental and historical significance. Students thoroughly enjoyed the session and learnings. The eco-walk was followed by quiz on their learnings from the walk and the winners were presented with indigenous medicinal saplings.

#### Wild Champions' finalists announced



'Wild Champions' initiative, which is part of Centre for Wildlife Studies' environmental education program, Wild Shaale, developed in collaboration with HCL Foundation, recently welcomed the third batch of Wild Champions finalists from the schools- PUPS Chinnarpathy, PUPS Palayasarkarpathy, PUPS Alankadavu and PUPS Semanampathy.

'Wild Champions' provides platform to youth to showcase their innovative solutions and forwardthinking ideas for some of the most pressing environmental issues of our time.





#### A women-led group combats climate change

Women-led Sundari Bansuraksha Goshti group of 15 members understood the importance of mangrove ecosystems and planted multi-purpose trees to regenerate natural habitats for biodiversity in Purbodarogapur village of Lakshmi Janardhanpur gram panchayat, West Bengal.

More than 23,000 mangrove saplings were planted to increase greenery, check

soil erosion, and act as a carbon sink. It is a shining example of women coming forward in our communities to protect the planet and combat climate change.



#### Sustaining a positive human-animal relationship

More than 300 dog owners in Kannagi Nagar, Chennai participated and rendered support to the mass vaccination drive led by Blue Cross of India, in collaboration with HCL Over 930 dogs Foundation. were administered with a single dose of a 9 in 1 vaccine that boosts the immunity of dogs



against 5 viral and 4 bacterial diseases that are often fatal to the dogs. Quite a few of the dogs that were vaccinated were also marked with vegetablebased dye on their nape post-vaccination for identification and monitoring. Bharat Scouts and Guides students and the Police Boys and Girls Club, T15 Kannagi Nagar staff members were present to support the initiative.

#### Nurturing 'Harit Champions' in schools



With the objective of nurturing school students as "Harit Champions", HCL Foundation and Technology Informatics Design Endeavour (TIDE) have partnered together in this journey to educate government middle school students through conceptual demonstration of environmental concepts and enabling them to take a lead in

positive environment action. This initiative kick started recently in few government schools in Chennai with 303 students.

### Manjha awareness session conducted



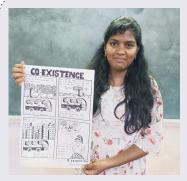
**Avian** Reptile Centre Rehabilation (ARRC) recently conducted a manjha awareness session Government Higher Primary School, Kowdenhalli, educate 150 students of classes 5-8 about the devastating impact of manjha on our wildlife.



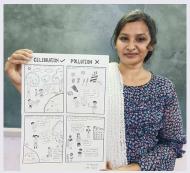
#### Imparting environmental education to students

Development of Human Action (DHAN) Foundation, under the Harit Initiative, organized an exposure visit to Jawadhu Hills as part of the environmental education programme.

A total 35 students participated to understand the ecosystem services of the location, and also interacted with the local farmers and community members regarding their traditional food systems.











### Discovering local issues in Madurai

A three-day comics workshop was organised by World Comics India in association with DHAN Foundation and HCL Foundation in which around 47 participants took part. The group, consisting of NGOs workers and college students, raised a whole lot of issues related to the local environment. They discussed ideas like switching to organic farming, not using chemical pesticides, how



forests are protected by having temples located there, etc. Through the workshop, the participants were taken through the process of identifying and writing stories about local issues and then they were given orientation to the medium of comics.

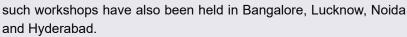
One of the most important things participants learnt from the workshop was the importance of including local issues in the discourse around stories and thereby connecting the local to the global. As most of the participants made comics for the



At the end of three days, 45 comics were drawn by the participants and the

exhibition was held at DHAN Foundation premises.

This was the second workshop organized by World Comics India in Tamil Nadu after the series was initiated in Chennai in August last year. Other





first time in their lives, they were pleasantly

surprised at their ability to draw as well as

This is the power of grassroot comics that it provides everyone with a way to tell their

own issues through a creative medium.

tell their stories.

#### From learning to teaching

When people learn new skills, they want to explore their creativity and learning. B. Gowsika and A. Sartha Namari Family Planning Association of India, Madurai, who participated in the Grassroot Comics Workshop organized by World Comics India in Madurai, later went back and did a similar workshop in Thiruvalluvar Corporation School, Madurai last month. The participants included 6th and 9th standard school children and the workshop provided an avenue for them to create their own comic stories based on real-life scenarios they observe in society around them. The students were able to learn the basics of comics making and how they can express themselves through comic stories. The workshop was also a great way for the students to think critically and creatively about the issues faced by society.

### Earth Hour Day

#### "Invest in Our Planet"

Millions of people across the country celebrated **Earth Hour Day** on March 25th by switching off their electrical appliances and turning off lights for an hour from 8:30 pm to 9:30 pm local time. Akshardham Temple in Delhi, Chhatrapati Shivaji Maharaj Terminus (CST) in Mumbai and the



iconic Howrah Bridge in Kolkata were also turned off as a mark to conserve energy and promote awareness around climate change. Earth Hour Day, the global movement initiated by the World Wildlife Fund is celebrated annually on the last Saturday of March. The official theme for this year's celebration was "Invest in Our Planet," a continuation of the theme from 2022.

# Movie Review The Elephant W

#### Oscar for The Elephant Whisperers

The Elephant Whisperers made history by becoming the first Indian documentary to win an Oscar. It won Best Documentary Short film at the 95th Academy Awards. The documentary follows an indigenous couple as they fall in love with Raghu, an orphaned elephant given into their care, and tirelessly work to ensure his recovery & survival. The film highlights the beauty of the wild



spaces in South India and the people and animals who share this space. The documentary builds around the argument that humans and animals have always been predisposed to coexist with each other. (photo: official photo)

#### 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.

Issue – 18, Year – 2, April. 2023
(Private circulation only)
We are grateful to HCL Harit partners for their significant contribution to this publication.
Editorial Board: Dr Santanu Basu, Hitesh Sitaram Jalgaonkar, Ravi Kumar Sharma, Aishwarya Balasubramanian and Jagjit Singh

Editor: Sharad Sharma and K. Kannan Cover Page Illustration: Garima Sharma

web: www.hclfoundation.org | www.worldcomicsindia.com email: hclfoundation@hcl.com | wci.hcl@gmail.com Twitter: HCL\_Foundation | Facebook: HCLFoundation



