

1-15 JANUARY, 2026

# Down To Earth

FORTNIGHTLY ON POLITICS OF DEVELOPMENT, ENVIRONMENT AND HEALTH

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**SPECIAL**

# ANXIETY IN A WARMING WORLD

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IN REMEMBRANCE

# ECOLOGICAL POVERTY

ANIL AGARWAL | 1947-2002

India's politicians never seem to think ahead. They have created three new states out of some of the poorest regions of India—Uttaranchal (now Uttarakhand), Chhattisgarh and Jharkhand—without any idea of how these states would survive economically without a huge and permanent largesse from the Centre. If the new chief ministers get stuck in the same old mould, we will hear more cries of neglect from the Centre. In a country where politicians love to talk about poverty but know precious little about how to deal with it, an obvious question to ask is: What will be the economic development strategy in these states?

The answer lies in redefining poverty. The leaders of these states have to recognise that it is 'ecological poverty' that plagues these states more than the 'economic poverty' that economists love to dwell upon. They need a strong and healthy natural resource base that can help the poor to improve their own natural resource-based enterprises like agriculture, rearing of animals and forestry. These states don't need economists. They need good environmental managers... As a first step, the new chief ministers should declare themselves the chief environmental officers (CEOs) of their states.

Why do I say this? Firstly, all three are largely forest states. Each one has a large population heavily dependent on forests. But large tracts of land have already been deforested. In Chhattisgarh and Jharkhand, autocratic management of forests has seriously alienated the people and Naxalite movements have gained ground with support from the local populace. Therefore, the first challenge for these states is to get the people involved in regenerating their forests in a way that they come to 'own' these forests and are interested in their sustainable management... Secondly, agriculture in these states has to be nursed back to health. All the three new states receive high rainfall, an annual average of more than 1,000 mm. Yet agriculture remains poor... Thirdly, all the three states are rich in biodiversity. They need programmes not just to conserve their eroding biodiversity but also to put it to good use. Farming of herbs can add value to agriculture. Uttaranchal can take the Kerala route in using its herbal wealth to develop a large Ayurvedic healthcare industry...

But it is unlikely that the CEOs of the new states will focus on any of these natural resources. Forest, water and biodiversity management don't have powerful lobbies. The existing lobbies will focus on activities that benefit contractors and companies, which will lead to exploitation of minerals, and in making roads. Governments in India love to talk about poverty but usually serve the interests of contractors and companies. The trouble is that both roads and mineral exploitation can easily destroy the natural resource base of the poor—forests and biodiversity, in particular—unless there is a strong governance of these resources which involves the local people instead of alienating them. Therefore, the CEOs, if of the right mind, have no choice but to focus on ecological poverty, decentralised natural resource governance and a people's movement for land-water-forest management. The people will then be their friends. But their own corruption and the standard autocratic ways of their officers will be their biggest enemy. If they are able to show leadership they would not have just benefitted their own people but set an example for the rest of the country's political class on how to deal with poverty. This will not be a small achievement.

*(Anil Agarwal was the founding editor of Down To Earth. This editorial was published in the magazine's January 1-15, 2001 edition)*

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# ECO-

## INTERVIEWS



**DIA MIRZA**  
Actor, producer,  
UN Environment  
Goodwill  
Ambassador  
**P10**



**TSEWANG  
CHUSKIT**  
Captain, Indian  
women's ice  
hockey team  
**P16**



**JACINTA  
KERKETTA**  
Journalist, poet,  
activist  
**P22**



**JINALI  
MODY**  
Entrepreneur  
**P28**



## COLUMNS



**AMBIKA  
AIYADURAI**  
Anthropologist  
of wildlife  
conservation **P14**



**MEGHA  
PRAKASH**  
Researcher  
and journalist **P20**



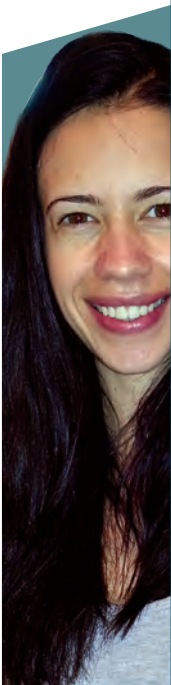
**AKRITI  
ASHESH**  
Research  
scholar **P26**



**TRISHNA  
SARKAR**  
Economist and  
academic **P33**

# ANXIETY

**YOUNG,  
ANGRY, AND  
BETRAYED** P6

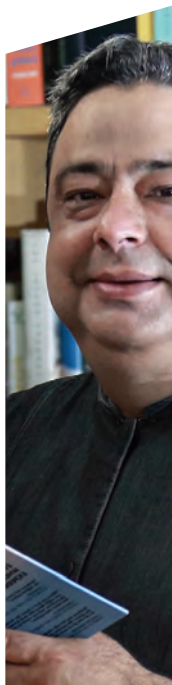


**KALKI  
KOECHLIN**  
Actor, writer  
P30

**KIRAN RAO**  
Filmmaker,  
producer  
P34



**MANISH  
MEHROTRA**  
Chef,  
restaurateur  
P38



**NILA  
MADHAB  
PANDA**  
Filmmaker  
P42



**SAJANA  
SAJEEVAN**  
Cricketer  
P46



**MAMANG  
DAI**  
Poet, novelist  
P52



**CHETAN  
SINGH  
SOLANKI**  
Scientist, social  
entrepreneur  
P56



**SARADA BISWAS;  
SHUBHAM  
KUMAR  
SRIVASATAVA**  
Content engineer;  
Academic P37



**SWATI SINGH  
SAMBYAL**  
International waste  
and circular  
economy  
expert P41



**NIDHI  
CHANANA**  
Urban farming  
entrepreneur P45



**VISHAL  
KUMAR**  
Waste  
management  
social  
entrepreneur P50



**RAVLEEN  
KAUR**  
Journalist P55



**SUMIT DOOKIA**  
Wildlife  
biologist and  
academic P58





# **YOUNG, ANGRY, AND BETRAYED**

**AN OPINION SURVEY OF THE  
21<sup>ST</sup> CENTURY'S FIRST GENERATION  
REVEALS GRIEF, FRUSTRATION AND  
RAGE OVER CLIMATE CHANGE**



In 2024, when the UN Environment Programme (UNEP) released “Navigating New Horizons: A Global Foresight Report on Planetary Health and Human Wellbeing,” it warned of an emerging crisis gripping the world’s young: Eco-anxiety, also described as climate grief. It is a negative emotional response to the threats posed by environmental degradation and climate change. The UNEP report called climate anxiety among young people “a crisis in plain sight”, warning of “an emotional catastrophe being visited on the next generations.”

Evidence of this unease is widespread. *Down To Earth* conducted an opinion survey in October-November 2025, among over 300 people aged 16-25 years—the first generation of the 21<sup>st</sup> century. It shows how entrenched eco-anxiety has become. Nearly 88 per cent of respondents said they felt the climate is changing around them; 67 per cent said these changes were already affecting their daily lives and lifestyles.

Climatic studies tracking the changes suggest that those born in the past 25 years may have never experienced a “normal” climate. From heatwaves to cyclones to floods, the planet’s pulse has changed, and young people are feeling it more than ever. “The climate currently behaves like an athlete on steroids,” says Erich Fischer, a senior scientist at Institute for Atmospheric and Climate Science, ETH Zurich and a lead author of the UN’s climate science assessments. Scientists at Climate Central, an international association of scientists and journalists reporting and researching climate change, note that anyone born in and after February 1986 has not experienced a single month with normal temperature; each month since has been warmer than the average.

What changes do the young associate with climate change? In the opinion survey, nine symptoms, ranging from unseasonal weather to warmer climate to more insects and pests, were listed for respondents to tick with the option of selecting more than one. More than two-thirds of respondents associated climate change with warmer temperature and unseasonal heat or

rainfall. Nearly 40 per cent linked it to smoggy or foggy days, while 36 per cent cited “change in food quality” as one of the climate manifestations. Extreme cold was identified by 38 per cent respondents as another manifestation of climate change, and 32 per cent reported experiencing an increase in insects and pests.

Asked whether climate change affects various economic groups differently, 61 per cent said the impacts are felt equally across society, whether rich, poor or middle-income groups. Among those who perceived unequal effects, the consensus was clear: the poor suffer most. On gender, opinions were more uniform. About 90 per cent of respondents said climate change affects men and women equally.

The emotional toll is evident. Respondents were asked to identify their feelings about climate change from six options—frightened and sad, anxious, angry, helpless, betrayed and indifferent—and were allowed to select multiple responses. All emotions were widely voted, underscoring the depth of climate anxiety. As many as 57 per cent respondents described themselves as “anxious”; 54 per cent as “helpless”; and 43 per cent as “frightened and sad”. Many also reported feeling “angry” or “betrayed”.

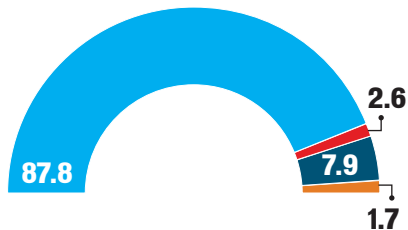
Looking ahead, fear persists. Nearly 53 per cent expect climate change to lead to more diseases; over one-third anticipate food shortages; and 45 per cent foresee water shortages. An overwhelming 94 per cent respondents said they are worried about their future because of climate change. Half described government action on the issue as “disappointing.”

Such reactions, argue some experts, are entirely rational. “Our children’s anxiety is a completely rational reaction given the inadequate responses to climate change they are seeing from governments,” says Caroline Hickman, from the University of Bath who co-led a major survey on climate anxiety. Children and young people, she notes, are mobilising worldwide and taking governments to court; arguing that failure to act on climate change violates human rights.

**Down To Earth's opinion survey among more than 300 people aged 16-25 years shows how entrenched eco-anxiety has become in the minds of a generation that has never experienced a "normal" climate**

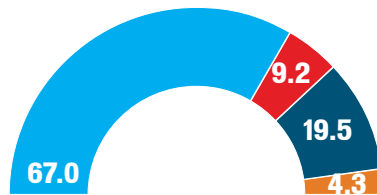
**Do you feel that the climate is changing around you?**

Yes No Somewhat Not sure (figures in %)



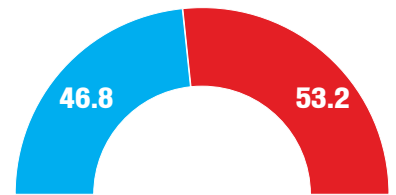
**Does it impact your daily life/lifestyle?**

Yes No Somewhat Not sure (figures in %)

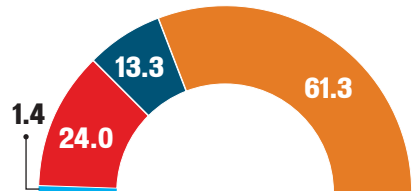


**Do you think that climate change disproportionately affects:**

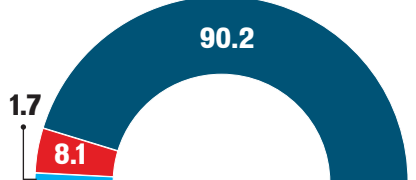
Rural Urban (figures in %)



Income groups: Rich Poor Middle All groups (equally) (figures in %)

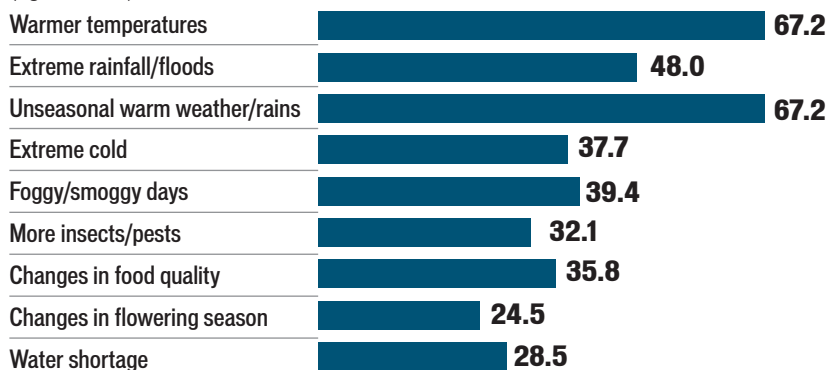


Gender based: Men Women All genders (figures in %)



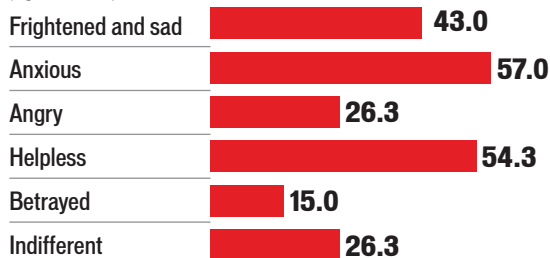
**What changes do you associate with climate change?**

(figures in %)



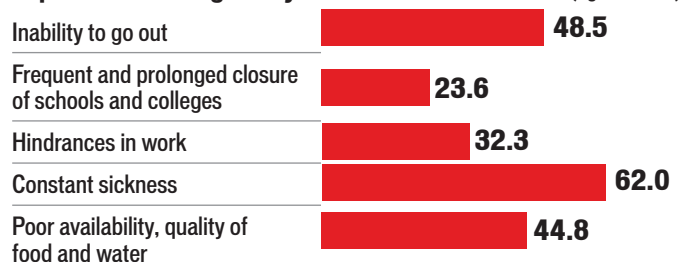
**How do you feel about the changing climate?**

(figures in %)



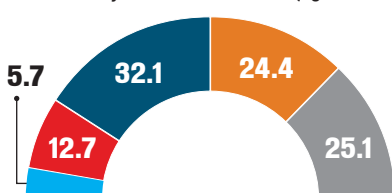
**Which specific consequence of climate change triggers unpleasant feelings for you?**

(figures in %)



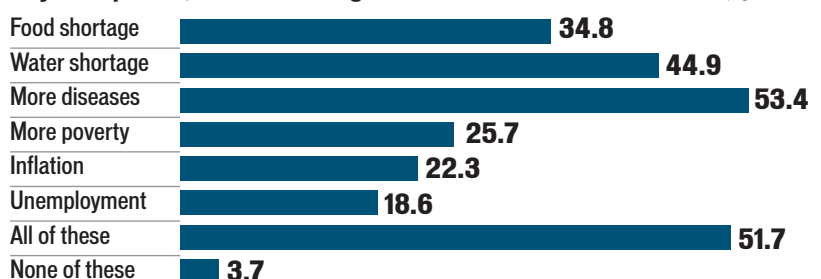
**How worried are you about your future because of climate change?**

Not at all A little Moderately Highly Extremely (figures in %)



**In your opinion, climate change in future will lead to:**

(figures in %)





# DIA MIRZA

**ACTOR | PRODUCER | UN ENVIRONMENT  
GOODWILL AMBASSADOR**

# “APPLY YOURSELF TO SOLUTIONS TO FEEL LESS DESPONDENT”

Since being crowned Miss Asia Pacific in 2000, **Dia Mirza** has established herself as a versatile actor and producer in the Indian film industry as well as a committed climate crusader. As Goodwill Ambassador for the UN Environment Programme, she works to raise awareness on priority issues such as clean air, clean seas, wildlife protection and climate change. In an interview with **Snigdha Das**, Mirza discusses how today’s youth can navigate eco-anxiety and take meaningful action:

**You have been an active voice in environmental and conservation issues for over 20 years. Do you think there is enough acknowledgement of the crisis unfolding around us?**

No. I do not think we are treating the issue with the urgency it demands. When we started working in environmental action 20 years ago—when I first began participating in these efforts—the reality felt distant. We were talking about melting glaciers in far-off oceans. But today, that reality has reached home. We are now grappling with a triple planetary crisis, one that is putting the human species, and many others, at risk of extinction. In just the last 100 years, we have caused an extraordinary level of destruction that will require the involvement, participation and awareness of everyone to address.

While the problems are vast and planetary in scale, and often feel unreachable, we must recognise that at the individual level, each of us has a part to play. It starts with a basic understanding: everything we need for our health, peace,

progress and survival comes from the Earth. This is our home. If we disconnect ourselves from this understanding, we will continue to contribute to destruction rather than becoming part of the protection we so urgently need.

So if you live in Delhi, care about pollution. Take concrete actions to mitigate air pollution. Make better choices in your everyday life: segregate waste, compost, manage every aspect of the waste you produce at home and reduce wasteful consumption. These are tangible actions that help us feel less overwhelmed by the enormity of the issue.

**Most young people today say they feel helpless by the environmental crisis. How do they deal with this?**

Eco-anxiety sets in when you confront the scale of the crisis and realise how little is being done to address it—governments are not showing the will, industries are not showing the will, and conversations are often collapsing. That is why I emphasise identifying accessible solutions and

working on the ground, in your own environments and immediate neighbourhoods. I often return to what Dr Jane Goodall [English primatologist and anthropologist] has said: hope is a verb. You have to apply yourself to solutions; you have to do the work towards them every day to feel less despondent. I find that I am far more hopeful and far less miserable when I am actively involved in solutions each day. Become a part of the solution—whether it is joining a beach clean-up, protesting against tree felling, helping to grow an urban forest, or ensuring that your neighbourhood segregates and manages waste better. Whatever the action may be, get involved.

**As a mother, do you worry about the kind of environment your child is going to inherit? Do you feel over-**

***Panha*, a Marathi short film by your production house One India Stories, has won the Best Indian Short Film award at All Living Things Environmental Film Festival 2025. Please share your vision behind the project.**

*Panha* is one of the first films we produced, and I am incredibly proud that we chose to back a story like this. I believe environmental action will arise from intimate storytelling. We need to humanise the climate crisis and help people understand that our interpretation of progress must change. And what better way to do that than through the lens of an eight-year-old child? *Panha* tells the story of a young boy who feels displaced from his ancestral mango orchard due to a large new project. This is not to say that I am opposed to infrastructure. But infrastructure must never come at the

## EVERY DAY I WORRY ABOUT THE AIR MY CHILD IS BREATHING, FOOD HE IS EATING, AND THE FACT THAT HE DOES NOT HAVE ACCESS TO FREE PLAY

**whelmed by such anxiety?**

Oh yes. We are nurturers; we are mothers. More than anything else, what matters to us is the health and well-being of our children. I delivered an extremely premature child, which led to serious complications, including risks to his life and to mine. In fact, there is a growing number of women giving birth prematurely because of environmental pollution: the polluted air we breathe, the food we eat, the plastics we ingest—these all cause profound disruptions in our bodies.

So from that point on, every day I worry about the air my child is breathing, the food my child is eating, and the fact that he does not have access to free play. There are so few parks and pedestrian spaces in our urban centres. In a normal world, my child would be walking to school every day. But it is not safe, because there is no infrastructure to support that kind of mobility. So I worry. I worry like every other mother.

cost of ecological balance—and, most importantly, it must never come at the cost of robbing children of what secures their lives and livelihoods.

**Sustainability is a big part of your persona. How do you ensure it reflects in your lifestyle?**

I have become far more mindful of my consumption and waste. I waste much less than I did when I was younger. There is this idea of success—that the more wasteful you are, the more successful you are perceived to be—but that mindset has to change. I have become so conscious of waste that I almost turn blue in the face when I see someone pull out an extra tissue at the airport just to wipe their hands. Ultimately, it is about recognising that every resource has a carbon footprint. It all comes from the Earth, and we need to be mindful of how we use it. [DTE](#)

# Guiding Organizations from *Learning* to *Action-Driven Impact*

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*Individuals empowered through training*



**1,000+**

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**50+**

*Clients ranging from private organizations and NGOs to educational institutions and international organizations.*

# ‘ECOLOGICAL GUILT IS REAL’

**Greater awareness of how both humans and non-humans are coping with climate disruptions only deepens the anxiety**

**AMBIKA AIYADURAI**  
ANTHROPOLOGIST OF  
WILDLIFE CONSERVATION,  
FACULTY AT  
INDIAN INSTITUTE OF  
TECHNOLOGY,  
GANDHINAGAR

**F**or someone who teaches environmental humanities and studies, and the human dimensions of wildlife conservation, living with ecological guilt is a daily reality. Constantly assessing one’s lifestyle and its environmental impact has been unavoidable. And the more materially comfortable life becomes, the sharper this guilt feels. I debate my use of plastic bags or cars for short distances almost daily. Cycling on campus offers momentary relief, but feels superficial. Riding a bicycle on a green, low-traffic campus is itself a privilege—one that quickly exposes the limits of individual virtue.

In India, the ability to rethink lifestyle choices is, in truth, a luxury. What, then, of those who have no choice but to endure climate change, which is already eroding their health, livelihoods and, at times, their lives? Greater awareness of how both humans and non-humans are coping with climate disruptions only deepens the anxiety. Knowledge does not soothe; it compounds concern.

Climate extremes affect everyone, but not equally. Some are more affected than others. One of my students recently interviewed brick-kiln workers who labour for hours under the open sun. “When has there been no heat?” asked one worker. “Only those who have worked at brick kilns can understand what this pain feels like.” Among the educated and privileged, eco-anxiety is widely articulated and discussed—again, a privilege of sorts in itself. The cruel irony is that those most physically vulnerable to climate change are often communities that have been historically marginalised.

For many tribal communities, vulnerability is intensified by dams, mines, infrastructure projects and even land acquisition for “green energy” projects. “Where will our children go?” I have encountered this question many times in these communities, consumed by constant worry about future generations. Their anxieties are layered: loss of land and livelihood, displacement and the steady erosion of culture. For forest-dwelling communities, biodiversity loss threatens language, identity and ways of life.

Biodiversity itself faces similar risks. A year ago, I was travelling from Ahmedabad to Bhuj in Gujarat with two wildlife biologists who, for the past 20 years, had been reading the landscape, especially the bird diversity along the highway. As we drove, they pointed out vanished wetlands and shrinking bird habitats. “There was a wetland here,” one said. “Now it is a dumping ground,” replied the other. Entering the Rann of Kutch, one said, “I have seen bustards here.” The great Indian bustard, a ground-nesting bird once common in the region and known as the heaviest flying bird in India, now numbers 100-150. The species hovered like a ghost over the journey. We were not merely observing change; we were mourning loss.

What is it like to be a species whose numbers have dwindled beyond recovery, surviving mostly in captivity? How do we speak of eco-anxiety without acknowledging the concerns of marginalised communities and endangered species? After all, they are the ones who bear the heaviest costs of a planet in crisis. **DTI**





# HEAT-PROOF CITIES

## PATHWAYS TO SUSTAINABLE COOLING AND HEAT MITIGATION

**Dates:** January 27-30, 2026 | **Last date to apply:** January 23, 2026 | **Venue:** Anil Agarwal Environment Training Institute, Nimli (near Alwar), Rajasthan

The world has warmed by about 1.5°C since pre-industrial times. With 2024 declared the hottest year on record and the past decade the warmest ever, cities have become the frontline of this crisis. As urban areas grow more heat-stressed, the demand for cooling continues to surge. Additionally, current cooling technologies release large amounts of waste heat into the environment, further intensifying the Urban Heat Island effect.

In India, space cooling demand in buildings is projected to rise 11-fold by 2038 compared to the 2017-18 baseline, which will drive up energy consumption. To address this issue, India has recognised the urgent need for a sustainable cooling transition. The India Cooling Action Plan (ICAP, 2019) targets to cut cooling demand across sectors by 20-25 per cent by 2037-38, among other national goals. Achieving this will require cities to revisit urban planning and design and adopt an approach that integrates cooling with the planning of the built environment. A cooling master plan can enable this and serve as a vital framework to structure and optimise city-wide cooling by combining nature-based solutions and Cooling as a Service, which includes not-in-kind technologies, energy-efficient systems and scaling up of renewable or alternative energy sources.

Centre for Science and Environment (CSE) is offering a four-day training programme that will equip participants with an advanced methodology to plan and design cities that not only adapt to rising heat but also actively reduce it. The programme will also cover how to implement these cooling strategies and support long-term climate mitigation.

### COURSE FEE

**Rs 28,000**

(sponsorships and discounts available, subject to satisfactory fulfilment of the application form)\*

\*Course fee includes tuition fee, external expert lecture sessions, training materials, boarding and lodging, and transport from Delhi to AAETI and back.

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- Understanding thermal discomfort, current policy levers and opportunities
- Mapping heat-stressed areas and heat sinks with the help of remote sensing and GIS
- Design solutions for microclimate enhancement
- Optimising cooling energy demand in a city through demand flexibility and aggregation approaches
- Integrating renewable energy with urban systems, including alternative energy sources
- Exploring not-in-kind and sustainable cooling solutions
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- Introduction to low embodied carbon materials and construction technologies

### WHO CAN APPLY

Officials from urban local bodies and other government departments, pollution control officials, regulators, architects, engineers, planners, builders/developers, researchers and anyone interested in the circularity of the built environment.

To register, scan this QR code



### COURSE COORDINATOR

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# TSEWANG CHUSKIT

**CAPTAIN, INDIAN WOMEN'S ICE HOCKEY TEAM**



# “WE ARE SKATING ON THE FRONTLINES OF CLIMATE CHANGE”

Captain of the national women’s ice hockey team since 2018, **Tsewang Chuskit** was only 10 years old when she first tried the sport in her village, Tangtse, in the Changthang region of Ladakh. She has not just led the team in the international arena but also earned individual accolades. Behind this rise, however, lies the truth that Chuskit and other Indian ice hockey players, all from Ladakh, are at risk of losing their first practice rinks and their homes due to climate-related impacts. In an interview with **Dakshiani Palicha**, Chuskit shares her concerns about ice loss, on and off the rink:

## How has growing up in Ladakh shaped you into the sportsperson that you are today?

Growing up in Changthang, nature was everything to me. The thin air, brutal winters and challenging terrain made me tough before I even started skating. Living in Ladakh taught me about resilience, teamwork and respecting the land—lessons that are important for any athlete. Being close to nature gave me a kind of discipline. I learned to adapt quickly, stay calm when things get rough, and find strength in the simple things.

## As a sportsperson, which impacts or signs of climate change resonate with you the most? How do they affect your performance?

The biggest hit for me is the loss of ice. Ice is not just where we play; it is our home.

When it melts early or is not smooth, it messes with our training and takes away our connection to the sport. Plus, the uncertainty about whether there will be ice each winter affects my motivation. It is a constant reminder that our sport’s future depends on how we treat the environment. Playing ice hockey in Ladakh today is both a passion and a statement—we are skating on the frontlines of climate change.

When I first started skating, we had natural ice for about four to five months a year. Now, it is down to just two months, sometimes even less. The ice forms later and melts earlier, and it is often not safe to skate on. It is heartbreaking, not just for athletes like me but also for farmers who depend on the land and for kids who look forward to skating in winter.

We have had to adapt by travelling to higher altitudes for practice or going to

short training camps. This has pushed us to think about artificial rinks and how to preserve ice better while connecting sports to climate action.

**Do you see other climatic or weather changes affecting your home region—for example, drought or heatwaves, sudden rain or snowfall, scarcity of water and resources, or disease outbreaks? Who or what would you say is responsible for the emergence of this crisis?**

Every year, things are changing: shorter winters, weird rain patterns and drier summers. Streams that used to flow all year now dry up early, leading to water shortages in villages, and the pasturelands are shrinking.

It is a global issue, not just one person's

But we have always lived close to nature, so we have traditional knowledge and adaptability that the rest of the world could learn from.

**Have these impacts changed you personally or influenced your lifestyle in any way?**

I have become a lot more aware of my impact on the environment, whether it is travel, waste, or how much water I use. Climate change is not just some distant problem; it is something we feel every season. As an athlete, I have realised that the environment is part of our sport. I try to talk about these issues because young athletes in Ladakh need to understand that protecting nature is part of representing where they come from. It has made me more mindful and vocal about sustainability, both on and off the ice.

## **IF OUR LAKES STOP FREEZING, GIRLS LOSE NOT JUST THEIR PLAYGROUND BUT ALSO THEIR DREAMS. RESPECT THE LAND THAT GIVES YOU ADVENTURE**

fault. But I think the rapid tourism and over-building in sensitive areas are making it worse locally. We need to find a balance because Ladakh's ecosystem is too delicate for unchecked growth.

**You have had some experience in international arenas. Do you feel that the impacts of changing climate in India are different from what people in general, and sportspersons in particular, in other countries face?**

After competing internationally, I have noticed that climate change hits differently in India compared to other countries. In places with better facilities, like artificial rinks, they can adapt more easily. In Ladakh, we rely on nature, so when the ice melts early, our whole training system is in trouble. Our communities depend more on natural cycles for water and livelihoods, so climate impacts hit us harder and faster.

**What are some specific messages you feel compelled to spread awareness about or urge others to explore? What is the one message you would like to share using your platform?**

I want to use my platform to highlight how climate change connects with opportunities for young girls in remote areas. This is not just an environmental issue; it is about access. If our lakes stop freezing, girls lose not just their playground but also their dreams.

Through sports, I have learned that small actions can lead to big changes. My message to everyone, especially athletes, travellers and adventurers, is simple: respect the land that gives you adventure. Whether you're skating on it or riding through it, your journey should give back more than it takes.

My appeal is: "Protect the ice, protect our future." **DTI**

# Himalaya Wellness Committed to Conserving Biodiversity



Biodiversity is crucial for sustaining life and maintaining ecological balance. Conserving biodiversity requires the urgent collaboration and involvement of individuals and corporations. Corporations have a social responsibility to help navigate discourses on biodiversity and leverage opportunities for sustainable development.

Himalaya Wellness Company believes that products that benefit customers must also positively impact the environment. Since our inception, we have been operating our business with the highest ethical standard. Nature has a rhythm, and we understand that. We have made conscious efforts to deepen our commitment to care for the Earth by conserving biodiversity and safeguarding the environment.

We have taken proactive measures to protect and restore forested regions, including the Western Ghats, recognized by UNESCO as a biodiversity hotspot. We have planted two million trees across India, comprising over 200 species. We have also engaged extensively with local communities and farmers to plant saplings of fruit, vegetable-bearing, and fodder-providing trees, giving the locals complete autonomy over the crops, which are used for economic upliftment or personal consumption.

Himalaya's tree-planting initiative is a collective endeavor to conserve biodiversity and nurture and restore the goodness of Nature.



# ‘NUMB, AND UNABLE TO ACT’

As disasters grow more frequent, I find myself wondering how long I can continue living here, waiting for the next storm

**MEGHA PRAKASH**  
RESEARCHER AND  
JOURNALIST BASED IN  
DEHRADUN

It was the sort of night that signals trouble. The sky roared past midnight, lightning ripping through swollen clouds. Unable to sleep, I stood on the balcony of my home in Dehradun, unease building with each passing hour. I packed a small bag with my laptop, charger and a few essentials, ready to leave at a moment's notice if conditions worsened. I must have dozed for an hour when my phone rang. A massive cloudburst in Sahastradhara area in the early hours of September 16, 2025, triggered flash floods in the seasonal rivers that run through Uttarakhand's capital, sweeping away buildings and roads. Having grown up in Dehradun, I can say with some confidence that this was the first time rainfall-driven flooding in the city's rivers caused destruction on such a scale.

Today's Dehradun is no longer the sleepy, tree-lined town once known as Dehra, as evoked in Ruskin Bond's writing. Birdsong once echoed across the valley; traffic was sparse enough that a distant horn could startle. Water, too, had a gentler relationship with the town. The Rispana and Bindal rivers flowed along their natural courses, sustaining fields and livelihoods. I remember women in the evenings selling fresh catch from the river and corn growing on its banks. A network of canals was once a defining feature of the valley. Rainfall followed a rhythm. For much of the monsoon, and often beyond, it arrived by mid-afternoon, sometimes settling into a *jhadi*, a steady gentle downpour lasting days. By Diwali, winter would arrive with clarity, cold enough to require sweaters beneath layers of warmers; ceiling fans mattered only at the height of summer.

Those patterns have frayed. Winters are shorter and less distinct; the monsoon, once reliable, now arrives in violent bursts. Summer temperatures routinely touch 42°C, and air-conditioners have become commonplace. As high-rises, industries and commercial blocks mushroomed across the valley, forests, fields and waterbodies were steadily encroached upon. The consequences are visible everywhere. The Bindal has narrowed by concrete embankments and carries sewage and industrial effluents; a garbage dump lines its banks. The fate of Rispana is no better. Few know that Rispana Pull, a city landmark, is named after a river, not *nullah*.

Across Uttarakhand, farmers and herders describe similar shifts: altered weather, degraded land and losses that accumulate year after year. Their despair is hard to ignore. Watching sal trees felled for the Delhi-Dehradun expressway or concrete pillars rise from the Mohand Rao riverbed, feels like slow violence. People tossing plastic waste into the forest unsettles me as much as the large-scale destruction. Forecasts of hotter summers, drier rivers and declining soil fertility deepen the unease. At times, helplessness curdles into what might be called “eco-paralysis”—a numbing inability to act even as change accelerates. As disasters grow more frequent, I find myself wondering how long I can continue living here, waiting for the next storm. **DTE**



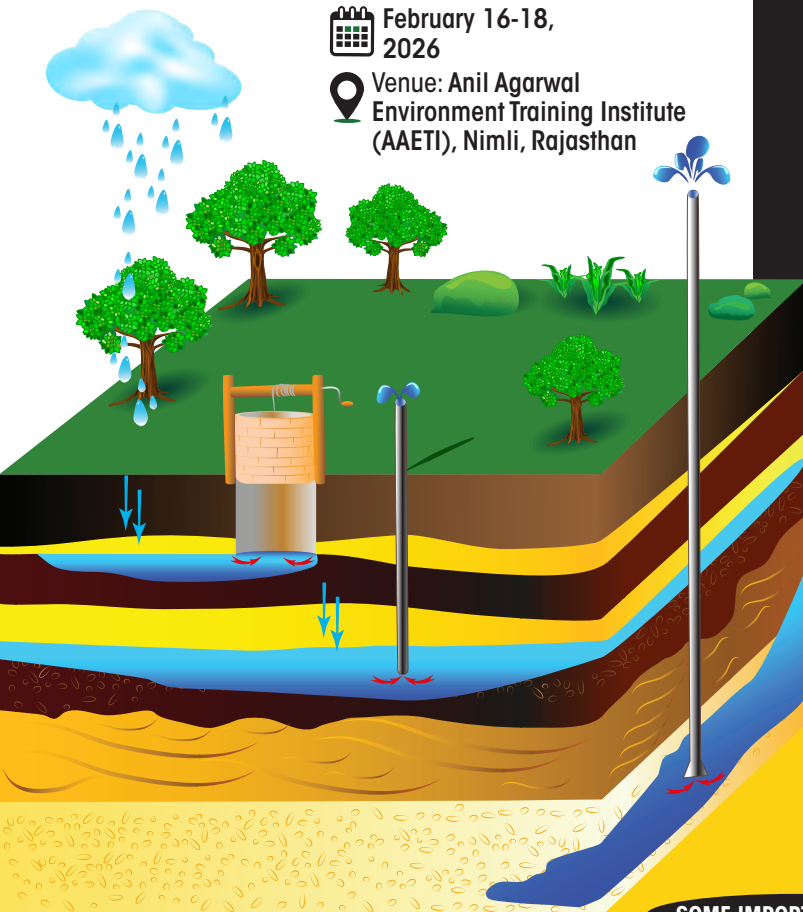
**RESIDENTIAL TRAINING PROGRAMME**

# USING AI, GIS AND REMOTE SENSING

## FOR MAPPING POTENTIAL GROUNDWATER RECHARGE ZONES IN URBAN AND RURAL AREAS

 February 16-18, 2026

 Venue: Anil Agarwal Environment Training Institute (AAETI), Nimli, Rajasthan



India is extracting groundwater at phenomenal speed and scale. Natural recharge of groundwater is becoming almost impossible in urban areas due to loss of green areas and waterbodies – the potential recharge zones in cities. Added to this is lesser number of rainy days and variability in annual rainfall due to climate change. Hence, mapping aquifers for pinpointing groundwater reserves and potential recharge areas has become critical.

Data on groundwater storage, quality and movement is often difficult to monitor due to diverse geological formations, soil types, aquifer structure and limited access to areas having difficult terrain or facing conflicts. Today, the use of advanced tools like Remote Sensing and Geographic Information Systems (GIS) offers several advantages over traditional techniques. Satellite-based monitoring for the mapping of aquifers marks a significant advancement, as such modern techniques have high resolutions, optimal spatial and temporal coverage for modelling and monitoring the groundwater reserve and quality. Real-time monitoring facilitated by AI algorithms allows for continuous assessment of groundwater quality, enabling rapid response to contamination risks. AI helps in precise understanding of the groundwater behaviour in the aquifers.

Centre for Science and Environment (CSE) is launching a specialized three-day residential training programme that will focus on using advanced tools to estimate the reserve, movement, recharge options and monitoring of groundwater.

### TRAINING FEES

**Rs. 30,000**

(Single occupancy Accommodation)

**Rs. 28,000**

(Double occupancy Accommodation)

LAST DATE FOR RECEIVING COMPLETED APPLICATIONS: FEBRUARY 10, 2026

**A DISCOUNT OF 10 PER CENT AVAILABLE FOR A GROUP OF 5 PARTICIPANTS FROM THE SAME ORGANIZATION (T & C APPLICABLE)**

Training fees includes accommodation, food, training material, field visit and travel from CSE's main office at Tughlakabad Institutional Area to the training centre and back.

### WHAT DO YOU GET AFTER COMPLETING THE PROGRAMME

- 1 Completion certificate
- 2 E-alerts for CSE events, webinars, trainings and workshops
- 3 CSE's e-bulletins
- 4 Entry into network CSE's training alumni under the School of Water and Waste
- 5 Priority access to CSE's publications on water (T&C apply)

### COURSE HIGHLIGHTS

- Extent and distribution of aquifers in India
- Urbanisation and its impact on aquifers
- Acquisition and processing of groundwater data
- Principles of QGIS, Google Earth Pro and GPS
- Remote sensing and GIS applications in aquifer mapping
- Coordinate systems, map scales and projections
- Soil and Water Assessment Tool (SWAT) for hydrological modelling and estimating surface runoff and groundwater recharge
- AI models for sustainable groundwater management
- Real-time examples on use of advanced satellite-based systems for estimating groundwater behaviour
- Field visit for collection and interpretation of data for hydrogeological modelling

### SOME IMPORTANT POINTS

- CSE will arrange the travel from CSE's main office in Delhi to the training centre (AAETI) in Rajasthan and back.
- Participants need to arrive at CSE's main office in Delhi on **February 15, 2026 by 12 noon**. Anyone who arrives late might get left behind and will have to arrange her/his own transport to reach AAETI.
- Before finalising their travel plans, participants should get in touch with the training coordinator.

### TRAINING COORDINATOR

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# JACINTA KERKETTA

JOURNALIST | POET | ACTIVIST



# “WRITING DISPELLED THE FEAR WITHIN ME”

In her journalism and poetry, **Jacinta Kerketta** blends the dispossession of her community, the Oraon adivasi tribe of Jharkhand, with the destruction of nature. Her work, known for its passionate advocacy of tribal rights, has been widely translated and taught in universities around the world. In an interview with **Preetha Banerjee**, Kerketta reveals that, for her, the greatest achievement has been avoiding ‘insanity’ by forging a deep connection with nature:

**Many of your poems touch upon the impact of capitalism on adivasi communities and their natural surroundings. What personal experiences inspired you to lend your voice to this cause?**

I was in the eighth grade when I lived in Chakradharpur, a town in Jharkhand’s West Singhbhum district. My school was an hour-long train ride from my village in the district’s Manoharpur block. In this region, I often heard stories about the history of Kolhan State of the Ho adivasi people [Austroasiatic Munda ethnic group, known for their deep connection with land and nature, rich culture and unique traditional governance system]. Manoharpur falls within the Saranda forest, Asia’s largest sal forest, and the adivasi people worshipped the tree. Eventually, India’s largest iron ore mine was established here, at Chiria village, and the Howrah-Nagpur railway line was opened. Many people from Uttar Pradesh, Bihar, Rajasthan and Gujarat settled here. Railway tracks were laid by cutting timber

from the Saranda forest. During this period, people from Gujarat established sawmills in Manoharpur. As an adivasi-majority area, many adivasi people worked in these sawmills. Earlier, traders from Marwar region had also arrived to conduct business. Over time, Manoharpur transformed into a town. However, power remained in the hands of those who came from Rajasthan; they became *rajās* and *zamindars* in this adivasi region.

The Manoharpur area was administered by a member of the Raja of Porahat’s family, who collected taxes from people. Even after the abolition of *zamindari* system and the monarchy, members of this family continued to conduct business in the area. Amidst all this, Manoharpur also became a hotbed of hooliganism and intimidation linked to mining, markets, timber and the *tendu* leaves trade. In this same town, my uncle was mob-lynched by powerful upper-caste individuals over a land disputes. My middle grandmother was imprisoned. The perpetrators falsely accused adivasis of practising human

sacrifice for a good harvest, and this fabricated narrative was published in newspapers. When people from my village attempted to protest, the entire Kerketta clan was threatened with extermination from the area. During this conflict, some Naxalite groups from the Saranda forest region stepped in to defend the adivasis. They declared that if any further members of the Kerketta clan were killed, the upper-caste perpetrators would be driven out of the area. The atmosphere remained tense for several days.

At the time, I was writing stories and poems for a children's magazine. These events deeply shook me. I realised that our people were not the ones writing about us, and that we lacked the means to create a counter-narrative to challenge the dominant discourse. It was during this period that I began to take writing seriously. This was the turning point at which I chose to use writing not as a hobby, but as a way to strengthen the voice of my people.

**How do poems help you channel your anger and emotions, while also inspiring others?**

If I had not picked up a pen, I would have definitely taken up arms. From a young age, I began working within myself. Back then, emotions would surge within me like a storm. I practised silence for years, but my words would burst forth, screaming on paper. The girls at school would say, "Your words are sharp, like arrows piercing the heart." If I had a disagreement with someone at school, they would express their anger by speaking. I, however, would write something down and send it to them. The girls would say, "Fight by speaking, do not write. It hurts more."

Both nature and writing have saved

me. I was unable to respond to the violence around me with violence. Instead, I chose writing—a path that, like a river, reaches the ocean of hearts of many. Writing dispelled the fear within me. It helped me build a relationship with my body and the universe. It helped me become a better person. I believe that writing, or any art, is meaningless if it does not make us better human beings.

**How do adivasi communities perceive degradation of their surroundings and changes in the environment? Have you documented these experiences?**

Adivasi people are able to preserve their spontaneity, innocence, honesty, truthfulness and innocent laughter precisely because we live so close to nature. However, the exploitation of nature and relentless displacement of adivasi communities are having devastating effects. We see a rise in corruption, hatred, anger, suicide, exploitation of women, gang rape and many other atrocities within adivasi communities. I attribute all of this to the refusal to integrate us into the mainstream, to the exploitation of our natural resources under the guise of development, and to neglect our territories in the name of national interest. In this process, adivasis are being transformed into the new Dalits of this country—relegated to the role of a labour force that builds the nation, cleans the sewers and lives in conditions that are far below human dignity.

Amid all this, my strength to survive comes from a deep connection with nature and working with its support. Being adivasi, always living in areas surrounded by nature, has been deeply healing for me. It has saved me from losing my sanity.

**IF I HAD NOT PICKED UP A PEN, I WOULD HAVE TAKEN UP ARMS. BACK THEN, EMOTIONS WOULD SURGE WITHIN ME LIKE A STORM**

## **ADIVASI PEOPLE HAVE BEEN HERE SINCE THE BEGINNING. THEY WILL CONTINUE TO FIGHT FOR PRESERVATION OF THIS LAND'S RICH DIVERSITY**

**You have commented on religion, gender inequality and social injustice through the assault on forests and rivers. How do you think these are related?**

We cannot view religion, gender inequality and social injustice in isolation—they are all interconnected. The way we treat nature reflects how we treat humans. From the moment humans began to see themselves as superior to nature, they also started seeing themselves as superior to some within humanity. The hierarchy created by this mindset ignores the fundamental truth that everything in nature is interconnected, and humans survive only through mutual cooperation. So when I write against the attacks on rivers, mountains and forests—their plunder, and the occupation of nature by some—it is not just about nature; it is also about the people. It is about the communities that live in and are deeply connected to these areas, because they are the ones most affected by these assaults. Sooner or later, the entire human civilisation will feel the consequences.

**How effective is poetry in bringing about climate and social justice? What role do local languages play in driving social change?**

I have seen many people in India admit that they do not know much about adivasi issues. Through poetry, they are able to connect, even if only to some extent, with the adivasi world. Poetry allows them to feel, listen and understand from the heart. I have witnessed many people, both in India and abroad, cry after listening to poetry. It brings people together, creating a bond that transcends barriers. It certainly opens the path to social justice.

As for language, I write only in Hindi,

although I can speak Santhali and, after years of effort, understand Kurukh. My book has been translated into Santhali. I find adivasi languages to be very different from Hindi. They are more gender-sensitive, deeply connected to nature and more expansive in their expression. Adivasi languages are imbued with wisdom, and if they disappear, mainstream society will lose a vital part of this knowledge.

**What, in your experience, is the role and status of adivasi communities of India in conservation and decision-making?**

Adivasi communities are constantly struggling to uphold their ancient rights to protect the forests, rivers and mountains in their territories. The demand by thousands of people in Ladakh to have their region included in the Sixth Schedule is a prime example of this ongoing battle. We see two contrasting philosophies in the country: one based on exploitation and profit, and the other rooted in the belief that the protection of humans is inseparable from the protection of nature. These two worldviews are in conflict, and the adivasi communities across the country are fighting this struggle in their own corners.

The adivasi people are the only ones who will remain rooted in this land, no matter the circumstances. They will continue to raise their voices against their own government, calling for the protection of nature and the rights of its people. Unlike a significant number of privileged upper caste individuals, they will never flee the country. The adivasi people have been here since the beginning. They are the only community that will continue to fight for the preservation of this land's rich diversity. **DEE**

# ‘THE UNEASE DISCONNECT’

**Waste,  
infrastructure  
and eco-anxiety  
on the edge of an  
expanding city**

**AKRITI  
ASHESH**  
RESEARCH SCHOLAR,  
CENTRAL UNIVERSITY  
OF SOUTH BIHAR,  
GAYA

**S**ome worries do not come from distant headlines but from what one sees every day. Mine stems from the gap between rising aspirations, particularly in communities on the edge of an expanding city, and the inability of systems and government machinery to meet basic needs efficiently. Where this gap widens, settlements acquire a hybrid character, blending rural and urban traits. Without adequate infrastructure or planning, however, such places risk sliding into slum-like conditions. That is precisely what I am witnessing at Panchanpur, a small village on the outskirts of Bihar’s Gaya district, where I have lived for the past four years. About 3 km from my university, where I am pursuing doctoral studies, Panchanpur has been undergoing rapid urbanisation, driven largely by infrastructure projects. Its proximity to Gaya, an important education hub in the state, has spurred construction linked to institutions and residential facilities. New shops and business appear every few months. What has not kept pace with this growth is basic infrastructure, particularly sewage and waste management.

Communities that once lived closely with the land, and in doing so protected it and their surroundings, appear to be steadily alienating from the landscape and the values that accompanied that relationship. What I witness daily in Panchanpur is a stark disregard for the environment it possessed just six to seven years ago. Each day, all manner of rubbish—construction debris, electronic waste and bulky discards—is dumped into a large open sewage channel or onto adjoining farmland. I see it clearly from my balcony. Everything is mixed together, without thought or separation. This sight is deeply unsettling. Each time I consider stopping someone from dumping waste, a familiar question intrudes: “If not here, then where?” With no answer, I look away. And looking away breeds its own guilt.

My anxiety probably stems from awareness—sharpened by education—of environmental degradation. I know I cannot repair broken systems on my own. Nor is the problem confined to Panchanpur; villages on the edge of expanding cities and towns across the country face similar pressures. Still, my inability to intervene hardens into a constant unease. This discomfort follows me elsewhere. People spitting on roads, in public places, even from buses and trains, unsettles me more than I expect. During a crowded festive-season train journey, a man offered me his seat. Moments later, he leaned out of the same window and spat. I said nothing, but the moment lingered.

My anxiety has however quietly reshaped my behaviour. I try to live mindfully: carrying my own shopping bag, saving plastic wrappers for recycling, separating waste at home. If I reach the market without a bag, I buy nothing—even essentials. I avoid plastic almost obsessively, fully aware that individual choices cannot compensate for systemic failure. None of it feels sufficient. Perhaps this is simply who I have become. Just as littering is routine for some, constant vigilance and restrained consumption have become routine for me—along with the guilt of knowing how often I have chosen to look away. **DTI**



# Turning on the Green mode



**179%**  
water positive since 2016



**99.6%**  
non-hazardous waste diverted from landfill since 2011



**60%**  
reduction in specific water use since 2011



**57%**  
reduction in carbon intensity since 2011



**57%**  
reduction in specific energy Use since 2011



**37%**  
of total revenue from good & green products

# JINALI MODY

**ENTREPRENEUR**



# “SHIFT TO SUSTAINABLE MATERIALS IS INEVITABLE”

In September 2025, UN Environment Programme announced Mumbai-based **Jinali Mody**, founder of material-science startup **Banofi Leather**, as a Young Champion of the Earth. Launched three years ago, **Banofi Leather** uses banana waste to produce vegan leather and has partnered with major fashion brands. In an interview with **Dakshiani Palicha**, Mody discusses the fashion industry’s growing shift towards sustainability:

## How did the idea for Banofi Leather come about?

Banofi was born out of my passion for materials and my interest in the fashion industry. Most alternatives to leather today are marketed as vegan but are largely made from plastic or petrochemical byproducts. We decided to redesign the material and banana waste emerged as a high-quality feedstock.

## Banana fibre-based products have been around for a few years, many of them produced and sold at a small scale by self-help groups. How are Banofi’s products different?

Banana-based products manufactured locally typically use raw banana fiber to create baskets or carpets. That process involves cleaning the fibre and subjecting it to manual and mechanical processing. While banana waste a key component in our leather, we combine it with rubbers, gums and starches to create a mesh that results in a durable, high-performing material that is soft and subtle. At a technical level, we chemically separate the fruit’s cellulose and lignin, and develop binders and additives to achieve the desired performance. Banana fibre, in fact, makes up 25-30 per cent of the final material; the rest is from carefully engineered chemistry.

## How is your leather beneficial for the environment?

Manufacturing banana-based leather reduces both carbon and water emissions by over 95 per cent each, compared with animal leather. The process also generates zero toxic waste. Crucially, it eliminates toxic leather tannery byproducts like chromium and heavy metals which are discharged into waterbodies. We work directly with 100 smallholder farmers, and have created additional income streams for locals who cut and transport the waste.

## Are fashion brands becoming more conscious of environment-friendly products and practices?

Sustainability teams at major fashion companies conduct impact assessments and know the key emission hotspots; leather being one of them. When they encounter an alternative solution that is high-quality, high-performing, scalable and competitively priced, they are excited about it. Larger industry shifts are inevitable. Materials are increasingly subject to certifications and regulations, especially in the EU, and brands are now investing in large sustainability teams to drive this shift. Banana waste alone, with almost unlimited local supply, offers far more opportunities than we are currently exploring. **DTE**



# KALKI KOECHLIN

**ACTOR | WRITER**

# “SUSTAINABLE LIVING SHOULD NOT FEEL PUNISHING”

**Kalki Koechlin** has long stood out for her unconventional choices, whether in films, plays, podcasts or web series. Beyond her craft, her deep connection with nature shapes her advocacy for mindful consumption and systemic change. In an interview with **Preetha Banerjee**, Koechlin reflects on the roots of her ecological awareness, the tensions between individual and corporate responsibility, and how storytelling can shift cultural imagination:

**You have often talked about living mindfully and staying connected to nature. What sparked this consciousness and how has it evolved?**

I was privileged to grow up surrounded by wildlife and nature. I lived in the Nilgiris, near the Mudumalai Sanctuary, where it was normal to see elephants, bears, deer and bison. Our trips were always nature-based—we would set up tents, go trekking, paddle down rivers and learn how to kayak. From a young age, I was taught the importance of leaving no trace; not leaving any plastic behind. I also spent time in Auroville, which has a strong sustainable ethos. The idea is to give back to the community through whatever business you run. People were co-dependent on each other for various needs, with plenty of exchanges and a strong focus on growing organic food. Later I have supported Ecofemme, an environmentally conscious organisation that makes reusable sanitary napkins, among other products.

I am not against technology, but I

believe humans have forgotten that they are part of nature as they embrace technological advancement. People are being displaced due to floods, droughts and other extreme weather events, or because of pollution in cities like Delhi or Mumbai. These are all very real outcomes of ignoring nature.

**How can one incorporate the ethos of sustainable living into daily life?**

There are two aspects to this. One is the overemphasis on individual responsibility, when, in reality, the onus lies with big corporations. So much is blamed on individuals—for example, for not composting or recycling plastic. Even if we are separating our plastic, most of it ends up in dumps. The real issue is the production of these items. To address this, individual choices matter—things like where we buy our clothes, food or other products from. At the individual level, sustainable practices are also crucial. Where I live in Goa, I have campaigned for a local community initiative called

“Makanaka plastics”. The group circulates cloth bags among shopkeepers and vegetable vendors, made by local women from discarded fabric. Practices like sustainable tourism can also make a difference. Choose homestays within the community instead of five-star hotels. And it does not have to be backpacking—it can be luxurious and still sustainable. As a celebrity, I feel it is important to influence the brands I work with and encourage them to shift some of their ethos towards sustainability.

A cultural shift is also needed so that sustainable living does not feel like a punishment, but rather something that brings joy. For me and my daughter, Sappho, going to a waterfall on the weekends is far more fun, exciting and stimulating than visiting a mall.

growing naturally, as her weekends are spent on the beach, at waterfalls, trekking or climbing trees. She is witnessing the growth of plants around us—like *tulsi* (basil), curry leaves and mint. She knows which plants are edible and which are not, and she knows which caterpillars she should avoid touching.

**Can storytelling as a medium bring about social and environmental changes? Do you see that Indian film industry is becoming more sensitive to environmental issues?**

Absolutely, storytelling is key. Take the Leonardo DiCaprio film *Don't Look Up*, for example. It is a humorous yet starkly accurate portrayal of the climate crisis. It connects with a much larger audience, making a serious issue

## THERE IS OVEREMPHASIS ON INDIVIDUAL RESPONSIBILITY, WHEN, IN REALITY, THE ONUS LIES WITH BIG CORPORATIONS

**How has becoming a parent changed the way you look at environmental issues?**

I feel a deep responsibility for Sappho to grow up in a world where she can still dive into the ocean and witness the sea life, which is rapidly disappearing; coral reefs are dying. One of the biggest decisions I made was moving to Goa after she was born. We had been stuck in Mumbai during the lockdown, and it was intense being confined to an apartment for the entire pandemic period. We realised we wanted to live somewhere with a garden and open space. Of course, that was not affordable in Mumbai, so we moved to Goa. It has been challenging for me, as I work in Mumbai and travel back to Goa. But it is worth it. Sappho is able to see and experience the natural world in ways that are essential for her development. Her environmental consciousness is

more accessible. I remember telling Sappho a bedtime story about this young woman in South America who climbed a tree and decided to live there to prevent a big company from razing the forest to the ground. She made a home in the tree, with a cooking stove and blankets, and stayed there for years until she won the lawsuit that saved the forest. Sappho was so moved by the story.

As for the Indian film industry, I would say we are still a long way off, especially when it comes to creating impactful films about the environment. The industry also needs to be more mindful of the environmental impact of its own practices. It frustrates me how we go into forests for shoots and leave trash behind. On a positive note, fashion and magazine shoots are being more conscious, where it is common to find glass bottles and recyclable materials. Still, a lot of work needs to be done. **DTI**

# ‘COST OF EVERY BREATH’

**Pollution has turned ordinary living into an expensive exercise in survival**

**TRISHNA SARKAR**  
ECONOMIST, FACULTY  
AT DR BHIM RAO  
AMBEDKAR COLLEGE,  
UNIVERSITY OF DELHI

One day this winter, as I climbed a familiar footbridge on my way to a metro station in Delhi, I felt a sudden tightness in my chest. The air seemed heavier than usual, compressing my lungs. Halfway up the stairs I had to stop, not from exertion, but because breathing had become difficult. I stood gripping the railing, watching commuters moving through a grey fog we have come to accept as normal. When I resumed walking, one thought kept returning: I should have taken a cab instead. That thought has become persistent. Since pollution levels spiked this winter, I have been spending ₹15,000 to ₹20,000 a month on taxi rides—not for comfort, but to avoid air that now feels hostile. The irony is in trying to protect my health, I am contributing to the very pollution choking the city.

As an economist, this contradiction unsettles me. In a consumer-driven society, we have been conditioned to accept that there is no such thing as a free lunch. But what of nature’s free gifts—sunlight, water and air? Today, we pay for clean air through purifiers, masks, nebulisers and oxygen kits; and for clean water through filtration systems. Once these fundamental resources acquire price tags, how should we reckon the value of a river, a mountain, a forest, or even clouds and wind? The problem lies in our reluctance to assign blame. We recognise the crisis, yet hesitate to acknowledge our role in it. Conversations with colleagues reveal how widespread the burden is. Almost everyone has a personal account of pollution steadily eroding their comfort, well-being and also finances. One colleague, with asthmatic family members, has installed 10 air purifiers across his home, including the kitchen and car, turning clean air into a major household expense. Others have stopped walking short distances because of exhaust fumes and dust. Spending on supplements, immunity boosters and medical consultations has surged; staying healthy now requires constant intervention.

Even humour barely masks the strain. A colleague joked about her rising hair- and skin-care costs as pollution worsened her allergies and hair loss. Beneath the joke lies a shared reality. Studies say 80 per cent of Delhi’s residents experience recurring symptoms—cough, eye irritation, fatigue and difficulty breathing—during high-pollution months. Prolonged exposure to PM2.5 is linked to thousands of premature deaths each year.

For students from smaller towns, the burden is heavier. They come to Delhi seeking better education and opportunity, only to find that basic necessities—clean air, clean water and safe food—come at a steep price. As an educator, I see this often: respiratory infections, jaundice, allergies, sleep disorders and stress-related illnesses. Families already stretching their means must now pay for medical care, purifiers and safer food, simply so their children can breathe. That moment on the footbridge was not merely personal discomfort. It was a glimpse into the daily reality of millions. What appears as individual inconvenience, is part of a collective struggle in which ordinary living has turned into an expensive exercise in survival. **DTE**





**KIRAN  
RAO**

**FILMMAKER | PRODUCER**

# “PRACTISING SUSTAINABILITY IS NOT ALWAYS CONVENIENT”

Filmmaker and producer **Kiran Rao** has mastered the art of mainstreaming social commentary, as seen in her early films like *Dhobi Ghat* and more recently in *Laapataa Ladies* and *Humans in the Loop*. In 2016, Rao co-founded Paani Foundation, a non-profit focused on helping Maharashtra’s drought-stricken farmers become climate-resilient. In an interview with **Preetha Banerjee**, Rao shares how her journey has deepened her understanding of nature and how it has influenced her creative work:

## What first sparked your awareness of environmental and social issues, and how has that awareness evolved over the years?

My awareness has developed slowly and organically over the years. As a child, I always felt most alive when I was outdoors—around trees, rain, rivers—especially during our family holidays in the Himalayas. I did not have the language to express it then, but as I grew older, I learnt how deeply we are nurtured by and connected to nature. Later, as I began travelling through rural India, especially after we started Paani Foundation, I saw how everything is interconnected. Trees, water and the care we give to our natural resources are directly tied to our survival, family security, and even our happiness.

Through our work on mitigating drought and improving farmer livelihoods, I saw firsthand how climate change is not an abstract idea. It is tangible—visible in the lives of farmers, in parched wells and in the loss of forests. That experience deepened my understanding. I realised that environmental consciousness is not just a personal feeling; it is a social and collective responsibility.

## Practising sustainability is not easy. What challenges do you face while making these choices?

I try to live simply. I am very aware of my water usage and we try to reuse as much as possible at home. Composting, saying no to single-use plastics and eating local, seasonal food—these may seem like small actions but they add up. I also try to choose sustainable fashion and support local designers and artists. During film production and the events we host at Paani Foundation, we try to be mindful—by avoiding waste and being responsible with travel and use of materials. Beyond all that, it is really about sensibility. You start by asking yourself: What kind of world am I reflecting? What values am I reinforcing? These questions result in mindful actions.

The hard part is that it is not always convenient; it is not easy to recycle or always choose cleaner alternatives. Part of it is cost and access, another part is habit. I believe that those of us who have access to better choices should make them. We have grown accustomed to convenience and unlearning that takes effort. But it is not impossible. I still have a long way to go

before I can say I am proud of my carbon footprint, but I try my best every day.

**Has your environmental awareness influenced the kind of projects you choose or the way you approach your work in film, theatre or writing?**

Yes, it has, perhaps not in obvious ways, but in how I see the world. I am drawn to stories that are rooted in people, places, relationships that feel lived-in. I find myself gravitating towards authenticity, towards characters that exist in relation to their environment. In fact, the next film project I am developing is deeply rooted in ecological consciousness and the interconnectedness of all life. Storytelling has immense power. It can normalise care, empathy, balance. That is something I try to hold on to, whether it is a big film or a smaller creative project.

People have shown what collective action and hope can achieve. For me, Paani Foundation is a reminder that environmental transformation is about change in human behaviour; it is about social unity, collaboration and resilience.

**You have often used art as a medium to explore pressing social issues. What kind of stories do you think we need more of today?**

Stories shape how we see the world—what we value, what we stand for, and how we understand our place in the larger ecosystem. I have always believed that environmental consciousness is not separate from human consciousness. The way we treat the earth mirrors the way we treat each other—with care or with indifference. For example, that is what drew me to *Humans in the Loop*, a film

**IT IS NOT EASY TO RECYCLE OR ALWAYS CHOOSE CLEANER ALTERNATIVES. PART OF IT IS COST AND ACCESS, ANOTHER PART IS HABIT**

**You have co-founded Paani Foundation. What has the journey been like and what does it mean to you?**

It has been one of the most profound and joyful journeys of my life. When we started Paani Foundation, we were clear that this was not about charity but about enabling people to take charge of their own future. The initial idea was simple: motivate and mobilise communities, teach the science of watershed management and unite people around a shared goal. We aimed to make the process joyful by hosting a competition called the Water Cup, that takes the drudgery and crisis away from drought. We did not anticipate how transformative the process would be. Village residents who had not spoken to each other in years began working side by side. Women emerged as incredible leaders. The land transformed, but so did the people.

I have learnt more from our own communities than from any classroom.

directed by Aranya Sahay, which I recently came on board as an executive producer for. It is about an adivasi woman working as a data labeller to train an AI (artificial intelligence) model. On the surface, it may seem like a job completely detached from nature. But beneath that, it is a story about disconnection—how technology can erase indigenous knowledge systems and cultural contexts, how progress can marginalise those closest to the land, and how we risk losing our roots, both cultural and ecological, in the name of advancement.

That is the kind of storytelling we need more of today. They do not need to be heavy or didactic “issue films”—they can be human narratives that show how interconnected our worlds really are. We also try to do with the short films we make at Paani Foundation. These are stories that remind us that we are not outside nature; we are part of it. **DTE**

# ‘PARENTHOOD PAUSED’

**It seems unfair to bring an innocent life into a world sliding towards uninhabitable heat, drought and extreme weather**

**SARADA BISWAS**  
CONTENT ENGINEER AND  
LEXICOGRAPHER, NOIDA

**SHUBHAM KUMAR  
SRIVASTAVA**  
FACULTY AT AMITY  
UNIVERSITY, NOIDA

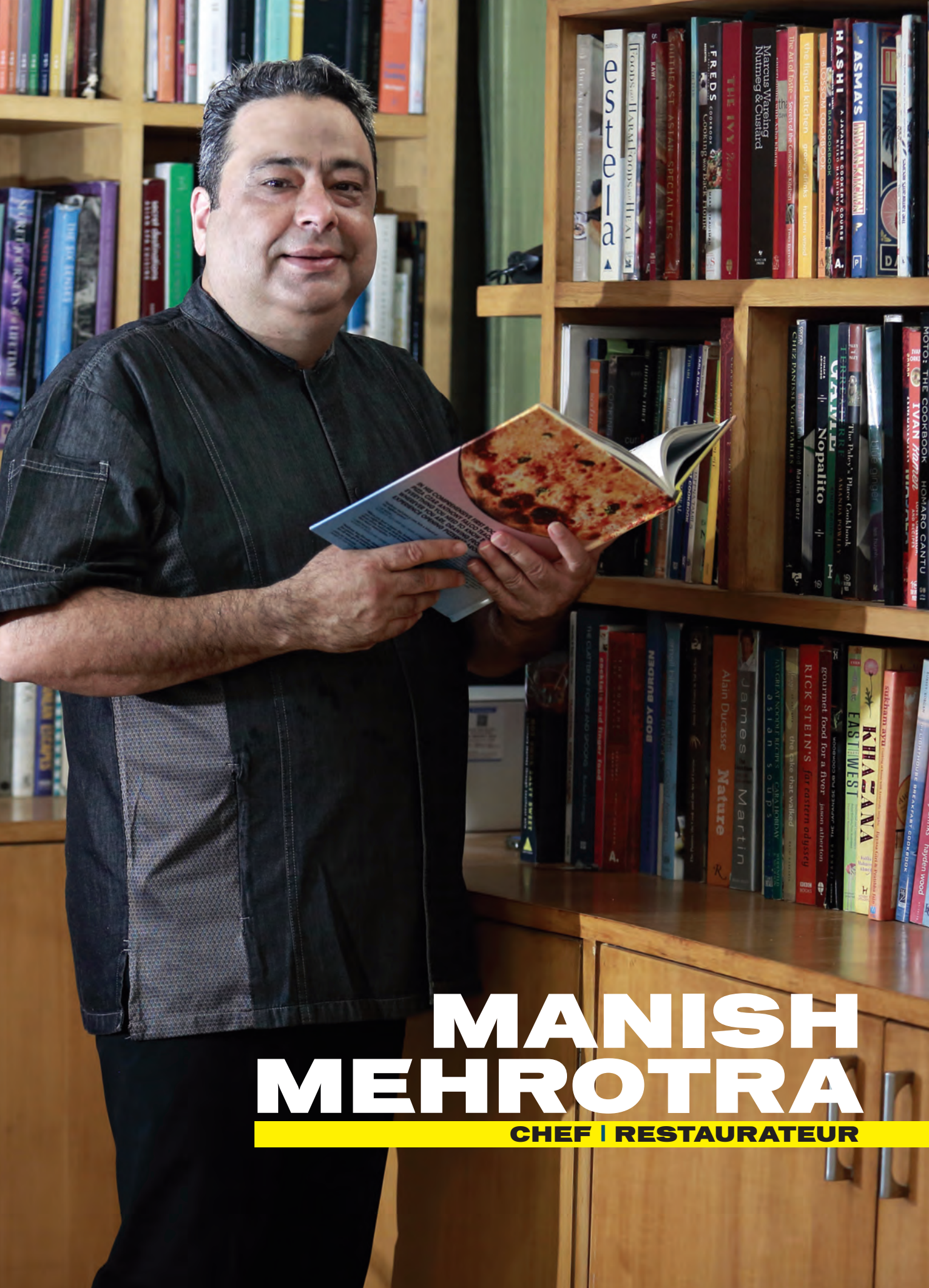
**T**wo years ago, we decided as a couple that we would not have biological children. This sparked profound opposition and questions from not just our families, but also our neighbours, colleagues and friends. This article is, in a way, our attempt to clear the proverbial air. To begin with, this decision is not one taken lightly or impulsively. Nor is it an attempt to walk away from the responsibility of raising a child. In truth, our stance stems from profound eco-anxiety that has gotten worse each progressive year. It is a deliberate response to what we see as a growing ecological crisis.

Every year as winter approaches, the skies turn grey, and we struggle to breathe. Even as we write this article, the air quality index (AQI) at many places in Delhi has crossed 600 and some stations have recorded 999—the highest the air quality monitor can register. Then summer rolls in, and we start to complain about how it is hotter than ever before. The mountains that were once our haven during summer vacations, now face devastating floods every year. Few recognise that these extreme weather patterns are proof of nearly irreversible climate change. Added to this, sights that should be alarming, such as passing by mountains of bio-hazardous garbage, smoldering like a mini-volcano, have become normal, almost mundane. Our decision is buttressed by three viewpoints: first, deeply personal eco-crises do not appear out of thin air, but evolve from years of systematic and calculated ecological abuse. We are as complicit in this as anyone else. By choosing to remain child-free, we are trying to alleviate some of our guilt for being party to blatant ecological abuse through our lifestyle and choices.

Second, it seems unfair to bring an innocent life into a world sliding towards uninhabitable heat, droughts, recurrent flash floods and many such extreme weather events. In this world that is tipped out of balance, our priority is to nurture and protect those that are already living on it and to not subject a child to a future that may be bleak or at best, uncertain.

Third, and most important, we recognise that population growth is directly related to ecological strain. Each additional human life contributes to a substantial carbon footprint, consuming finite resources, generating waste and creating demands that our planet can no longer fulfill. None of this is to claim that our decision will have any real or lasting impact on the environment. The responsibility for sustainable and abiding change cannot just fall on individuals. We still feel that personal choices, regardless of how small and insignificant they may seem, have symbolic meaning. Our decision feels like a small but concrete step towards lessening the environmental impact caused by us. The brunt of our ecological abuse is borne by vulnerable communities, especially children, and voiceless species whose only fault is cohabiting this world with humans. Therefore, instead of building a lineage, we want to redirect our resources and energies towards adopting, fostering and spreading awareness in the hope of healing our broken world. **DTE**





# MANISH MEHROTRA

CHEF | RESTAURATEUR

# “WHAT IS GOOD FOR LAND IS GOOD FOR HEALTH”

**Manish Mehrotra** is globally recognised for his innovative approach to preserving India’s culinary heritage. Adept at creating memorable flavours, Mehrotra often highlights indigenous ingredients as key elements in his dishes. In an interview with **Vibha Varshney**, the celebrity chef decodes what sustainable food means in times of climate change:

## What is your philosophy of food and sustainability, and how has it evolved over the decades you have worked in this industry?

What you eat should be good for the land and soil, good for the environment, and good for your health. This philosophy should guide everyone, whether they are cooking in a hotel kitchen or at home. Your choices—what ingredients you use and how you cook—matter. Using seasonal produce is equally essential.

When we were children, food was strictly seasonal. Cauliflower was not available in May and fresh peas were not sold in June—they arrived only in winter, just like *sarson ka saag* [mustard greens]. Mangoes were a summer fruit, and *singharas* or water chestnuts and sweet potatoes had their time. We cooked accordingly. For example, *kanji* was prepared only in winter, consumed only on sunny days. It has digestive properties and is perfect for the heavier food typical of the season. The shift began in the late 1980s and 1990s. Now, at places like Delhi’s posh Khan Market, you will find mangoes even in December, flown in from somewhere else. That long-distance travel is not good for the environment. I doubt it is the best for your health or flavour either.

Take avocados—30 or 40 years ago, no

one in India knew about them. But now, they are everywhere, especially in metro cities. Whether they are truly good for you is still unclear. Quinoa is another trendy ingredient, but people often forget the environmental cost of growing it. Even if quinoa is now cultivated in India, that does not automatically make it “local”. Forcing a crop to grow in a region, where it does not naturally thrive, can compromise its quality. My belief is simple: use what grows naturally in your region and eat what is in season. In winter, when we get excellent *singharas*, we should cook with them instead of relying on canned ones in summer. Region and season have been two very important concepts in our food culture, but somewhere along the way we lost that connection. Fortunately, there is a return to these ideas.

## Tell us about some of your recent innovations that use regional and seasonal ingredients?

I am currently working on the menu for my new restaurant, and one dish I am particularly excited about is inspired by a seasonal specialty from Kashipur and Ramnagar near Corbett: *singhara kachri*. It’s a type of *chaat* made with boiled, mashed water chestnut with spices and a small dollop of butter. It is simple, but

delicious—very local, very seasonal. On the menu, we may describe it as a *chatpata* water chestnut hummus. Another ingredient I am excited to incorporate is *mishrikand*, known as jicama in English. Chefs often try to make it sound exotic—jicama carpaccio or jicama tartare—without knowing that in Bihar, it is eaten as *prasad* during Saraswati Puja. It grows in Bihar, West Bengal and eastern Uttar Pradesh, and tastes wonderful when eaten raw. I plan to use it as a garnish or to add texture to my dishes.

**Can fine dining balance luxury and sustainability?**

Sustainability is not just about the food we cook; it is about how we use resources. Kitchens consume a lot of water and plastic. Cling film, for example, has become ubiquitous, even in homes. We

**Are concepts like farm-to-fork, or “mock meat” viable ways of sustainable, environment-friendly living?**

I find it hard to believe when a restaurant in Delhi’s Connaught Place claims to be “farm-to-fork”. Are they serving radishes grown along the Yamuna? Are their ingredients really coming from their farm? If a dish has 10 ingredients and only one is farm-sourced, can it truly be called farm-to-fork? Farm-to-fork is when you sit at a farm, see the ingredients, and eat them fresh.

As for mock meat, it makes sense in Europe or the US where vegetarian options are limited. They do not have *dal*, *paneer*, tofu or the rich variety of vegetarian dishes we have in India. If you decide to give up meat, just give it up. It is like quitting smoking; do not stand in front of a smoker and inhale the smoke.

**SUSTAINABILITY IS NOT JUST ABOUT THE FOOD WE COOK; IT IS ABOUT HOW WE USE RESOURCES. KITCHENS CONSUME A LOT OF WATER, PLASTIC**

need to train people to use it sparingly. Water usage is another critical issue. Culinary schools have long taught that meat should be thawed under running water, which wastes enormous amounts of water. Reducing waste is one of the simplest ways to cut costs. Look at how much food is discarded daily, especially in big cities and even more so in places like the US. If bread goes stale, it is thrown away; if a sauce expires, it is tossed. In the past, leftover food was fed to cows, but that practice has faded.

Planning is key. Create dishes in smaller batch sizes. We can learn from small vendors who proudly tell you they are sold out by 6 pm or 7 pm. They never pull out old stock from the fridge. We need to change our mindset—running out of a dish or two should be seen as a sign of freshness, not poor planning. Guests should feel pleased that the food is freshly made.

What you eat matters less than how and when you eat it. Nothing that is god-made is inherently unhealthy. We make it unhealthy through excess. Sweets are fine—in moderation. Ghee is excellent—but not half a kilo a day. *Pakodas* are great—but not every day; they are special when eaten occasionally, like during the rains.

**Which environmental issues trouble you the most? Have they influenced your lifestyle in any way?**

What troubles me the most is the garbage, piling up everywhere. Other countries have made significant improvements, but in India we still generate far too much garbage. Whether it is in restaurants, hotels or in general, the waste we produce is overwhelming. For me, this is the biggest environmental issue. When you see the landfill mountains in Ghazipur and Burari, you realise how serious the situation is. **DTE**

# ‘KNOWING TOO MUCH HURTS’

**Pretending  
everything is fine  
is no longer an  
option**

**SWATI SINGH  
SAMBYAL**

**INTERNATIONAL WASTE  
AND CIRCULAR ECONOMY  
EXPERT, CURRENTLY  
AFFILIATED WITH GRID  
ARENDAL,  
ENVIRONMENTAL  
SCIENCE-POLICY CENTRE,  
NORWAY**

**T**his is my 14<sup>th</sup> winter in Delhi, and what was once a season I embraced has become one I dread. For many, winter mornings mean walks in the park, sunlight, perhaps a cup of tea outdoors. For me, mornings begin with anxiety. I do not reach for the newspaper; I reach for the AQI Air Quality app. That number on the air quality index now dictates the rhythm of my day. Can I step out? No—the air is toxic. Should I do yoga? Not the strenuous kind. Open the windows? Only briefly, and with discomfort.

What we breathe is no longer air; it is a cocktail of pollutants—fine particles, chemicals and invisible threats that settle deep into our lungs and bloodstream. Fifteen years in sustainability and waste management have given me knowledge, context and vocabulary. They have also made me more vulnerable. When you understand how pollution works—how air, land, and water contamination intersect with health, livelihoods and inequality—you feel its weight differently. Cause and effect appear everywhere. You also clearly see political apathy, administrative inertia and collective indifference. Step outside on Delhi’s roads and life seems normal. Hardly anyone wears a mask. Traffic flows, shops open, children go to school. It’s business as usual, for those who do not—or choose not to—see how deeply pollution harms us. Ignorance is a strange privilege.

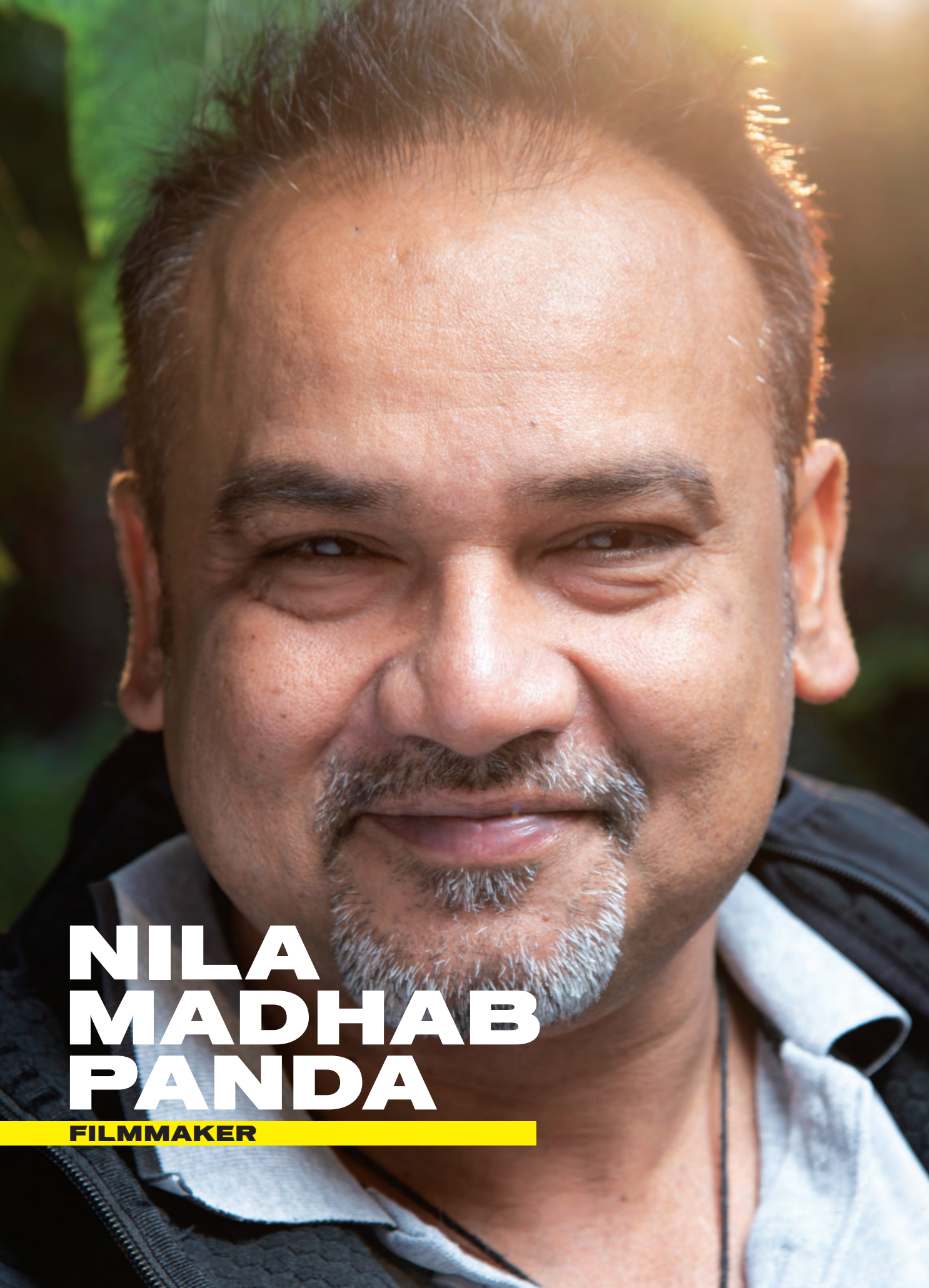
One day pollution comes home, uninvited. A family member falls sick. A cough lingers. Breathing becomes laboured. Suddenly, every life decision is under scrutiny. Why did I stay here?

Delhi grabs headlines every winter, but the truth is far more widespread. Almost every Indian city grapples with air pollution. This is not a seasonal crisis—it is chronic. Sometimes, I wish I did not know so much. The crisis is no longer abstract when you watch your three-year-old take antibiotics and nebulisers because a simple cold worsened in polluted air. When keeping a child indoors for days is dictated not by rain or thunderstorm but by toxicity of air.

Then there is waste, overflowing landfills, burning garbage, plastic choking drains, casual littering and dumping near eco-sensitive zones. Rivers, lakes and oceans—filthy, foaming, eutrophic—bear the cost of our consumption. Fragile ecosystems buckle under over-tourism. Every journey leaves me asking, “How do I unsee this?” I cannot. A recent visit to the hills of Uttarakhand, meant to heal, left me unsettled. Choked roads, mountains strewn with garbage, Landour Cantonment struggling under unchecked footfall. I wrote a blog about my concerns; silence felt like complicity. Some authorities responded, but responsible tourism cannot be an afterthought—it is urgent.

Eco-anxiety is not weakness. It is a rational response to an irrational world: awareness meeting inaction, care colliding with slow or absent systems. I live with the contradiction of working in this space while feeling overwhelmed, loving cities that are deteriorating, raising a child while questioning the future we hand over. Yet I believe personal stories can cut through data; discomfort, when shared, can become collective resolve. Pretending everything is fine is no longer an option. [DTE](https://www.downtoearth.org.in)





**NILA  
MADHAB  
PANDA**

**FILMMAKER**

# ‘I FEEL RESPONSIBLE FOR BEING PART OF THE GENERATION THAT DESTROYED ECOSYSTEMS’

Few storytellers bring dramatic despair of ecological loss to the big screen like **Nila Madhab Panda**. The national-award winning filmmaker often makes nature his central character, be it in his 2017 film *Kadvi Hawa* or in the 2023 web series *The Jengaburu Curse*. Raised in rural Odisha, Panda’s storytelling is grounded in lived experiences with climate change, water scarcity, child rights and environmental justice. In an interview with **Preetha Banerjee**, Panda explains why the environment remains his constant source of inspiration:

**Your films reflect a conscious choice, centering around environmental and social issues. What draws you to these subjects?**

My world of cinema has been shaped by my own personal growth. I spent the first 10-11 years of my life in a village where life was basic. There were no motorable roads, airports or railways. I was almost 12 when I first smelled diesel or petrol. The ecology was untouched. Over the course of 20 or 30 years, I watched the world transform into the fast-paced, car-packed cities we live in today.

In 2005, I came across a photograph of Satabhaya’s lone hand pump in *Hindustan Times*. Satabhaya gram panchayat used to be a cluster of seven villages in Bhitarkanika National Park, Odisha. Almost all of these villages, save for a small portion of one where the hand pump stood, had been swallowed by the sea. That image gave me a deep sense of anxiety and pushed me to reflect on the rapidly

changing environment. I felt the need to tell stories about the basic elements of life. That is how water, air and fire become more than just subjects for me—they became emotions. The rapid coastal erosion in Satabhaya was so disturbing that I kept following the villages, three of which were still there in 2005. We interviewed local people, government officials and scientific experts to understand the cause behind this crisis. Thus was born my documentary *Climate’s First Orphan*.

I make films because I feel emotionally hurt. And because I feel responsible for being part of the generation that destroyed these ecosystems—we did it.

**Have any of your film sequences been inspired by a real-life experience or event that left an impression on you?**

Most of the scenes in my films are drawn from my own experiences in some way. However, there is one specific scene from my film *Kadvi Hawa* that I would like to

mention: It is a classroom sequence where the teacher asks the students to count the number of seasons. The students start contradicting each other—one season, two seasons, three seasons. Seeing them confused, the teacher scolds them and says the book clearly says there are four seasons. But some students insisted that there are only two—summer and monsoon. In the next scene, a girl from the class comes home and narrates this story to her grandfather, the protagonist, who is forced to agree that they only experience two seasons now. This scene was inspired by a conversation I had with my son when he was eight or nine years old.

He was a sprinter at the time and we used to live in Delhi. The doctor once told us he could no longer run because it would damage his lungs due to the city's polluted air. My son was heartbroken and asked me

**Which aspect of environmental degradation troubles you the most?**

It is the sheer wastage I see around me. We live in a consumerist world where everything is designed to be disposable, constantly replaced and upgraded. Take Apple phones, for example. Every year or every second year, a new version comes out. The same phone, with just a few tweaks, and the same users queuing up to buy it. Can you imagine the endless cycle? We are running away from the real uses of technology and turning it into a fashion statement. What bothers me more is the waste accumulating due to this—be it the packaging or multiple tags on clothes by big brands. When I look back to my village, I see how different it was. The first pair of shoes I got was when I was 17 years old. And they lasted me some good five years. We lived without wastage. There

**FILMS ON ENVIRONMENT MAKE CONVERSATIONS ON CLIMATE ACTION MORE ACCESSIBLE, KEEP THE CONSCIOUSNESS ALIVE**

if I faced such restrictions as a child. I realised that the winds that once brought perfect life-giving seasons are now a curse. And that it has been created by us.

**How have the films changed you on a personal level?**

My films are about the emotions around ecological loss. Instead of presenting crude data on carbon footprints or waste accumulation, I prefer to engage with local communities and bring out their stories. But there are contradictions I grapple with. We craft beautiful films that make people laugh, cry and reflect, but the carbon footprint of filmmaking is massive. To be honest, it is confusing. The subjects of my films are also disturbing. At times, I feel like I am selling reading glasses to the blind. No matter how much effort I put into creating awareness, there is a sense that it would not be enough if we do not change our practices across the board.

was zero wastage of food. I was the youngest child in the family and for years, wore only hand-me-downs. All of this is unrelatable now. And I can see that our need-based life was much more joyful than today's consumer-driven world.

**Do you think films on environment and climate issues have helped bring change?**

Raising awareness is a gradual process. At least now, I see people engaging with these topics. They understand the stories I tell and the ideas I present. This is how we begin the conversation. I was not a good student, so my elder cousin would come home and place a book on my bedside before leaving. He would say, "One day, it will happen." After six months I started reading the book. So my approach is simple: keep talking; someday awareness will come, consciousness will form, and things will change. **DTI**

# ‘THE LONG WAY TO THE PLATE’

**A close look at farms, food systems and food habits reveals how far we have strayed from the land that feeds us**

**NIDHI CHANANA**  
PLANT SCIENTIST AND  
URBAN FARMING  
ENTREPRENEUR,  
DELHI-NCR



**P**reparing food, for me, is an elaborate, almost meditative, exercise. This is not because my family demands variety, as is common in many Indian households shaped by the country’s culinary diversity. Rather, it stems from my stubborn insistence on method and using only whole grains and pulses. Hard grains such as rice and millets are soaked overnight; pulses for at least four hours. Cooking is done in earthen pots over a low flame, regardless of how long it takes. Those around me are often frustrated by this behaviour. Yet I cannot bring myself to yield to the fast-food culture. Or perhaps, I am simply afraid of losing what little nutrition remains in modern foodgrains.

My education and laboratory experience have made me acutely aware of grains’ defence chemistry. Antinutrients such as phytic acid and lectins protect seeds during dormancy but interfere with nutrient absorption in humans. Hence my insistence on soaking, which mimicks germination, reducing antinutrients and making nutrients more bioavailable; it also makes food easier to digest, reducing bloating.

Over the years, family and friends have come to tolerate—and even appreciate—my eccentricity. Some have begun to emulate it. My anxiety, however, has not eased. At local markets, I recoil from vegetables that gleam too brightly and fruits that appear too perfect. I know what lies beneath: pesticide residues, wax coatings and chemical fertilisers. Part of this unease can be traced to my time in the laboratory. I worked to improve crops but almost always with an eye to higher yields and cosmetic quality. Clean, chemical-free food rarely featured as a criterion for a project’s success. The more I learned, the more uneasy I became. I found myself scanning supermarket aisles and online portals, scrutinising labels on food, personal-care products and even cleaning agents. The catalogue of harmful chemicals seemed endless. Everyday items, such as shampoos, floor cleaners and packaged snacks, began to feel like latent threats. The vigilance was exhausting.

Eventually, this anxiety nudged me to set up an organic food initiative, Biokriti. But instead of easing my worries, it sharpened them. Confronting ground realities, meeting farmers, analysing soil and understanding food systems revealed how disconnected we have become from the land that feeds us. This realisation forced a recalibration my own life. I refuse to use thermocol, aluminium foil or single-use disposables. I carry my own water bottle and cloth bags. My household uses fewer harsh chemical cleaners and artificial fragrances. My food habits too transformed from convenience to consciousness. We eat less now, but better, slower, simpler and more consciously. We now eat local, seasonal and naturally grown food. I returned to traditional grains, unrefined oils and slow cooking. The difference was evident not only in taste, but in how my body and mind responded. Our food habit is now an expression of gratitude towards the soil and people who tend it. **DTE**

A portrait of cricketer Sajana Sajeevan. She is wearing the Indian national team jersey, which is blue with orange accents on the sleeves and sides. The jersey features the Adidas logo and the ICC Women's T20 World Cup Bangladesh 2024 logo. She is smiling and has her right fist raised in a celebratory gesture. The background is a plain, light grey.

# SAJANA SAJEEVAN

**CRICKETER**

# “RESPECT NATURE AS YOU DO SPORT”

In April 2024, **Sajana Sajeevan** got her maiden call up to the national women’s cricket team on the back of a 12-year domestic career that began in the paddy fields of Wayanad, Kerala. Growing up in the district’s Mananthavady town, Sajeevan spent most of her time outdoors. This bond has helped her build awareness about environmental shifts, especially since 2018, when floods swept away her house, belongings and cricket kit. In an interview with **Dakshiani Palicha**, Sajeevan explains her bond with nature and unseen climate change impacts on sport:

**Growing up in Wayanad, you have lived close to nature. Has that in any way helped shape you into a sportsperson, or gave you an edge over other sportspersons, apart from the training you have received?**

Wayanad is a hill station and is naturally very beautiful. It may be one of the best tourist places in Kerala. Growing up here means being surrounded by greenery, clean air and open space. It naturally makes me want to stay active and connected to the environment. I have spent much of my childhood outdoors, running, playing or climbing trees. It has helped me improve my fitness. I also started to play cricket on my grandmother’s farm. This closeness to nature also teaches you discipline, balance and makes you gain respect for your surroundings. These are values that I have carried into my games as a cricketer.

**Wayanad is often impacted by climate vagaries, especially in recent**

**years. You have spoken about how the 2018 floods in district washed away your home and belongings. Could you elaborate on the devastation you witnessed?**

The 2018 floods were one of the toughest times I faced as a cricketer and as a person. Our home was partially gone and we lost almost everything. At that time, I was not a professional cricketer, but still mulling over how to take my passion further. The loss of my belongings and my equipment was heartbreaking. But it also made me stronger.

Right before the floods, I had acted in a Tamil film *Kanaa* (2018) with producer and actor Sivakarathikeyan. In the aftermath of the floods, as I was cleaning my house and surroundings, he called me a few times. He asked about my well-being and whether I needed anything. I was too apprehensive to ask for new cricket equipment, so I only asked for the shoes, which we call spikes. Within a week, the spikes arrived.

This is just one of many incidents during the floods where I saw people and communities come together to support and motivate each other. In fact, I can say the whole district united, especially in the aftermath, where people were left to clean their houses of waste and mud. That spirit has stayed with me. It reminds me that no matter what happens, you can start again and rebuild whatever is lost.

**You speak of the power of community action in the aftermath of disasters. Do you believe there is enough action to warn people and help them prepare prior to climate vagaries? Who is to blame for the increasing intensity and impact of disasters?**

Largely, I think disasters are natural phenomena. But it is also true that in many cases, we do not consider maintain-

**to see or be aware of?**

Cricketers spend most of our days playing under the sun; typically from 9 am to 5 pm. During series like the Women's Premier League, the day extends, and we play under stadium lights. So for us, heat has become a real challenge. We are now playing matches in more extreme temperatures. Multi-day matches are even more taxing—after each day, we struggle to think how we could keep going. Heat affects our endurance and dehydration. Our pitches and grounds are also getting dry, which leads to more injuries, for instance, when we run and dive while fielding. Hydration is challenging, even drinking lots of water does not seem to help.

**Do you feel that these experiences have changed you personally or**

## **WE ARE NOW PLAYING MATCHES IN EXTREME HEAT. MULTI-DAY MATCHES ARE MORE TAXING—WE STRUGGLE TO THINK HOW TO KEEP GOING**

ing the balance of nature. We continue to build, without balance. In recent years, we have seen big changes in rain patterns, which have become unpredictable. Even 10 years ago and prior, we could predict a rainy season of six months, after which the summer would arrive. Now we cannot predict climate at all. We see either heavy rain in short bursts, or just long dry spells. Summers have become hotter too. Day by day, it is becoming more unpredictable and more dangerous.

But I do not think that the blame should be placed on one person or group. It is about how all of us have used nature without balance. The focus now should be on awareness and collective responsibility.

**Cricket is not a sport that one would directly link to the environment or to climate issues. Do you believe these changes have an impact on the sport that one may not be able**

**influenced your lifestyle? Do you feel compelled to use your platform to share your experiences and spread awareness?**

The 2018 floods completely changed my environmental perspective. I have learned to be more mindful, to value what we have and not take nature for granted. I try to reduce waste, avoid plastic, and make small changes in my daily life like conserving water or being careful with energy use. And I feel strongly about creating awareness among young people. To bring about change, it is the youth who must take action. This is especially true in rural areas; whether it is planting trees, managing waste, or simply learning to truly balance with our surroundings, small steps matter.

My message would be simple: respect nature the way you respect your sport, because both demand care, consistency and discipline. [DTE](#)

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# ‘IT’S AN ENDLESS BATTLE’

**A decade spent  
tackling waste  
still feels  
vanishingly small**

**VISHAL KUMAR**  
WASTE MANAGEMENT  
SOCIAL ENTREPRENEUR  
BASED IN DEHRADUN

**N**ot too long ago, a member of my team at Waste Warriors Society came to me red-faced, sweating and said that his chest was hurting and he could not breathe. He had been reading up on carbon emissions and their impacts, and the negligible role that solid waste management would play in alleviating the entire existential crisis. This led to him questioning the meaning and impact of our work in waste management and the spiral of thoughts caused a panic attack.

I am not unfamiliar to the restlessness and fear brought on when one realises the state of the world’s environment. This was anxiety that I first felt in 2012. On a 40-hour train journey from Chennai to Varanasi, as I looked out of the door and window to the ever-changing landscape of the country, my eyes fixed on the never-ending stream of waste strewn across the rail tracks. In Varanasi, walking around my beautiful college campus, I saw garbage everywhere. Even a hike into the forests or a tourist site was the same. Curiosity piqued, and I started visiting informal landfill sites in different cities to understand where all the waste ended up, and was dumbfounded to find out that it just stayed there. I started reading more and watching videos on the topic. A 20-minute animated documentary, *The Story of Stuff* by Annie Leonard, an environmental activist in the US, left an impact on me.

After my studies, I took up waste management as my career. I set up formal and informal recycling units (for both plastics and electronic waste) in and around Bengaluru, my then home; mechanisms for community awareness and behavioural change mechanism; practices of government departments and corporate leaders, as well as greenwashing. Over the last decade, I have consistently worked to alleviate the waste crisis.

Yet it feels insignificant and irrelevant in comparison to the scale of the problem. Just last year, while walking towards a project site where we had been present for years, I saw littered waste all along the roadside. It felt like I was in a never-ending uphill battle, and losing. I have had this feeling many times prior and since then. Yet, I cannot simply walk away. The inspiration I get from people who have dedicated decades to environmental causes, such as activist Almitra Patel and conservationist Wilma Rodrigues, as well as passionate colleagues, gives me strength and hope. My work gives me ample opportunities to spend time in nature, explore rural Himalayan villages, hike up mountains, hear the birds or simply be among the trees and feel the connection.

I realise that this journey is not just about bringing external change, but also of self-discovery. When I feel peaceful and content, I consume less unhealthy packaged food and therefore generate less waste. When anxious or stressed, my willpower vanishes. I started noticing this pattern in others as well. Gradually, it has dawned on me that what is good for me is good for the environment. So I do not just need to look to solve the external climate crisis or environmental challenges, but also live a good life in sync with nature. **DTE**



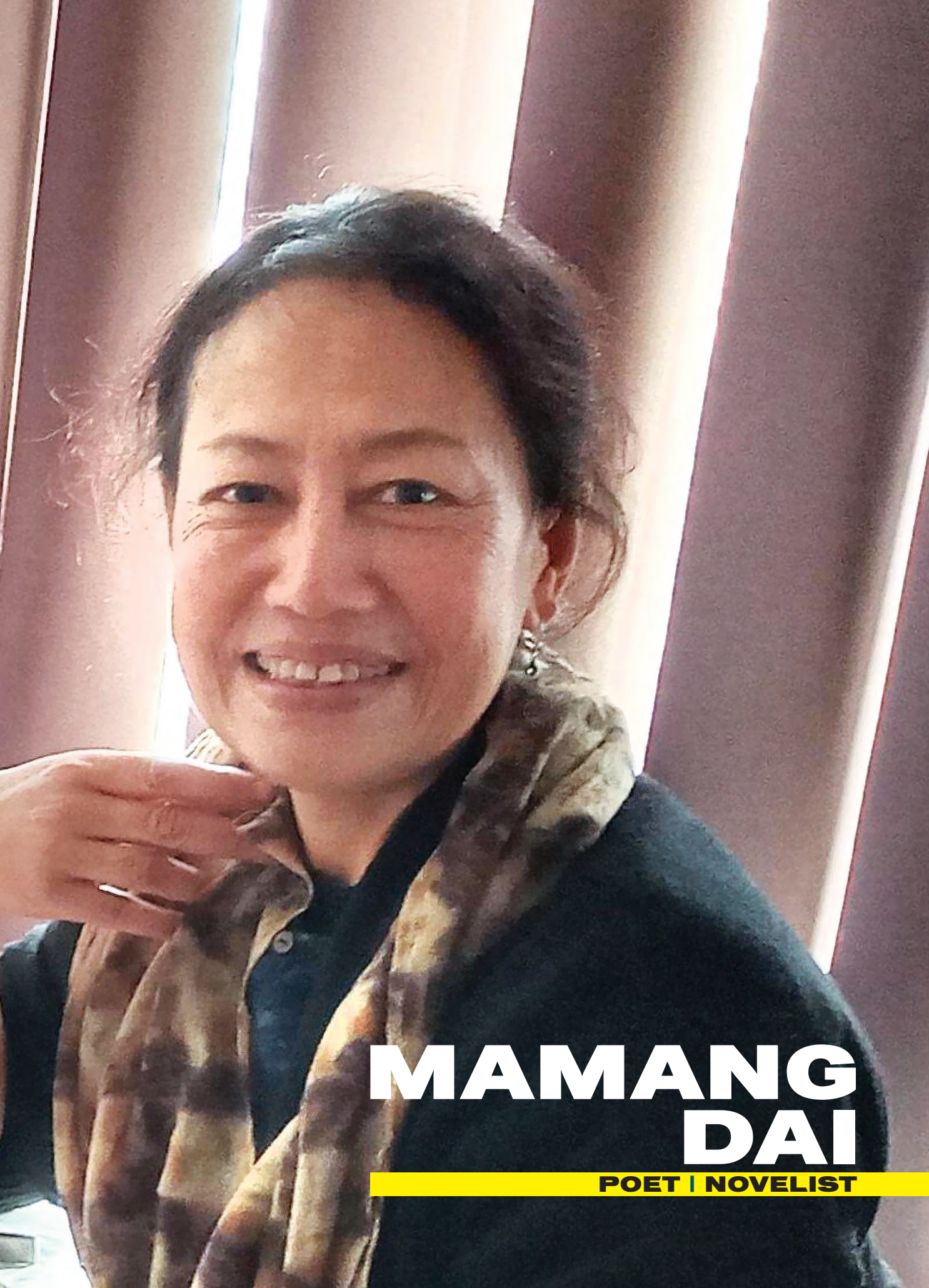


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**MAMANG  
DAI**

**POET | NOVELIST**

# “NATURE IS THE GREATEST CONSOLER”

Often described as the poet-warrior of Arunachal Pradesh, **Mamang Dai**'s life and work are marked by quiet courage. Born in Pasighat, she began her career as the state's first woman officer in the Indian Administrative Service before leaving the bureaucracy to pursue journalism and literature. Honoured with Padma Shri and Sahitya Akademi Award, Dai's writing glorifies nature in its primordial form, breathing life into the region's landscapes and traditions. In an interview with **Preetha Banerjee**, Dai reflects on how nature shapes her work and why mindfulness matters in the face of the climate crisis:

**Nature and human emotions are intimately intertwined in your work. How do you feel they are connected?**

Most of my writing is about Adi society and a landscape and traditions I am familiar with. For example, when a person dies there is a period of taboo when family members cannot leave the house. This is followed by a ritual called *kutung kuyar* when everyone goes to the river. A fire is lit and everyone can bathe, wash clothes and do other things. It is an act of closure, for one part of the mourning period. At such times, it is visible how nature and human emotions are connected. Being out in the open is a gift to open your eyes again to the beauty of the world. In the end “nature” is the great consoler. It goads you into reflection. Just looking at a river running on is like receiving a secret message about so many things that we face at some point in our lives.

About nature and human emotions in my work—it is a bit more difficult to describe, because here it is to do with my

thoughts, recollections and imagination, and really, there is no knowing what connections and intimacies may come up.

**Your native language, Adi, is primarily an oral language. How is nature or traditional knowledge of nature documented or spoken about in the language and what is the importance of nature in your community?**

Among the Adi we have epic narratives called *A:bang*. Originally chanted in ritual language (old Adi), the *A:bang*, in its simplest meaning, is a story, or an act of storytelling for an audience performed by a *Miri*—a shaman, well versed in the history of the tribe. It is a documentation in verse of the beginnings of the universe, the birth of plants and animals, and the early life of man. All the stories have something to tell us about the natural world, and support a close, living relationship with the environment. Of course, there are many different interpretations of the language of the *A:bang*. People who

live in remote villages and whose survival depends on co-existence with their surroundings have quite a pragmatic approach to nature. It is a constant tussle when you are living off the forest. In Adi, we do not have an equivalent word for “nature”. It is more like earth-water, sun-moon, animals-birds; and environment means the place where we are, as part of the surroundings.

**How have the natural surroundings of your hometown changed over the years? Has that impacted you and your community?**

My hometown Pasighat has changed a lot since the time we knew it as the boring place we were condemned to spend our school holidays. There was a stream close to my grandparents’ house and this was the one spot of joy where we went to play and catch small fish and crab. Now that

cultural and intellectual hub of the state.

**If you had to choose one of your novels or poetry collections that was most directly born from your fear of environmental degradation or eco-anxiety, which one would you select and why?**

It would be *Escaping the Land*, published by Speaking Tiger, 2024. I started it quite a few years ago when I was a journalist covering insurgency related stories. I felt then that the amount of money from the timber business that erupted across the state was destroying great swathes of forest as well as fuelling the alleged “spill-over militancy” into our state.

**In a warming world, where there is so much pressure on the individual to live sustainably, how do you stay mindful?**

**IN ADI WE DO NOT HAVE AN EQUIVALENT WORD FOR ‘NATURE’; IT’S LIKE EARTH-WATER, SUN-MOON, ANIMALS-BIRDS; ENVIRONMENT MEANS WHERE WE ARE**

stream has disappeared. Most of the big streams have also dwindled in size. Old timers use the word *dujit*, to describe this. It is a way of saying that we have “squatted the river dry” with overwhelming encroachment.

Pasighat town (now a Smart City), I sometimes feel, is all about the story of water—beginning with the stories of migration and river crossings in rafts, the settlement of Adi clans on the banks of the Siang river, the entry of the British and ensuing wars along the Siang, stories of earthquakes and floods, and now the mega dam plans in the Siang valley.

At the same time, major infrastructure development with new bridges over a number of big rivers and, of course, the Bogibheel bridge and Bhupen Hazarika Setu over the Brahmaputra river has made Pasighat an accessible destination for adventure tourism and an important

I wake up in the morning and think about the garden. Perhaps a new flower has bloomed overnight!

I think staying mindful is about paying attention—to all sorts of little things. I think of not wasting food, of buying local, seasonal fruit and vegetables, and not overspending on processed foods and trying to stockpile items. It is also to be able to restrain yourself from intervening too much in anything. I used to think my mother was doing it all wrong by not using potting compost, by planting a whole bunch of lilies with all sorts of other plants. Now I see that plants have their affinities. They may or may not like shared place, and if I keep moving them for more sun, or give them more feed that I think will be good for them, they wilt and die. That is too much intervention.

Better to be patient, let things be. **DTE**

# ‘LIVING SLOWLY, RELUCTANTLY’

The pleasures and burdens of attempting a sustainable life in a fast-moving world

**RAVLEEN KAUR**  
JOURNALIST  
BASED IN KOKRAJHAR



This summer, when I visited my aunt with my family, she showed us with love and clothes—a typical gift in Indian households. My children were delighted by the shiny, colourful fabrics. My heart, however, sank. Reality had just upended a plan I had long nurtured: that our family would buy no new non-cotton fabric. A work visit to textile mills had prompted the resolve. Yet the thought of acquiring another pile of “petroleum-based synthetics” dulled the pleasure of receiving gifts. Eco-consciousness can be a burdensome companion—one from which there is no easy escape.

I cringe at broken plastic toys, chemical glue, triple-layered packaging from online orders and even the crackle of unboxing videos that my children enjoy. The thought of managing the resulting waste unnerves me. Simply throwing things in the bin was banished from our home a decade ago, when we realised that sustainability demanded more than material minimalism. We needed to align our lives with nature if we hoped to soak in its magic. Shedding the fear (of living without a salary or comforts) took time. After the first wave of COVID-19 pandemic, we sold most of our belongings and moved to a village in Gujarat. My partner took a sabbatical from his corporate job; I picked up additional freelance work to cover expenses. The plan was enviable: slowly build an organic farm and live off it. The idealism paid off, to an extent. Freedom from office life, of not reporting to a job, was unparalleled and came with the luxury of time. We learnt to cook on a wood-fired *chulha*, grew herbs, ate fresh meals only when hungry, compost, preserved fruits from the trees, wove door mats from grass, took long walks to the weekly *haat* for vegetables. We managed without a refrigerator and eliminated chemical-laced toiletries and cleaners from the house. Our fondness for snacks meant frequent baking and carrying our own *dabba* to the market. The greatest relief was not worrying about keeping the children in “presentable” clothes.

But mindful living is “slow”. Daily chores consume hours. Washing utensils with ash without running water takes time. Conscious buying takes time. Saving jackfruit and mangoes from going to waste takes time. Learning these skills from neighbours takes time. Our urban minds, trained to assign a monetary value to every hour, began to see it as an extended vacation—one that had to end. “Use your education, earn money, advance your career,” the world seemed to insist. We listened and returned to corporate life, where time evaporates. And we were struck, more sharply than before, by how little room modern urban life allows for frugality. We now earn to pay others to perform household tasks, justifying it as job creation. We burn fuel for even short trips—no time or road space to walk—order most things online; indulge children’s demands for toys with scant attention to material; and succumb to stress-driven meals out. In short, we live the consumerist life we once fled.

Some frugal habits persist. I still preserve food and wash plastic packets for reuse. And I am learning, reluctantly, to let go. **DTE**



# CHETAN SINGH SOLANKI

**SCIENTIST | SOCIAL ENTREPRENEUR**

I AM  
ENERGY

# “ON A FINITE PLANET, CONSUMPTION MUST BE FINITE”

For the past five years, **Chetan Singh Solanki** has been on a singular journey. A former professor at the Indian Institute of Technology Bombay, Solanki lives in a bus fitted with solar panels, travelling the country by it. In an interview with **Dakshiani Palicha**, Solanki reflects on the purpose of the journey that he refers to as the Energy Swaraj Yatra

## Tell us about your *yatra* and what sparked the idea.

As a professor of solar energy, I came to grasp the global game of energy—and how badly it needed correction. I began by asking myself how Mahatma Gandhi might have confronted climate change. The answer seemed obvious: he would have gone directly to the people. That realisation led me to commit at least a decade of my life to public engagement. Climate change cannot be tackled in fragments or paused for festivals and weekends, so I pledged not to return home for 11 years. That decision, five years ago, marked the start of my *yatra* to make people aware of the climate crisis and the urgency of shifting to renewable energy.

Since then, I have been living in a bus. Though its engine runs on diesel, solar panels on the roof generate enough electricity to run a fan, a cooler and lights, and to charge a laptop and mobile phone. People visit the bus to see how I live. But I do not recommend this as a model. I chose it out of necessity, having left my home but still needing to eat and sleep properly. Building the bus and travelling in it consumes considerable energy.

## You emphasise on reducing energy consumption. What is the rationale?

Almost 80-85 per cent of the world's energy supply comes from coal, crude oil, gas,

which I call “dark energy”. Every user of energy is a carbon emitter, so every person is responsible for climate change. The answer, therefore, does not lie solely in more technology or expanding solar power. It begins with a simple recognition: on a finite planet, consumption must be finite. That is why the movement that began as the Energy Swaraj Yatra is now the Finite Earth Movement. When consumption falls, so do carbon emissions.

## How do you spread the message?

Most people, I find, are confused about climate change—its causes and how it can be addressed. I set out to simplify the message. One of the programmes I run is “consumption literacy”. It teaches people how to consume by examining what happens before and after the use of any product. Even a mundane action like brushing teeth depends on a chain of items, all of which are industrially produced, consume energy and generate carbon emissions. Once people grasp this, they become cautious about their consumption. Another programme is on energy literacy, which focuses on understanding how each unit of energy degrades the environment. We are also training master educators and producing a “climate album” to reach people through music. Our aim is to bring 1 billion people into climate action over the next three years. **DTE**

# ‘I SEE THE RISE OF DEFENDERS’

**When a species disappears from a land, the loss extends far beyond the species itself**

**SUMIT DOOKIA**  
WILDLIFE BIOLOGIST AND  
FACULTY, GURU GOBIND  
SINGH INDRAPRASTHA  
UNIVERSITY, NEW DELHI



I vividly remember my first encounter with the great Indian bustard. It was on the outskirts of Bikaner in 2000. I was a young researcher, roaming the scrublands with more curiosity than knowledge. On one such outing accompanied by a few other researchers, I experienced a “not-seen-before” moment. The bird emerged first as an unidentifiable shape, tall and measured in its stride. Its sheer size, the way it rose into the air with slow, powerful wingbeats, left a lasting impression. In retrospect, that first sighting was also among the last in that landscape.

It is Rajasthan’s state bird and once inhabited the vast open grasslands of Thar desert, far from human settlements. Its numbers were never large, even in the 1980s and 1990s, but the collapse that followed in the next two decades has been severe. We have lost this charismatic species from nearly 90 per cent of its former range, including the very site where I first encountered it. For generations, people in this harsh landscape have survived by living in close alignment with their surroundings. Livelihoods, daily rhythms, knowledge systems and even cultural expressions in the form of songs, food and rituals are bound to local biodiversity. When a species disappears, therefore, the loss extends well beyond ecology. In the past, the Indian gazelle, the blackbuck and several other grassland species have also followed similar trajectories of decline. Even native plants that once shaped local diets and folk medicine are retreating. The phog bush, whose flowers were mixed with curd to help people endure extreme summer heat, has vanished from many areas under growing human pressure.

There is no such thing as a “wasteland” in western Rajasthan. Landscapes so labelled in colonial land records are, in practice, pastures, medicinal repositories, grazing commons and wildlife habitat—assets essential to local survival. Yet the term endures, and has become a convenient justification for diverting land to state-backed development projects. This remains among the most contentious fault lines between local communities and the government. It takes only minutes of conversation with village residents to hear their concerns voiced with blunt clarity: “Where will the wild animals live if the government itself is taking over their last remaining habitats?”

The anxiety is not abstract. Biodiversity here is not an environmental slogan but a component of cultural identity. Folk songs still recall plants and animals that no longer exist in the region. With shrinking habitats and local extinctions, that cultural fabric is thinning. Increasingly, these concerns are finding expression in sit-ins and protests.

Some use simple interventions so the young stay connected to nature. One Ecology, Rural Development and Sustainability (ERDS) Foundation takes schoolchildren into wild areas and teaches them about native biodiversity. Anxiety, people here say, can be managed when its causes are understood—when the right narrative is shared with patience rather than despair. **DTI**



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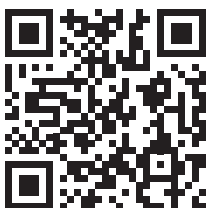
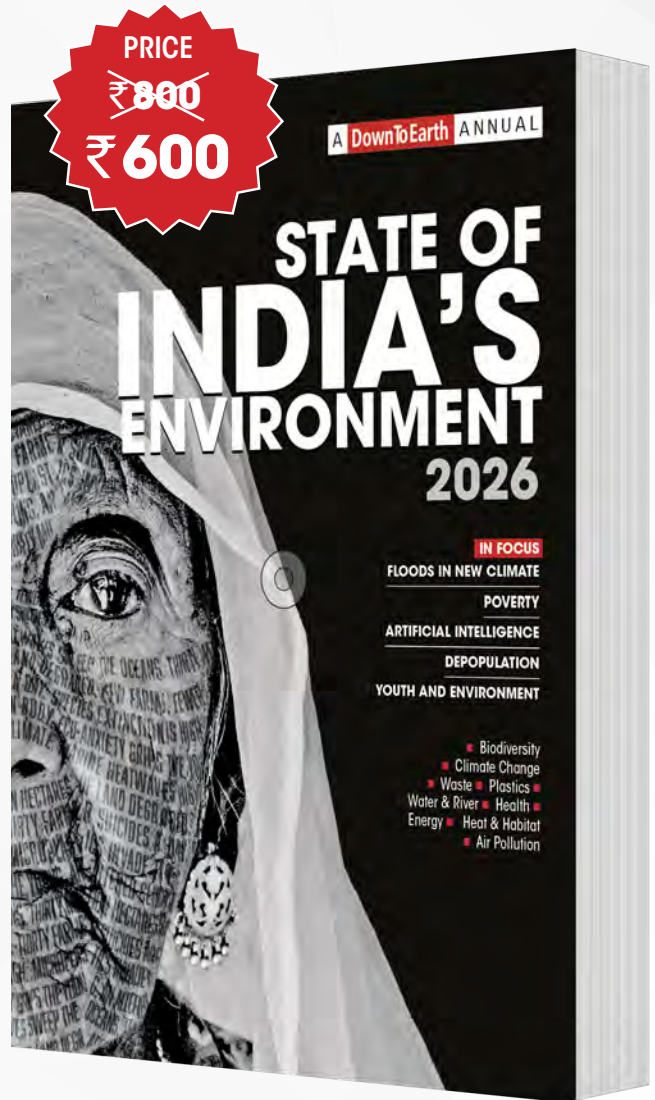
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