



March 2025 | ₹ 75

Science Reporter

A CSIR Publication



Forest and Wildlife Special 2025

FOREST FIRES | A Threat to Ecological and Food Security



Features

- ▶ In conversation with Jadav Payeng – The Forest Man of India
- ▶ 150 Glorious Years of the Kolkata Zoological Garden
- ▶ Jhalana Leopard Reserve
- ▶ Invisible Forest
- ▶ Q&A, Science Cartoons, Fiction & much more



WORLD WILDLIFE DAY
3 MARCH



21 March
International Day of Forests

IN CONVERSATION

PADMA SHRI JADAV PAYENG

THE SILENT SAGE WHO PAINTED THE EARTH GREEN

Interviewed by Neha Tripathi



On this World Forest Day (21 March), as we celebrate the theme "Forest and Food," we bring you an extraordinary conversation with Padma Shri Jadav Payeng, a man whose dedication has reshaped the environmental landscape of India. Popularly known as the "Forest Man of India," Jadav Payeng has shown the world how a single individual's unwavering commitment can create a lasting impact on nature and society.

Payeng's story offers hope in a time when food security, climate change, and deforestation are pressing global issues. More than 40 years ago, he took an initiative that appeared impossible initially, but finally, he turned a barren, lifeless sandbar in Assam into the lush, 1,400-acre forest that is now known as Molai Forest. This incredible ecosystem, which he built single-handedly, is home to elephants, tigers, rhinoceroses, deer, birds, and countless other species. It is a real example of forests restoring life and providing food security for both people and wildlife.

In recognition of his immense contribution, Jadav Payeng has received numerous honours, including the Padma Shri in 2015, one of India's highest civilian awards. There are various countries like France, Scotland, Taiwan, and Dubai, where he has been invited to speak on international environmental forums, and he shared his expertise on conservation and afforestation. The internationally acclaimed documentary "Forest Man" was also inspired by his life.

So let's explore Jadav Payeng's opinions on the importance of forests in food security, the difficulties associated with afforestation, and his vision for the future in this interview with Ms Neha Tripathi.

"Forests are deeply connected to food security in ways many people don't realise. They provide a direct source of nutrition through fruits, nuts, leaves, and roots, which are consumed by both humans and wildlife. Forests are nature's insurance policy against climate change" — Jadav Payeng.

Image credit: By President's Secretariat (GODL-India)



On 8 April 2015, the President, Shri Pranab Mukherjee, presented the Padma Shri Award to Shri Jadav Payeng, at a Civil Investiture Ceremony at Rashtrapati Bhavan in New Delhi

Interviewer: At an age when most people think about retirement, you are still actively working for the environment. What keeps you going?

Jadav Payeng: Retirement is for people who consider their work a job. But for me, this is my life's purpose. The trees, birds, animals, and the people who benefit from the forest are my family. My work will continue as long as I live.

Planting trees is not just about the environment, it is about life itself. Every tree gives oxygen, shelter, and food. How can I stop doing something that nurtures life? When I walk through Molai Forest today, I don't see just trees; I see history, effort, and a promise for future generations.

Interviewer: Your journey started when you were just a teenager. What motivated you to plant trees on barren land?

Jadav Payeng: In 1979, I saw hundreds of dead snakes on a barren sandbar of the Brahmaputra River. The intense heat had dried up the land, and there was no shade or water. That sight deeply affected me, and I realised that without trees, even animals cannot survive.

That day, I planted the first sapling. It was a simple act, but in my heart, I had made a lifelong commitment. Over the years, I planted more trees, and slowly, the barren land turned green. The trees started attracting birds, then small animals, and eventually, large mammals. Nature does not take long to heal if we give it the right conditions.

Interviewer: What challenges did you face in the early days? Did people support your mission?

Jadav Payeng: Initially, people laughed at me. They thought I was wasting my time. Some even discouraged me, saying a single person cannot create a forest. But I believed in nature's power.

The first few years were the hardest. There was no water source, so I had to carry water in earthen pots and water the saplings every day. Sometimes, animals would destroy the young plants. But I never lost hope. I knew that nature works in cycles, and if I kept planting, the forest would take care of itself one day.

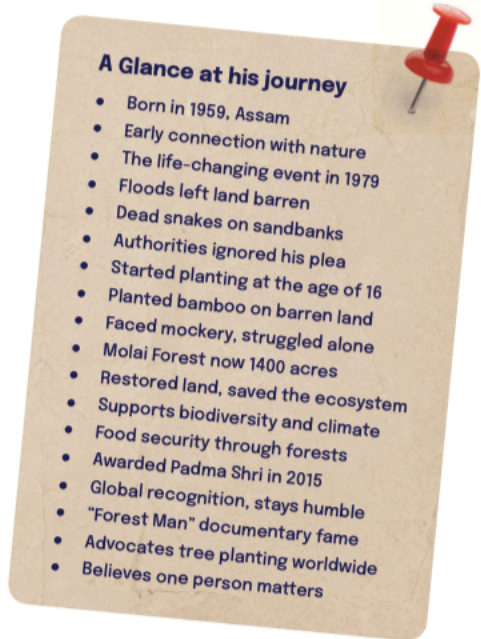
When the first saplings started growing, birds returned, and soon, animals followed. That's when people started noticing the change. The same people who doubted me in the beginning now respect and support my work.

Interviewer: How did you ensure biodiversity in Molai Forest?

Jadav Payeng: I did not bring the animals; they came because the forest provided them shelter and food. When you plant trees, birds come first, bringing seeds that grow into more plants. Gradually, herbivores arrive, and then the predators follow. It is a natural cycle.

People often think afforestation is just about planting trees. But a forest is much more than that. It is an ecosystem. Different types of trees, shrubs, and grasses create a balance, attracting different species. The presence of elephants and tigers in Molai Forest today is proof that it has become a complete ecosystem.

Interviewer: Your forest is now home to several wild animals. Can you share more about the different species that have made it their home?



Jadav Payeng: As the forest grew, nature slowly started returning. The trees provided shelter, the soil became fertile, and the ecosystem began to thrive.

Today, the forest is a sanctuary for many species, including:

- Royal Bengal Tigers, which roam freely and find ample prey.
- Indian Rhinoceroses, who have found a safe and undisturbed habitat.
- Over 170 Elephants, who visit the forest in herds, sometimes staying for months.
- Deer and Wild Boars, which play a crucial role in the food chain.
- Various reptiles, including snakes and monitor lizards, maintain ecological balance.
- Hundreds of bird species, some of which migrate seasonally, fill the air with their calls.

This transformation is proof that if we give nature the right conditions, it will heal and flourish on its own. My forest is now a living, breathing example of what one person's dedication can achieve. The trees not only provide food and shelter but also regulate the climate and protect the land from erosion. The return of these animals shows that a healthy ecosystem has been restored, and that gives me hope for the future.

Interviewer: This year's World Forest Day theme focuses on forests and food. How do forests contribute to food security?

Jadav Payeng: Forests are deeply connected to food security

What Can We Learn from Jadav Payeng?

- Start small but stay consistent — Payeng started with bamboo saplings, and over 40 years, his work turned into a dense forest.
- Nature knows how to heal itself — Given the right conditions, forests can regenerate, bringing back wildlife, restoring food chains, and balancing ecosystems.
- Every person has a role to play — Whether planting trees, spreading awareness, or adopting sustainable habits, everyone can contribute to environmental conservation.
- Food security depends on forest security — Without healthy forests, agriculture suffers, biodiversity declines, and the food chain is disrupted.

in ways many people don't realise. They provide a direct source of nutrition through fruits, nuts, leaves, and roots, which are consumed by both humans and wildlife. Forests also support medicinal plants that have been used for centuries to treat various diseases, ensuring not just food but also health security.

A healthy forest is the backbone of agriculture. It enriches the soil, prevents erosion, and maintains groundwater levels. Trees help regulate rainfall patterns, ensuring a steady water supply for farming. Without forests, there would be no fertile land, no stable climate, and no reliable harvests.

Farmers depend on forests more than they acknowledge. The trees attract pollinators like bees and butterflies, which are essential for crop production. They also provide a habitat for birds and other species that naturally control pests. Cutting down forests for short-term agricultural expansion is a dangerous mistake. It might increase yields for a few years, but in the long run, it destroys the very foundation of farming.

Forests are nature's insurance policy against climate change. They absorb carbon dioxide, reducing the effects of global warming, which directly affects food production. When forests disappear, we lose not just trees but an entire ecosystem that supports life, from the smallest insects to the largest mammals — including humans.

Interviewer: Have you planted any edible and medicinal plants in Molai Forest?

Jadav Payeng: Yes, I have planted many fruit-bearing trees.

- Banana, Guava, Mango, and Jackfruit trees — These provide food for animals and people.
- Medicinal plants like neem, tulsi, and aloe vera — These have healing properties.
- Bamboo — It prevents soil erosion and is an essential part of the ecosystem.

There are also medicinal plants such as neem, tulsi, and arjuna. These plants provide food and medicine to both animals and humans.

People often forget that forests have always been our natural pharmacy. Our ancestors relied on the forest for food and medicine. If we protect forests, we also protect traditional knowledge and natural healing methods.

When you walk through my forest, you will hear the rustling of leaves, the calls of birds, and the gentle hum of bees. The soil is soft under your feet and rich with life. Elephants, deer, and rabbits roam freely here, and even tigers sometimes pass through. The river flows alongside, its waters cool and clear, nourishing the trees and all who depend on it.

Each tree here has a story. Some I planted as a young man, watching them grow alongside me. Others were gifts from the wind, from birds who dropped seeds, from nature itself. This is not just a forest — it is a living, breathing world, one that reminds us how deeply connected we are to nature.

Interviewer: Today, deforestation is a major concern. What is your message to people cutting down forests?

Jadav Payeng: Deforestation is like removing the lungs of the Earth. Forests are not just a collection of trees; they are home to countless creatures, some we don't even know exist yet. Every tree cut down is a home lost for birds, insects, and animals. It is a chain reaction — when forests disappear, rivers dry up, the soil turns barren, and even the air we breathe becomes toxic.

People need to understand that money cannot replace nature. I tell everyone, "If you cut one tree, plant ten." That is the only way we can sustain life. I have seen with my own eyes how nature revives itself when given a chance. A barren land can become a thriving jungle if we care for it. We must remember that we are just visitors on this planet, but the forests, rivers, and skies — these are eternal. Protecting them is not just an act of kindness, it is a duty to our future generations.

True development happens when nature and humans coexist. The destruction of forests will only lead to climate disasters, water shortages, and loss of biodiversity.





Interviewer: Many people want to contribute to afforestation but don't know where to start. What advice do you have for them?

Jadav Payeng: Start with one tree. If every person plants even one tree every year, we can make a huge difference. Schools and communities should come together for tree plantation drives. Even in cities, people can grow plants on rooftops and balconies. Small efforts lead to big changes.

People often ask, "What difference can one tree make?" But imagine if one million people planted one tree each — it would create a forest. We should stop waiting for governments and big organisations to act. Every individual has the power to bring change.

Interviewer: Governments and policymakers play a crucial role in environmental conservation. What actions do you think they should take?

Jadav Payeng: Strict laws should be enforced against illegal tree cutting. Afforestation projects should be promoted at every level. Schools must include environmental education to teach children the importance of forests. Without awareness and policy changes, we cannot protect nature.

I always say, "A nation's progress is measured by the health of its forests." If we invest in afforestation today, future generations will reap the benefits.

Forests are not just clusters of trees; they are the lungs of our planet. If we destroy them, we destroy ourselves. Instead of cutting forests for short-term gains, we must create green corridors, plant native species, and restore degraded lands.

Everyone has a role to play — farmers, students, officials, and common people. Even planting a single tree can make a difference. If a single man like me can turn barren land into a thriving forest, imagine what a whole nation can achieve with collective effort.

Interviewer: You have dedicated your life to planting forests. What do you think schools should teach to create a greener future?

Jadav Payeng: Schools must teach children to love and protect nature, not just study it in books. Every child should plant a tree and take care of it — this is real education. If a child grows up nurturing a tree, they will learn patience, responsibility, and the value of life.

Forests are not just trees; they are homes for animals, birds, and even rivers. I have seen how planting trees brings back rhinos, tigers, and elephants. But today, forests are being destroyed in the name of development. Tree plantation should be a part of every school curriculum.

I have worked in Taiwan, Dubai, Bangladesh, and France, where people understand the need for forests. "Green India" will come when every student, teacher, and citizen protects nature like their own family. This is the real education we need.

Interviewer: You have travelled to different countries, spreading awareness about afforestation. How has your work been recognised internationally?

Jadav Payeng: Many organisations have invited me to share my experiences. I have been to France, Taiwan, Dubai, and Bangladesh, where people are eager to learn about afforestation. The world is recognising the need to protect nature, and I feel happy that my journey is inspiring people globally.

People everywhere, whether in India or abroad, want to reconnect with nature. We have to act now because the future of our planet depends on it.

Interviewer: You have devoted your life to forests. What is your biggest dream for the future?

Jadav Payeng: I dream of a world where forests are protected and people respect nature. I want to see every child learning about afforestation and growing trees. If every individual plants and cares for a tree, we can bring back the lost greenery. My work will continue, and I hope that future generations carry forward this mission.

A single seed holds the power of an entire forest. When we plant a tree, we are not just growing wood and leaves — we are creating shade, shelter, food, and life. The birds find their homes, the soil holds firm, and the air becomes purer.

People often ask me, "How did you create this forest alone?" But I was never alone. The trees, the river, the animals — they were always with me. All it asks is that we show respect and patience.

One day, I hope to see forests flourishing in every corner of the world, where children play under the cool shade of trees, where rivers flow clean, and where humans and nature live in harmony, just as they were meant to.

As our conversation with Jadav Payeng comes to an end, one thing is clear: his work is living proof that one individual's commitment can restore nature, protect biodiversity, and ensure a sustainable future for generations to come.

One of the key takeaways from our discussion is the strong link between forests and food security. We thank Jadav Payeng for sharing his insights and inspiring us all. His vision is clear. Protecting forests means protecting our future. Now, it is up to each of us to take action. Let us pledge to plant trees, protect nature, and build a greener, healthier world.

As Payeng says, "Nature gives back more than we give to it. If we respect it, it will sustain us forever."

Ms Neha Tripathi is a science journalist, anchor and filmmaker. Email: mail_neha@icloud.com