

spotlight

INDIA'S YEAR IN SCIENCE

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The social reformer and non-violent leader of India's freedom movement, Mahatma Gandhi, once said: "In a gentle way, you can shake the world." In August this year, the Chandrayaan-3 lander delicately extended its legs, bounced once, twice and settled near the lunar south pole. Perhaps the Moon shook a little, too.

By then, 2023 was already a momentous year for India. In April, it overtook China to become the world's most populous nation, with 1.4 billion inhabitants. It is home to more than one in six of the world's people.

In September, at a meeting in New Delhi of the G20 group of the world's biggest economies, speculation around plans to rename the country Bhārat, its name in several Indian languages, began in earnest.

Whatever the name, India faces many challenges. This year saw flash floods and drought, worsened by global warming, as well as major infrastructure failures, such as the Odisha train collision, and rising religious conflict. It is a diverse country preparing to take the next steps in its economic and social development. In this Spotlight, *Nature* explores how science and technology can support that development.

We examine some key numbers to contextualize Indian science and its growing economy (page S20). We explore how India intends to invest in solar power to meet the rising demand for green electricity (S22). And we look at how the climate disaster is hurting Indian citizens (S26).

On page S25, Gautam I. Menon tells us how the story of water is the story of India's development. And on page S29, we meet solar physicist Yoshita Baruah, who is investigating a different kind of storm to those exacerbated by global warming.

Along with many other nations, India faces a crisis caused by the over-prescription of antibiotics (S30). We report on how Indian researchers are tackling this and other public-health problems (S34).

The nation's greatest strength is its people. We explore some of the schemes the government has introduced to lure back the brilliant minds who have already left and to incentivize others to stay (S41). One solution could be to foster a stronger entrepreneurial culture (S38).

India is one of many countries to be concerned about workplace mental health. We speak to biologist Annapoorna P. K. about her work investigating the mental health of Indian scientists (S44).

And finally, Somak Rayachaudhury provides his personal perspective of Indian science today in a special episode of the Working Scientist podcast (go.nature.com/47wkck).

Jack Leeming is the editor of *Nature's* Spotlights.

Contents

S20 Science and the economy
India by numbers

S22 Power
Renewable energy for the subcontinent

S25 Perspective
We need to talk about water

S26 Climate change
The climate disaster strikes: what the data say

S29 Q&A
Yoshita Baruah: I predict solar storms

S30 Antimicrobial resistance
The fight against a health disaster

S34 High-impact research
The papers from Indian researchers that are shaping science

S38 Translating science
How to make science benefit society

S41 India's diaspora
Stemming the brain drain

S44 Q&A
Annapoorna P. K.: I study depression and advocate for mental health

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**On the cover**

India can use science and technology to help it through a time of challenges and opportunities.

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