

Scientific Literacy in India

What is the issue?

India has failed to propagate scientific literacy not only among the public, but also among scientists themselves.

What is the status of scientific advancement in India?

- A solid foundation for modern science was built by scientists in the 1950s and 1960s, facilitated by the then Prime Minister Jawaharlal Nehru.
- India has made significant scientific advances in fields such as molecular biology, agricultural/pharmaceutical science, solid-state chemistry, space, nuclear science and information technology.



What is the case of scientific literacy in India?

Article 51A says, "It shall be the duty of every citizen of India to develop the scientific temper, humanism and the spirit of inquiry and reform."

- **Lack of scientific temper**- Although India has made some significant scientific advances in research fields, it has failed to propagate scientific literacy in India.
- Scientific temper has not really percolated into society paving the way for retrogressive religion-based politics at the expense of constitutionally guaranteed secular values.
- The bulk of scientists in the country were themselves not committed to scientific temper which calls for rationality, reason and lack of belief in dogma and superstition.
- India had not produced any Nobel Prize winner in science since 1930 largely because of the lack of a scientific environment in the country, of which scientific temper would be an important component.
- **Pseudoscience**- Pseudoscience is everywhere, whether in denying the science of climate change or the evolution theory.
- There is official backing of the theory that cow excreta has therapeutic properties despite no scientific validation of this.
- Official circulars quote ancient texts to support the curative properties of cow urine for ailments.
- **Disinformation**- Disinformation weakens human rights and many elements of democracy.
- Dissemination of fake news is faster and reaches millions of consumers in seconds thanks to Information Technology.

What is the need of the hour?

- It is the job of the science academies to chip in and inspire the country to attain greater science literacy among the public.
- There is a need to develop a knack for critical thinking using the time-tested and highly successful methodologies followed in science as said by scientists such as Yash Pal, Pushpa Bhargava.

References

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