

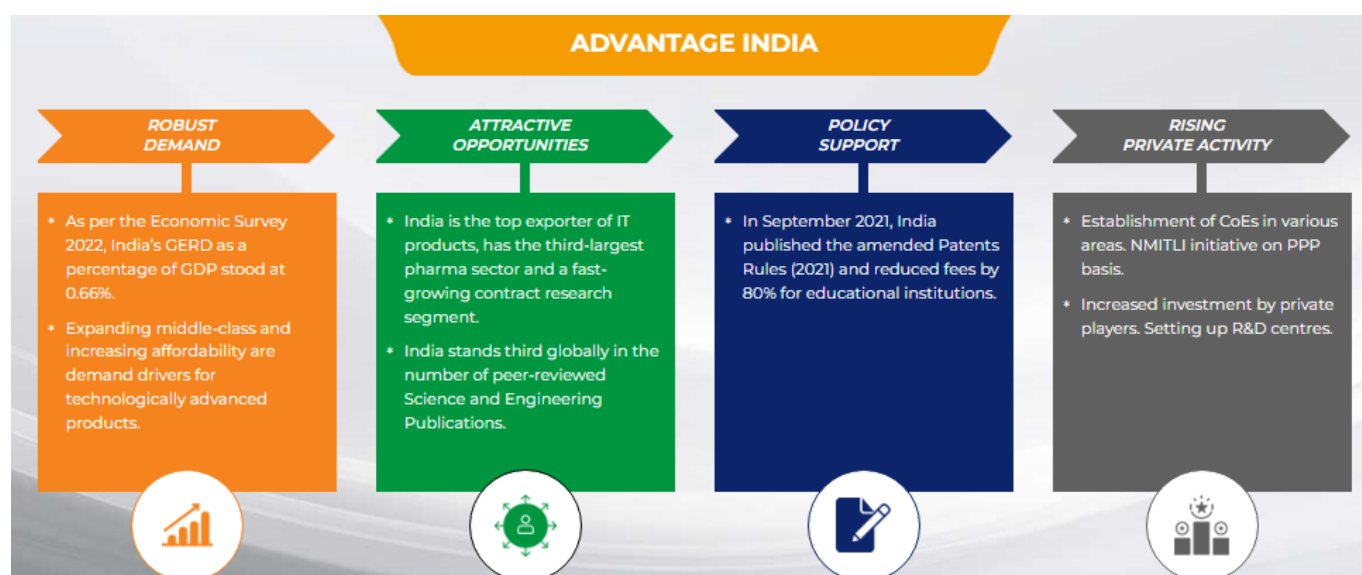
## Scientific Literacy in India

### 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**

1. <https://www.thehindu.com/todays-paper/tp-opinion/the-case-of-the-missing-scientific-in-dian/article6580385ece>
2. <https://www.ibef.org/industry/science-technology-presentation>

