



---

“The general root of superstition; namely, that men observe when things hit, and not when they miss; and commit to memory the one, and forget and pass over the other.”  
– Francis Bacon

---

## IN THIS ISSUE

**When the  
Governance Fails  
Scientists**

**NCAS Updates**

**Upcoming @  
NCAS**

## FROM THE NCAS DESK

Last month saw the death of two prominent Indian scientists. One was known as the Father of the Indian Satellite Programme, and the other as a scientist cum educationalist who helped develop a scientific temper amongst the masses. The former is the Ex- Chairman of ISRO, Prof. Udipi R. Rao and the latter, the sonic ray scientist cum former Chairman of the UGC and Chancellor of JNU, Yash Pal. Pal also headed the steering committee of National Curriculum Framework, 2005. They both stood for the development of scientific approach to events and dismissed superstitious beliefs at multiple points in their lives.

Our very Constitution under the 42<sup>nd</sup> amendment of 1976, categorically states the various fundamental duties which we as Indians have. As stated under Article 51-A (h), ‘to develop the scientific temper, humanism and spirit of inquiry and reform’ is one of our duties. But despite this, India has been witness to a wide array of events which question the commitment of the government to scientific temper.

The last three years have witnessed deaths of prominent rationalists, presentation of papers and statements by office-holders making unscientific claims about our past, increase in the violence committed by fringe groups in the name of religion

The March for Science India which took place earlier this month in 26 cities highlights the decline in the importance given to science research centers, educational institutes, evidence-based policies, religious tolerance and scientific temper. We are also celebrating the 70<sup>th</sup> Independence Day this year. And the protest of scientists and researchers sure brings a ray hope towards preserving the democracy in our country.

*Do write to us with your feedback and suggestions at [interface@ncasindia.org](mailto:interface@ncasindia.org)*

In solidarity

**Team NCAS**

# When the Governance Fails Scientists

India has been achieving several scientific milestones; particularly in space research with ISRO making headways in indigenous navigation systems and sending record number of satellites at one go. The story is not the same for Council of Scientific and Industrial Research (CSIR), which is the biggest research and development organization in India. Unlike ISRO, CSIR focuses more on basic research due to which its research bears fruits in the long-run unlike applied research whose gains are tangible in the short-run. But the government is currently insisting that CSIR focus on capitalizing their research to fund themselves which would undermine the basic research projects.

In the Dehradun Declaration of 2015, under the Minister of Science and Technology Mr. Harsh Vardhan, CSIR decided to reorganize to ensure 50% of its funding is self-financed in the coming years. Two years since then, its usual Rs 4,000 crores budget is proving to be insufficient given the recent pay hike under the 7<sup>th</sup> Pay Commission for workers and pensioners. With only Rs 202 crores being left of which 150 crores have already been allocated, the pursuit of new projects seems unlikely. This is not a problem faced solely by CSIR, but also other prestigious institutes of scientific research such as Department of Biotechnology, Department of Science and Technology and IISER.

'March for Science India' took up this cause on 8<sup>th</sup> of August in 26 cities across India and demanded that the government a) increase its budget allocation for scientific research, b) increase the expenditure on education, c) put a stop to the propagation of unscientific thought, religious intolerance and d) push for evidence-based policies.

## Low Budget Allocation for Science

India's budget allocation for scientific research does not meet the proportion of expenditure made in other aspiring superpowers and advanced economies. South Korea for example spent 4.29% of its GDP on research and development whereas Israel spent 4.11% in 2014. Similarly countries like Japan and U.S.A spent 3.5% and 2.7% respectively in 2015. India on the other hand averages around 0.85%. Of this, ISRO obtained around 9,000 crores and it has proven to be capable of capitalizing on their innovations by launching satellites for other countries and building tools for India's security concerns. The government's expectations from CSIR, DBT and DST to help industries takes away the importance of basic science research and puts pressure on them to focus on applied science research. The March for Science India demands a raise in the budget from 0.8% to 3%.

## Low Budget Allocation for Education

India's expenditure on education too is one crucial factor that the Indian government has been overlooking. India spends 3.7% of its GDP as opposed to countries like U.S.A, Cuba and Norway which spend approximately 6%, 12% and 7.5% of their GDP on education. The March for Science India demanded increasing India's expenditure from 3.75 to 10%. Though this will not ensure the quality of education improves *per se*, increasing the public spending on education could ensure that even students from poor socio-economic backgrounds could access quality education in premier institutes like IIT and other government institutes. It has been

reported that even IITs, NITs and IITs have been asked to raise a part of their capital through the fees, which would make the institutes unaffordable to students from the lower sections of society.

### **Propagation of Unscientific Ideas and Policies**

*Article 51 A(h)- to develop the scientific temper, humanism and spirit of inquiry and reform.*

The 2015 Indian Science Congress witnessed a paper being presented on the existence of aircrafts during the Vedic period which could fly between planets and fly back. This paper faced a lot of criticism from scientists around the world and despite a petition against its presentation it was presented. More recently, IIT-Kharagpur, one India's most prestigious colleges has introduced Vaastu-Shastra in their UG courses on architecture and design. These government policies promote ideas which go against the Fundamental Duty stated under Article 51A which asks Indians to develop a scientific temper. Vastu-Shastra has not been proven to be scientifically proven, whereas the science behind the 'ancient aircrafts' have been disproven in the 1970s by scientists from IIT and the shlokas were proven to be written in the early 20<sup>th</sup> century. This along with the current Honourable Prime Minister of India suggesting that plastic surgery was possible in India in the Vedic times by citing the example of Ganesha are harmful to the development of India where scientific temper is cultivated.

U.R Rao, former ISRO chairman who passed away last month also has previously stood up against the exploitation of people through pseudo-sciences like astrology and other superstitions which deter the development of India. Though fundamental rights are not judiciable, the government must persevere in ensuring that unscientific thoughts are not promoted by its officials and bodies.

*-Niranjan J. Nampoothiri*

## UPDATES



- 1) **Workshop on Nutrition (pictured above to the left)-**  
The first from the series of three workshops on Nutrition and Food Security was conducted at the NCAS office on 2<sup>nd</sup> August 2017. Ms. Manasi Chandavarkar conducted the workshop. This workshop concentrated on the fundamentals of nutrition and understanding nutrition as a basic human right.
- 2) **Meeting and Press Conference on Status of Malnutrition in Maharashtra (pictured above to the right)-**  
NCAS along with particular organizations, networks and academicians working on 'Nutrition', held a press conference at Mumbai Marathi Patrakar Sangh on 21<sup>st</sup> July 2017. We highlighted the stark ignorance and inaction on the part of the state government with regard to the issue of malnutrition. Not only are state budgets insufficient, but the expenditure is highly ineffectual. The event was covered by Times of India, Hindustan Times, Lokmat Times and several other newspapers.

## Upcoming Events and Publications

### Events

- 1) **Community Learning Movement (CLM) Workshop, Orissa, 17-18<sup>th</sup> August 2017**
- 2) **Exhibition of local vegetables, Maswan-under the People's Biodiversity Register under CLM, 17-18<sup>th</sup> August 2017**
- 3) **Workshop on understanding Nutrition-focus on policies tackling malnutrition-22<sup>nd</sup> August 2017**
- 4) **National Conference on Development and Governance of Adivasis in Contemporary India, jointly organized by NCAS and Rajiv Gandhi Centre for Contemporary Studies, Mumbai University, October 6-7<sup>th</sup>, 2017**

### Publications

- 1) **NCAS Series on Sustainable Development Goals-Mind the Gap**
- 2) **NCAS Series of Discussion Papers on Nutrition and Foods Security**
- 3) **Status Report on Particularly Vulnerable Tribal Groups in India**



National Centre for Advocacy Studies

Serenity Complex,  
Ramnagar Colony,  
Pashan, Pune – 411 021  
Tel. Fax : +91-20-2295 2003/04  
Email : [interface@ncasindia.org](mailto:interface@ncasindia.org)  
Web : [www.ncasindia.org](http://www.ncasindia.org)



[@ncasindia](https://twitter.com/ncasindia)



[fb.me/ncasindia](https://fb.me/ncasindia)

