

A Shot of Hope, Health, and Technology

Center for Study of Science, Technology and Policy

By Dr Jai Asundi.

Like most of us, Finance Minister, Smt. Nirmala Sitharaman, turned to technology in COVID times, to present the first paperless budget in India's history. Indeed, it set the mood for what was to come. The promise of a digital 16th Indian census, smart metering for electricity distribution companies, and proposals for installing an indigenously-developed automatic train protection system to boost passenger safety — there were ample instances of technology in motion.

The Budget went on to tick some significant boxes in the areas of health, urban water and sanitation, non-conventional energy sources, etc.

Health and Wellbeing Boosters:

With the world still grappling with the pandemic, the vision for a 'Healthy India' took justifiable prominence in the Budget. The launch of Mission Poshan 2.0 to fight malnutrition, the *Jal Jeevan Mission* (Urban) to ensure

universal water supply in all 4,378 Urban Local Bodies, Urban *Swachh Bharat Mission 2.0* for effective faecal and waste water management, and reduction in single-use plastic are critical building blocks for a healthy nation.

A big tick here was the provision of effectively managing waste to address the problem of air pollution resulting from construction-and-demolition activities — a major urban issue — and bio-remediation of all legacy dump sites.

Considering air pollution as an emergency, and allocating INR 2,217 crores for 42 urban centres with a million-plus population to tackle the issue is, indeed, applaud-worthy. The voluntary vehicle scrapping policy, though largely a step in the right direction to reduce emissions and encourage eco-friendly transportation, could face implementation challenges in the absence of scrapping infrastructure and automated vehicle fitness checking centres. The assessment rules for personal vehicles (20 years) and commercial vehicles (15 years) will also need to be tightly enforced for a clean and clear sky.

Energising Renewables:

One of the focal points of the Budget was the potential of renewable energy, especially solar energy, in reviving the economy. The measures suggested — a phased manufacturing plan for solar cells and solar panels, and an increase in the custom duty on solar invertors and solar lanterns — could lead to higher indigenisation in the solar energy infrastructure. Similarly,

the launch of a comprehensive Hydrogen Energy Mission for generating hydrogen from green power sources is a step towards net-zero pathways, while the additional capital infusion of 1,000 crores to Solar Energy Corporation of India and 1,500 crores to Indian Renewable Energy Development Agency provides the right boost.

The Budget also did a commendable balancing act in the Power sector, safeguarding the interests of both consumers and the electricity distribution companies (DISCOMs).

Impetus to Research and Development:

In a welcome move, Budget 2021 announced an outlay of INR 50,000 crores, over a period of 5 years, for the National Research Foundation. This, along with the national language translation initiative, will invigorate the research ecosystem and enable wider communication of research outputs.

Time to be Climate Responsive:

With the consensus growing on acknowledging climate change risks as a bigger threat to India's economic development goals than the shocks induced by the current pandemic, it is time for mainstreaming climate priorities in the annual budgeting and planning process. Unfortunately, explicit efforts towards climate risk adaptation were missed in Budget 2021. Going forward, development of climate-resilient infrastructure should be seriously considered.

Nevertheless, the Budget holds promise for the future, reflecting in the upfront recognition of clean environment as a pre-requisite for a healthy nation, and the reliance on renewables for a better tomorrow.

Wheels must be set in motion soon, to ensure that India is ready to meet the expectations in 2023 during her maiden G20 presidency and the first global stocktaking of the Paris Agreement.

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