

This is how



BJP

WALKS THE TALK

SCIENCE & TECHNOLOGY

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PREFACE

The scale and pace of development that took place in the last five years was unprecedented. The development that took place is not a mere concept, but one that touched countless individuals. Development under Modi government meant own house, a gas cylinder for one that has never used, or power connection to them who never saw an electric bulb, so on. This people-centric development is but realizing the guiding philosophy of this government: Sabka Saath – Sabka Vikas

The bar has been raised and as we are approaching the general elections, it is indeed riding on unparalleled expectations from the public. It is thus of vital import that we take a moment and reflect back on all that has been done and all that was promised.

An assessment of the promises made and delivered by the BJP since 2014 was carried to place a detailed report card of the government in the public domain. As per our findings, the government has fulfilled over 98% of the promises made in the manifesto, setting new standards of accountability and democratic integrity of the nation.

Along with a detailed enumeration of the promises made and delivered, the report assesses the qualitative impact the initiatives have brought about in the lives of the people. Separate monographs have been prepared on promises fulfilled in key sectors including -Social Sector, Economic Revival, Agriculture, Industry & MSME, Cultural Heritage & Tourism and Science & Technology. The monographs provide an insightful understanding of the policy approach of the government towards separate sectors and how targeted reforms have led to a transformative change in the lives of people and the society on the whole.

The following monograph details the initiatives undertaken in the science and technology sector, leveraging technology for good governance and also making strides as a global leader in domain. The analysis and documents are a testimony to the fact that the BJP led NDA government has upheld the sanctity of the vows undertaken in the Manifesto 2014, affirming faith and resilience of our democratic framework and how it went beyond discourse and ‘walks the talk’.

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1. BACKGROUND

The last four and half years of governance have captured the public imagination with a renewed vigour in the world's largest democracy. From the very beginning, the government has been characterized by affirmative steps in national interest, long term policy moves and establishing an indomitable world presence. However, another subtle yet indelible mark that the Modi regime has left is propelling collective citizen efforts towards new forms of social behaviours and bringing about an enduring social transformation. Not just setting the course, missions like Swachh Bharat Abhiyan, Beti Bachao Beti Padhao, Digital India etc witnessed an unprecedented national energy focused on building a new and vibrant India. The last 5 years have indeed been the phase of breaking out of the inertia and building a tradition of politics of performance. It is imperative that the government's performance be analysed in comparison with the promises it made in its manifesto.

The most important aspect of this growth story has been the fact that inclusivity and empowerment has been the leading force of this development trajectory. In a democratic nation like ours, the real success of any governmental effort cannot be mapped just in terms of numbers but also the essential element of how those numbers have brought about a qualitative impact in the lives of every section of the society and especially the relatively disadvantaged sections. The BJP government had well enunciated its commitment towards the mission of empowerment over entitlement in its election manifesto of 2014. The mission to '*make people active partners...and empower them to take advantage of the development process*' has been clearly charted out in the manifesto of the party.

Several kinds of initiatives were taken by this government that effected change. For instance, incremental approaches were adopted in a few initiatives that introduced efficiency and accountability in the system such as the GIS, geo-mapping and geo-tagging that were made mandatory in developmental works like MGNREGA.

In others, the governmental adopted reformist approach which shifted the way government functions. The planning regimes of the previous governments was symbolised by the Planning Commission, which was an extra-constitutional institution but wielded unusually disproportionate power in governance and fund allocation of the country. This was done away with by this government by creating NITI Aayog as the government's policy think-tank and policy formulation body which does not have a say in federal fund allocation.

With the help of such multi-variegated policy responses, the government initiated a profound change in the nation's governance institutions and also development regime. They have paved a path for the people to use their science, technology and innovation skills for the public good. Introduction of technology in the sphere of governance has brought in greater transparency, accountability and monitoring. Scientific technology is providing action-oriented solutions for ushering in Good Governance with a human face at all levels.

2. OBJECTIVES

- To enumerate all the promises made in manifesto 2014, implicit or explicit
- To detail all the efforts made by this government towards fulfilling those promises
- To explore and explain the extent to which this government went to serve the nation above and beyond the commitments made in the manifesto

3. SCOPE OF STUDY AND METHODOLOGY

This is an exercise to enumerate and evaluate the list of initiatives taken by the government in fulfilment of the manifesto promises. The scope of the study is broadly defined by the contours of Manifesto 2014. However, care was taken to not omit any significant policy initiative taken by this government in the last 5 years. On the whole, this document not only lists out the promises and actions taken but also crafts the impact felt by such initiatives on both the people as well as governance institutions of the country.

The actions taken on the promises made in the BJP's Manifesto 2014 were scooped from the entire official information source bases and compiled as a comprehensive databank. The information and data provided for ongoing/long-term projects and commitments made for such initiatives were normalised to reflect the progress of such promises through suitable scale. The study involved analysing secondary data for building evidence for delivering the commitments. Several datasets and sources were treated in accordance with requirements.

Primary impact of an initiative was analysed first, proceeding then to mapping the cascading and domino effects of such an initiative through secondary and tertiary impact analysis in social, economic, and other major pathways. Impact assessment reports of government flagship schemes have also been used to gain further insights. The document also provides an objective listing of all the commitments made one-by-one followed by specific initiatives taken in that respect.

4. Promises Made in the Manifesto 2014

- Ensuring food, agricultural, nutritional and environmental, wealth, health and energy security of the people on a sustainable basis, using science and technology.
- Mounting a direct and sustained effort on the alleviation of poverty, enhancing livelihood security, removal of hunger and malnutrition, reduction of drudgery and regional imbalances, both rural and urban, and generation of employment, by using scientific and technological capabilities along with our traditional knowledge pool.
- Encouraging research and innovation in areas of relevance for the economy and society, particularly by promoting close and productive interaction between private and public institutions. Sectors such as agriculture (particularly soil, water management, human and animal nutrition and fisheries), water, health, education, industry, energy including renewable energy, communication and transportation would be accorded highest priority. Leveraging of technologies such as information technology, biotechnology and material sciences would be done with special importance.
- Encouraging research and application to meet the challenges of climate change and for forecasting, prevention and mitigation of natural hazards, particularly floods, cyclones, earthquakes, drought and landslides.
- Promoting international science and technology cooperation towards achieving the goals of national development and security, and making it a key element of our international relations.
- Devise schemes, programs and opportunities to encourage the youth to take scientific research and innovation as a career. Provide work environment and professional opportunities in fundamental scientific research, to make research careers more

appealing, so that the nation can harness the best of brains for scientific research leading to enhancing the national productivity and competitiveness and reverse brain drain.

- Build world class, regional centres of excellence of scientific research in the field of nanotechnology, material sciences, thorium technology and brain research.
- Create an ecosystem for multi-country and inter-disciplinary collaborative research, and establish an Intellectual Property Rights Regime which maximizes the incentive for generation and protection of intellectual property for all type of inventors.
- Achieving synergy between industry and scientific research. Autonomous technology transfer organizations will be created as associate organizations of universities and national laboratories to transfer the know-how generated by them to industry. Industry will be encouraged to adopt or support educational and research institutions to help direct science and technology endeavours towards tangible industrial goals.
- Promotion of innovation by creating a comprehensive national system of innovation.
- Indigenous knowledge, based on our long and rich tradition will be further developed and harnessed for the purpose of wealth and employment generation.
- To promote science popularization schemes extensively.
- Bring the changes in secondary education to focus on application of science.
- Set an institute of Big data and Analytics for studying the impact of big data across sectors.
- To do research for the eradication of tropical diseases.
- Establish institutes of Technology for Rural Development.
- Establish a Central University dedicated to Himalayan Technology.
- Promote research and application of nuclear science in medicines, industry and agriculture.

5. Promises Delivered

- SRIMAN - Scientific Research Infrastructure and Maintenance Networks - Policy is under public consultations.
- Developed and implemented the technology for “Drinking Water Disinfection System” which is useful for continuous treatment of water.
- Extensive research on use of radiation processing for extending shelf life of food products is in process.
- Biotech KISAN Scheme for small and marginal farmers for better agriculture productivity.
- MANAK (Million Minds Augmenting National Aspiration and Knowledge) a national programme in which the thrust is on ‘Original ideas’ having potential to address societal needs through Science & Technology.
- Farmers FIRST scheme for strong farmers-scientists linkages, capacity building, technology adaptation.
- National Innovation Foundation recorded over 1,90,000 ideas, innovations in last 5 years and traditional knowledge instances.
- To combat vehicular pollution WAYU (Wind Augmentation and purifying Unit) was inaugurated.
- Materials on Energy Storage (MES) programme to support R&D activities.

- “Initiative to Promote Habitat Energy Efficiency (I-PHEE)” to improve energy performance of buildings and cities has been launched.
- National Initiative for Developing and Harnessing.
- Innovations’ (NIDHI) for nurturing knowledge-based and technology-driven ideas and innovations into successful start-ups.
- INSPIRE Award - MANAK (Million Minds Augmenting National Aspiration and Knowledge) is being executed to align "Startup India" initiative.
- Earthquake Warning System (EqWS) developed by CSIR-Central Scientific Instruments Organisation (CSIR-CSIO).
- The Global Cooling Prize launched to spur development of a residential cooling solution.
- Organization of Children’s Science Congress all over the country.
- National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) is being implemented.
- Organization of Children’s Science Congress all over the country.
- NASA-ISRO Synthetic Aperture Radar (NISAR) for forecasting of Natural Disaster is underway.
- Three new programmes: National Network Programme on Urban Climate with 05 projects, Human and Institutional Capacity Building (HICAB) for the Himalayan region with 18 projects, National Network Programme on Climate Change & Himalayan Cryosphere with 06 projects have been initiated.
- Three State Climate Change Cells one each in the states of Gujarat, Assam and Bihar have been supported.
- 5,441 schools recognised under Atal Tinkering Labs.
- The Make Tomorrow for Innovation Generation, a PPP Initiative to make innovative prototypes.
- Overseas Visiting Doctoral Fellowship (OVDF) offers opportunities for PhD students for gaining exposure.
- KIRAN (KNOWLEDGE INVOLVEMENT IN RESEARCH ADVANCEMENT THROUGH NURTURING) embraces women-exclusive schemes with the mandate to bring gender parity in S&T through gender mainstreaming.
- Teacher Associate ship for Research Excellence (TARE) aims to tap the latent potential of faculty working in state universities, colleges and private academic institutions who are well trained but have difficulty in pursuing their research.
- An Interdisciplinary Centre for Cyber Security and Cyber Defence of Critical Infrastructures established.
- Government declares 6 educational ‘Institutions of Eminence’.
- Overseas Visiting Doctoral Fellowship (OVDF) offers opportunities for PhD students for gaining exposure.
- Initiatives to diagnose genetic diseases, treat strokes and other conditions taken with industry partnership.
- A common web-portal is being developed to offer high-end equipment and facilities available with the institutions/ universities for use through online and in a transparent way.

- Atal Innovation Mission with 5441 Atal Tinkering Labs has been established across the country.
- Patent applications saw a manifold jump in numbers.
- Augmenting Writing Skills for Articulating Research (AWSAR), a new initiative that aims to communicate and disseminate Indian research stories among masses.
- Global Initiative of Academic Networks (GIAN) scheme launched to enable students to interact with finest teachers.
- Centre of Excellence for Data Analytics (CEDA) inaugurated in New Delhi
- Indo-Japan Joint Laboratories in Mobile Big Data Analysis underway.
- Central Sector Schemes for prevention and control of Zoonotic diseases and other neglected tropical diseases.
- Government's commitment to accelerated coverage of safe sanitation services results in eradication of tropical diseases.
- Launches Unnat Bharat Abhiyan 2.0, 750 Higher Education Institutions to get together for Development of Rural India.
- Launched the National Mission on Himalayan Studies (NMHS) since 2015-16 onwards. Initial outlay for National Centre for Himalayan Studies is already made.
- Kudankulam nuclear plant Phase II was connected to grid under this government.

6. OBSERVATIONS

We need a spirit of victory, a spirit that will carry us to our rightful place under the sun, a spirit which can recognize that we, as inheritors of a proud civilization, are entitled to our rightful place on this planet. If that indomitable spirit were to arise, nothing can hold us from achieving our rightful destiny.

C. V. Raman

The spirit of achieving excellence in science, technology and innovation has always been the part of Indian Culture and energizing this wisdom Atal ji added 'Jai Vigyan' to Sashtri ji's slogan of 'Jai Jawan, Jai Kisan'. India is one of the top-ranking countries in the field of basic research. Our historical contribution in the field of science ranges from the innovation in mathematics-first use of zero- as revealed in the Bakhshali manuscript to important contributions made by Aryabhata, Brahmagupta, Bhaskara, among others and to the exceptional contributions made by names such as CV Raman, S. N. Bose, Srinivasa Ramanujan in the last century.

Our scientist have utilised the minimum resources in store with maximum struggle to provide an improved quality of life to the people. We are still learning from their creativity and commitment. In the present era, progressive excellence is being achieved in areas such as nuclear and space science, electronics, defence as well as development of Indigenous technologies. Extensive research is being carried out in science, technology and innovation to create an ecosystem for fundamental research and innovation, keeping in view the objective of science with a human face in the service of the common man.

6.1 Research Innovation and Opportunities

The pursuit of Vigyan is fulfilled with the achievement of two objectives, first is generation of profound undisrupted knowledge and second being the consumption of that knowledge for socio-economic good. Along with pushing discoveries in science and space there is also need to inculcate a culture of innovation and start-ups. An ecosystem which imbibes a culture of scientific temper at every level has been encouraged.



Under the Atal Innovation Mission, the Modi government has imbibed a culture of innovation and entrepreneurship in the public. The mission has created an ecosystem which begins from the stage of primary education, tinkering the young minds in the grade VI to XII, and developing the aptitude to explore, experiment and learn. The mission has developed a space for thinking exponentially and encouraged students to convert ideas into reality. Now the students can link the theories of science to reality and make practical innovations out of them.

To motivate them further the students are bestowed with awards like Festival of Innovation and Entrepreneurship (FINE) and The Gandhian Young Technological Innovation Award for their innovative ideas. The students are also imparted with Indian research stories and provided access to the finest teachers under Augmenting Writing Skills for Articulating Research (AWSAR) initiative and Global Initiative of Academic Networks (GIAN) scheme.

A story of success emerged when one Indian innovator aged 23 years was awarded the “BRICS most promising Innovator” during the 3rd BRICS Scientist Conclave. 5,441 schools recognised under Atal Tinkering Labs as on 19th March, 2019.

Another sphere in the ecosystem of the mission is promotion of entrepreneurship. The citizens with an innovative bend of mind are supported and mentored to become successful entrepreneurs. Previously when an individual thought of establishing an innovation start-up there was no support system. Acquiring self-employment on the basis of an innovative capabilities and creativity was fairly challenging task. This challenge was addressed with the coming of Stand-up India, Start-up India and Atal Innovation Mission.

The schemes like National Initiative for Developing and Harnessing Innovations’ (NIDHI) is nurturing knowledge-based and technology-driven ideas and innovations into successful start-ups. Business incubation facilities have almost been doubled and National Innovation Foundation recorded over 1, 90,000 ideas, innovations in last 5 years. Innovation and start-up activities have received a big support during Modi government’s tenure.

Another sphere which demanded attention was brain drain. Due to unavailability of professional opportunities in scientific research, the talented pool of researchers and professors preferred moving to foreign countries for better opportunities. This drained us from the opportunity of consuming the vast knowledge human resource for socio-economic good. In order to reverse this scientific brain drain from our country and for providing work environment and professional opportunities in fundamental scientific research four schemes were launched-

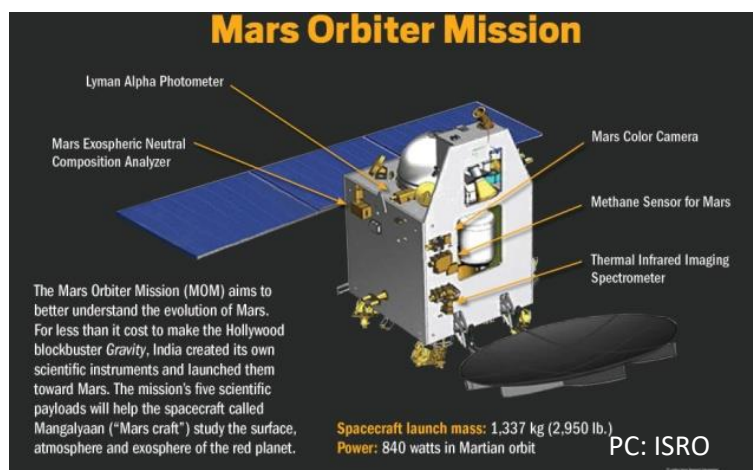
Teacher Associate ship for Research Excellence (TARE), Overseas Visiting Doctoral Fellowship (OVDF), SERB Distinguished Investigator Award (DIA), Visiting Advanced Joint Research (VAJRA) Faculty Scheme for overseas scientists and academicians.

As reported in the Parliament, a total of 649 Indian scientists returned to the country to work in Indian institutes and universities over the last five years as against 243 during 2007-12.

By encouraging scientific temper in students and providing work environment to professional and entrepreneurial opportunities in the area of scientific research, a spirit of research and innovation has been created. The whole ecosystem is giving shape to “Nayee Dishayen, Naye Nirman, Naya Bharat”.

6.2 Space Technology

Space technology generates critical infrastructure for a country, as it is used for navigation systems, communication, banking networks, stock market, weather forecasting and a range of military and other civilian purpose. Our space programme in its nascent stage was supported by countries like Russia, USA, UK, France in terms of technology, capital as well as launching capacities. Presently India is launching indigenous as well as foreign satellites of countries like USA, Canada, France, Finland, Germany, Italy, Israel, Japan, among others on PSLV, the workhorse of ISRO. 269 foreign satellites of 32 countries have been launched on our workhorse. India has set a world record of launching 104 satellites in one go and has given due recognition to the talent of young scientist by launching 10 student satellites so far. All this was a distant dream a few years back, but now is evidently a reality in making.



In the Modi era our country is strengthening its indigenous capability and is in the process of decreasing dependency on developed countries. We are on the path of becoming a self-sustained soft power in space technology. The Mangalyaan mission highlighted India's niche of doing cost-effective, high-technology research. Mars Orbiter Mission has survived

well beyond its designed mission life of six months and completed four years in its orbit on September 24, 2018.

India relied upon the foreign GPS (Global Positioning System) which has an accuracy of 15 meters for various navigation purposes. In order to decrease dependency and increase accuracy we launched our own Indian Regional Navigation Satellite System (IRNSS) which has an accuracy of 20 meters. IRNSS is capable of providing accurate position information service to users in India as well as the region extending up to 1500 km from its boundary. Space technology is thus, venturing towards improving bilateral relations. Through our peaceful use of technology for the betterment of the common man and global community at large, neighbourhood first is now being extended beyond the stratosphere.

It is crucial to protect our space assets as they act as a backbone of India's security, economic and social infrastructure. Recently India became the 4th country to acquire anti-satellite (ASAT) missile capability under 'Mission Shakti'. The fact that the entire effort was indigenous adds a feather to the cap. Now India stands tall as a space power along with countries like USA, Russia and China. The mission has empowered the nation in securing our communication satellites, earth observation satellites, navigation satellites, apart from satellites meant for scientific research and exploration, academic studies. The test has demonstrated the nation's capability to defend its assets in outer space and generated credible minimum deterrence in dissuading adversaries from targeting the country's satellite network as well as its military installations.

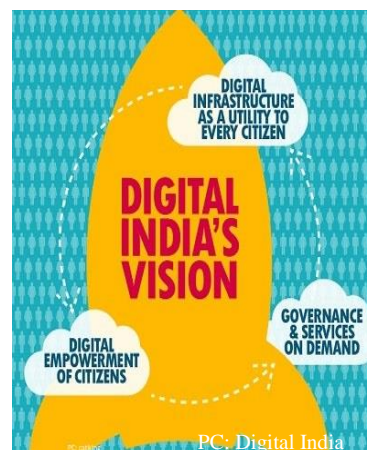


This move for securing the country's crucial space infrastructure goes along with Modi government's vision of promotion of space technology based tools and applications in governance and development. The convergence for space technology for the well being of the common man, providing them with new solutions, promoting development and fostering easy delivery of services has placed the nation in a new-orbit. The huge network of Indian postal department, which connects the whole country, has been linked with Information technology. This trusted institution has been fostered with digital empowerment for improving the quality of service and has achieved financial inclusion of the un-banked rural population.

6.3 Science and Governance

In the Modi era, science and technology is catering to the governance initiatives such as Make in India, Swachh Bharat, Clean Ganga, Swastha Bharat, Smart Cities, Smart Villages, Clean, efficient, affordable and renewable energy technology solutions and Innovate in India etc. in a significant way. The development of clean energy options and providing water related solutions and demonstration and deployment of other successful technology solutions are being pursued vigorously.

"Digital India" is the world's largest, technology-led transformative programme which is paving the way for our citizens to avail digital services. Now multiple government services (central, state and regional) can be accessed by the common man through a single mobile app- UMANG. The online application and tracking of forms, identifying and resolving persistent problem, storage, sharing and verification of documents and certificates has been simplified. A small entrepreneur can register on the Government e-Marketplace, and bid competitively for supply of goods to the Government. Pensioners no longer need to present themselves in front of a bank officer, to provide proof of life. They can leverage the Aadhaar biometric platform, to provide this proof with minimal physical effort.



Digital empowerment of citizens via Tele-education, Tele-medicine, e-bhasha has been made easy and effective. Citizens of India are increasingly adopting cashless transactions via the

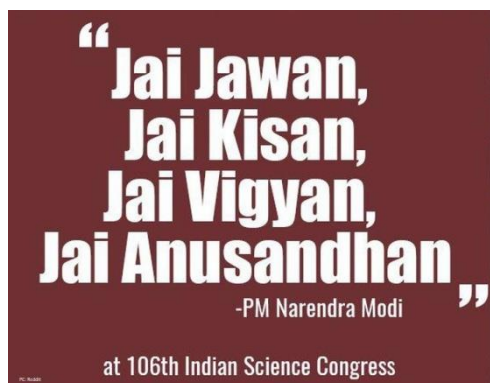
Bharat Interface for Money (BHIM App) and moving towards a less cash and corruption free society.

The launch of National Supercomputing Mission for building capacity and capabilities has given a new impetus to the Digital India vision with the availability of huge data storage space and linkages and Make in India would play a leading role in manufacturing of supercomputing systems under the mission. Recently two High Performance Computing (HPC) Systems Pratyush and Mihir were installed for accurate prediction of cyclones and other severe weather events.

International as well as National acumen is being harnessed to come up with more efficient technologies. India being a leader in multi-country Solar Alliance and in Mission Innovation is giving impetus to our aim of achieving the target of 100 GW solar energy by 2022, technology innovation under Make In India, increasing efficiency of solar modules.

The basic thought of leveraging the space technology for the common man's benefit and elevation was strikingly missing. The farmers and fishermen of our country had relied on their traditional knowledge for estimating the monsoon patterns and fish breeding grounds. This involved huge time consumption, unpredictability and putting themselves in the harm's way.

Sensor technology, drones, satellite imaging are helping farmers at various levels via-a-vis sowing, harvesting, production, fertilizers, pesticides, transport. Today, a farmer can access a variety of services, such as soil-testing results, expert advice, and a good price for his produce, at the click of a button. With the launch of Bhuvan geo-portal, a Geo-Governance dashboard has been generated with primary focus on societal-benefits, its theme-oriented services enable planning, monitoring and evaluation of stakeholder's activities in governance and development.



Any Science and Technology intervention which facilitates farmers and farming activities to improve crop productivity makes a huge impact on rural economy. At the 106th Indian Science Congress Prime Minister Modi had batted for the use of scientific tradition and technology for addressing the challenges faced by our farmers and fishermen. Through quick adaption to these realities space technology has been

utilised for establishing early warning system, geo tagging of assets, accurate location of breeding grounds is now just a click away, better disaster management and preparedness.

Agro-meteorological advisory to farmers is one such mechanism which benefits them in their day to day farming operations. 'Biotech Kisan' is such an initiative. It is assisting farmers in 15 agro-climatic zones helping for small and marginal farmers for better agriculture productivity. Farmers FIRST scheme for strong farmers-scientists linkages, capacity building, technology adaptation. Similarly, thousands of farmers are getting benefitted under Aroma Mission for cultivation of aromatic plants.

To fulfil the needs of New India, big data, artificial intelligence, blockchain technology is being progressively utilised in the various sectors. Blockchain technology which was previously being unitised by risky virtual currencies like bitcoin is now been put to judicious use. Recently

a blockchain-enabled marketplace app was launched for coffee cultivators. It is reducing growers' dependency on intermediaries, bringing in trust and efficiency in the chain, helping farmers with market access and ensuring traceability.

The unique quality about the Modi government's initiatives is that there is an evident amalgamation of fundamental science and applied science, linking ease of doing business with ease of living. For instance, GOBAR (Galvanizing Organic Bio-Agro Resources) - DHAN scheme is employing the concept of waste to energy for promoting sustainable living in rural areas. It has the advantage of creating clean villages, reducing open defecation and the diseases accruing subsequently, converting waste into wealth and a resultant creation of sustainable villages.

In urban areas, Missions like Smart city and AMRUT are utilising clean energy infrastructures for building a sustainable living environment. When we put special emphasis on piped water supply in rural habitations, continuous treatment of water becomes imperative to devoid it of any infection. To achieve this goal technology for "Drinking Water Disinfection System" has been made functional which has dual benefit of providing clean piped water and protecting our population from water born diseases.

7. Conclusion

- **From Lab to Field:** Solar based water heating system for mountain areas, Rice-dehusking Machine, Wind Purification unit to combat vehicular pollution, dye absorption using nanotechnology, Bandicoot India's first 'manhole cleaning robot', among others are prime examples of how science, technology and innovation are strengthening democracy and bring participative governance or 'Jan Bhagidari' from lab to field.
- **Vasudhaiva Kutumbakam:** Space technology is venturing towards improving bilateral relations and neighbourhood first is now being extended beyond the stratosphere. Science, technology and innovation has entered a dimension where all stakeholders are contributing to the cause of common good and carrying forward the Indian philosophy of "Vasudhaiva Kutumbakam" - the world is one family.
- **Ease of living, a new Paradigm in the use of technology:** The Modi government has given primacy to the human face of technology and are utilising it for transforming "ease of doing business" to "ease of living". The achievements in this section goes beyond the promises made, for instance, production of aviation grade biofuel, Divya Nayan- a machine for visually impaired, inexpensive devices for diagnosis of cervical cancer, TB and dengue, a real-time landslide warning system in the Sikkim-Darjeeling region.
- **Empowering through Digital Literacy:** The rapid developments in the digital domain have mirrored immense change in India. Digital technology has enabled efficient service delivery and governance, improving access in domains from education to health, shaping the future of business and economy.
- **India's Space Shakti:** We have ventured on the path of becoming a self-sustained soft power in space technology with initiatives like, Mission Shakti, Mangalyaan mission, launch of NAVIC and future missions like, Chandrayan 2, Gaganyaan, Aditya L-1. The convergence for space technology for the well being of the common man, providing them with new solutions, promoting development and fostering easy delivery of services has placed the nation in a new-orbit.

- **Nav Bharat ka Vikas:** To fulfil the needs of New India, big data, artificial intelligence, blockchain technology is being progressively utilised in the various sectors like agriculture, cyberspace, digitization of records, data privacy and security, financial services, better healthcare, building decentralized database and applications.

Progressive excellence in this field has resulted in finding scalable models and innovative solutions in education and health, using digital technology. Technological innovations have become an enabler for the differently-able. Sensor technology, drones, satellite imaging are helping farmers at various levels via-a-vis sowing, harvesting, production, fertilizers, pesticides, transport.

Science, technology and innovations have enabled effective planning, monitoring and evaluation of stakeholder's activities in governance and development. Through our peaceful use of technology for the betterment of the common man and global community at large, neighbourhood first is now being extended beyond the stratosphere.

