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R MADHAVAN





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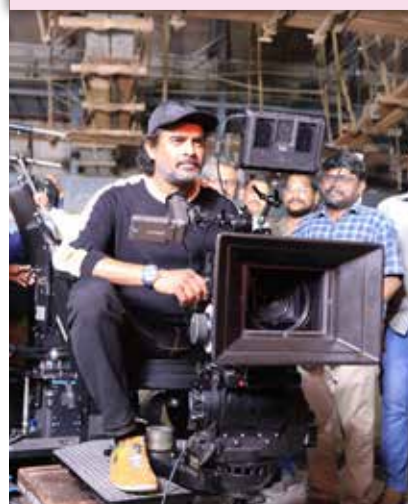
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UPCOMING ISSUE EASE OF DOING BUSINESS

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Engaging Content

I just wanted to drop a quick line to say how much I enjoyed the latest issue of the magazine. The G20 coverage was particularly insightful, and I found myself nodding along to Amitabh Kant's article on 'G20 for the Planet, People, and Prosperity.' Leena Nandan's piece on 'Green Development Pact' was also a great read. It's clear that you guys are putting a lot of effort into making Yojana a must-read for anyone interested in what's happening in the world. Keep up the great work!

– **Saniya**, Jharkhand

Comprehensive Explanations

The November 2023 issue of 'Yojana' showcased how India's G20 presidency has put forth the voice of reform on the global stage. This has comprehensively explained how the New Delhi Declaration marched on to become a tool for achieving equitable and inclusive global governance. It has also highlighted the discourse about balancing economic growth in a post-pandemic world with a sustaining climate to live on a harmonious planet. Articles on 'Bhashini', 'Digi Locker', etc., put forth India's progress in DPI, which could be prompted to be harnessed in LMICs. Thank you, Team Yojana; it would make it easier for readers to follow the author's points and understand the key takeaways from the Yojana article.

– **B Avinash**, Odisha

Informative Issue on G20

The November issue of 'Yojana' on the historic G20 summit in India was (information) delivered to the readers on a platter. The lead article by Amitabh Kant, 'G20 New Delhi Leaders' Declaration,' under 'Key Highlights' with simple infographics and 'Li.F.E' was very interesting. 'Bhashini App,' answering queries of dignitaries in their mother tongue, proved the mettle of the Indian tech revolution.

Special article by Harsh Vardhan Shringla, the former Foreign Secretary, beautifully narrated the successful conduct of the G20 summit, with launch of 'Global Biofuel Alliance' and 'IMEC', thereby putting India on a high global pedestal. The article on legendary Prof MS Swaminathan was a tearful tribute to the father of the Green Revolution. His comments in the pages of 'Yojana', "Modern industry is labour-saving, agriculture is labour-absorbing" are true even in today's world. All other articles were informative.

– **Pratap Nayak**, Bhubaneswar, Odisha

Significance of G20 Presidency

The esteemed contributors to Yojana's November 2023 edition have rightfully highlighted the significance of India's G20 Presidency at the juncture of an evolving and new global order. The pro-people initiatives and pro-government approaches of the G20 towards tackling global challenges and maximising development impact for the needy and exposed populace are eye-catching.

– **Sayan Karmakar**, West Bengal

Inspiring Readers

I am writing to express my sincere appreciation for the latest issue of Yojana magazine, which focuses on the G20 and its important role in shaping a sustainable and prosperous future for all. Atul Bagai's article, "Designing a Circular Economy," offered a compelling case for adopting a circular economy model. Mr Tripathi's insights on the need for inclusive and accessible digital infrastructure were insightful and thought-provoking. The magazine's coverage of the G20 and its various initiatives is timely and relevant, and the articles are well-written and engaging. I commend the editorial team for their dedication to providing high-quality content that informs and inspires readers. Thank you for your continued commitment to excellence.

– **Md Wahid Sarwar**, Jharkhand

Glimpses of 2023

The year 2023 has been a challenging one for the world with unfathomable challenges. India, amid this tumultuous global panorama, has emerged as a beacon of resilience and transformation, navigating the global economic storm with timely policy initiatives. India is well-positioned to bridge global divides. Hosting world leaders for the G20 summit and the adoption of the catalytic and comprehensive New Delhi Leaders' Declaration underscore India's diplomatic prowess. True to the spirit of 'One Earth, One Family, One Future', the New Delhi Leader's Declaration that came out of the G20 Summit clearly stated action points and directives towards an affirmative resolve. This role has presented India with opportunities to chart a path from peace and security to economic cooperation and climate action, and it offers hope for solutions to several urgent global issues.

The year 2023 witnessed a commendable transformation across various sectors. This year indeed marks a milestone in India's journey to *Kartavya Kaal*—towards evolution and transformation. The successful launch of Chandrayaan-3 and Aditya-L1 marked a significant milestone for India's Space Sector. It signifies India's commitment to advancing its space capabilities and scientific research that showcases India's growing prowess in space technology.

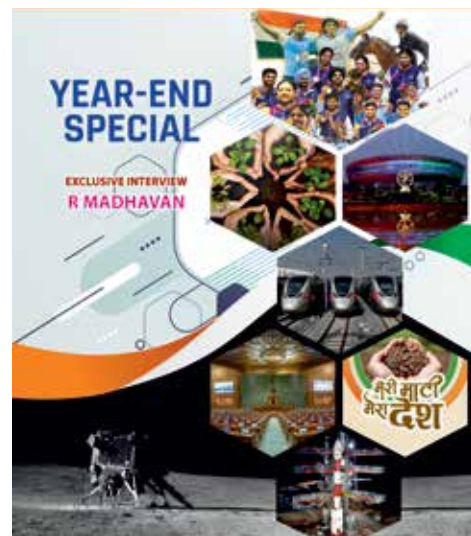
The industrial sector experienced a surge in measures aligning with ease of doing business and global sustainability goals. While the National Logistics Policy seeks to improve efficiency in human resources and logistics services through process simplification, regulatory framework adoption, skill development, mainstreaming logistics in higher education, and the adoption of appropriate technologies, the PM GatiShakti National Master Plan focuses on integrated infrastructure development. The transport sector has experienced significant expansion in terms of network coverage and system output. The emphasis has been more on quality, leading to better speeds and all-weather connectivity. Schemes like Bharatmala, Sagarmala, Parvatmala, UDAN, etc. aim to enhance connectivity and accelerate economic growth. India's first-ever indigenously designed and manufactured semi-high-speed Vande Bharat trains have provided a modern and comfortable rail travel experience to passengers.

The Government continued to prioritise raising rural residents' standards of living to promote more inclusive and equitable development. Through proactive socioeconomic inclusion, integration, and empowerment of rural India, it seeks to 'transform lives and livelihoods'. The launch of the PM Vishwakarma scheme and the Pradhan Mantri PVTG Development Mission are considered important steps in this direction.

With the ongoing efforts to preserve and promote its heritage, India's cultural wealth remains an integral part of its identity. The journey of Azadi Ka Amrit Mahotsav, celebrating India's 75 years of Independence, highlighted the nation's diverse and vibrant culture through events like Har Ghar Tiranga, Ek Bharat Shrestha Bharat, and Kalanjali, culminating with the grand Meri Maati Mera Desh initiative. The inauguration of the New Parliament Building this year also marked a significant moment in the country's history.

Sports was another leveller, and it gave the Indians several reasons to celebrate. The athletes across all games brought home laurels. The 2022 Asian Games will always be remembered as a significant occasion for our country. With 75% more gold medals than in the Asian Games 2018 and medals in 16 new sporting categories, India achieved its highest-ever medal total of 107 in 60 years. These achievement highlights the development of a sports ecosystem where support is provided at all levels. Further, the year ended with India's commendable performance in the Cricket World Cup.

This year-end issue aims to encapsulate the dynamic essence of India's journey across various sectors, providing readers with insightful analyses and glimpses into the major developments and milestones in sectors like Industry, Transport, Culture, Agriculture, and soft power areas like Sports and Cinema highlighting key policy initiatives. This issue gives its readers glimpses of the year that was and the opportunities that lie ahead. □





INDIA'S MOONSHOT

This year has been remarkable for Indian space research and exploration. ISRO was an early developer of cutting-edge technologies like sensors, inertial navigation, guidance, and control systems. The success of extremely important missions like the Mars Orbiter Mission, Aditya-L1, and Chandrayaan-3 can be attributed to its unparalleled capacity.

SUDHEER KUMAR N

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In the midst of a time when space agencies around the world were vying for space race, the Indian space programme was developed for scientific research and applications in the mid-1960s. Since then, the programme has expanded, with an emphasis on societal benefits and self-sufficiency. Many important technologies, materials, and industrial processes have been developed by Indian scientists, who have made

extensive use of in-house and external resources. During the last 50 years, self-reliance has been achieved in designing and manufacturing launch vehicles and satellites. The electronics for launch vehicle avionics and satellites have always been a challenge with imports and customisation. ISRO overcame these obstacles and is now well on its way to putting in place the necessary technologies and infrastructure for manufacturing, assembly, and testing of the sub-systems. With this, ISRO made

its mark on the international space arena as one of the top five space agencies with full capabilities in Earth observation, communication, navigation, and planetary exploration.

ISRO has developed a one-of-a-kind space transportation system. It can now launch payloads ranging from 500 kg to 8000 kg into low, medium, or high Earth orbit using its four operational launch vehicles. PSLV, ISRO's workhorse, offers exceptionally reliable and cost-effective solutions for commercial users worldwide to launch payloads in the 2t class. The turnaround time is excellent, and it can be set up in a number of ways to meet the needs of individual clients. PSLV's growing popularity can be attributed to its versatility; the rocket can launch many satellites in a single flight, its upper-stage liquid engines can be started and stopped, it can inject orbits into a variety of different geostationary orbits, and it can host research on its PS4 orbital platform.

Incredibly complex missions, like as Chandrayaan and the OneWeb commercial launches, were successfully completed by LVM3, the most adaptable and made-in-India launch vehicle. Since its first test flight, it's been the most reliable vehicle in its class. It is another excellent choice for the worldwide commercial markets for both LEO and GEO payloads with capacities of 4t and 6t, respectively.

The newly inducted Small Satellite Launch Vehicle (SSLV), which was developed in record time to satisfy the requirements of the small satellite launch vehicle market, is one of the demand-driven solutions offered by ISRO to the Indian industry.

ISRO was an early developer of cutting-edge technologies like sensors, inertial navigation, guidance, and control systems. The success of extremely important missions like the Mars Orbiter Mission and Chandrayaan-3 can be attributed in part to its unparalleled capacity. Having in-house optics and opto-electronics expertise has allowed for the creation of a wide range of specialised payloads for use in earth observation and planetary exploration.

ISRO has dedicated groups to research and design satellites and their associated payloads. Satellite systems, including antennas, reflectors, and radio frequency (RF) systems, are constantly updated to meet or surpass global standards for technical progress.

In the country and along the round paths of both eastward and southward launches, ISRO has its own ground systems. All EO, communication, navigation, and scientific satellites are monitored around-the-clock by the master control facility and the tracking and telemetry facility. ISRO is now going into the new arena of Space Situational Awareness (SSA) that involves a comprehensive understanding and knowledge of the space environment including location, and behaviour of space objects such as satellite, debris, and other celestial bodies and their future evolution. The infrastructure required to complete the operations is currently being planned by ISRO.

ISRO has significantly expanded its infrastructure in recent years in order to accommodate numerous critical space missions and technological developments. Some of the important facilities are: Trisonic wind tunnel,

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high-altitude test facilities, semi-cryo testing and integration facilities, Gaganyaan facilities, and the ability to integrate and launch multiple launch vehicles simultaneously with little delay. Near India's southernmost tip, a new launch pad is being constructed to give the commercial launch industry unfettered access to launch privately developed launch vehicles into low-Earth orbits.

The foundation was laid by NNRMS in the early 1980s for the use of EO data in GIS applications at the national level, spanning all potential ministries and departments. With this objective in mind, ISRO created the IRS programme, which included first-generation satellites. Progress has been made in a wide variety of specialised areas, as evidenced by satellites like Cartosat, RISAT (Radar Imaging Satellites), ResourceSat, OceanSat, and many more. High-resolution data is provided by these satellites to a wide range of users. ISRO now maintains a

significant number of EO satellites for continuous coverage. Programmes including MGNREGA, PMGSY, PMKSY, AMRUT, PMFBY, SVAMITVA, and UIDIA have benefited from and are making extensive use of EO data.

ISRO possesses a fleet of high-throughput and conventional communication satellites to fulfil the enormous demands of satellite communication.

The Indian Regional Navigation Satellite System (IRNSS), with an operational name of NavIC stands for NAVigation with Indian Constellation. It provides accurate real-time positioning and timing services over India and the region, extending approximately 1500 km around the Indian Mainland. The variety of services offered by NavIC aid in different applications like vehicle tracking and fleet management, location-based services integrated into mobile phones, terrestrial navigation aid for travellers, time dissemination, disaster management, and more, including services to our strategic users. IRNSS consists of three segments: space, ground, and user. The space segment consists of a base-layer constellation of seven satellites in the GEO and GSO planes. The constellation has been augmented recently with the NVS-01 Satellite, which is the first of the second-generation navigation satellite series. NVS-01 is based on the standard I-2K bus structure and has a mass of more than two thousand two hundred kilograms. The NVS-01 satellite has a navigation payload working in the L1, L5, and S frequency bands. As compared to the first-generation satellite series, the second-generation satellite series includes the L1 navigation band and incorporates an indigenously developed Rubidium atomic clock. The inclusion of the L1 navigation band, improves the positioning, navigation, and timing services for civilian users and also facilitates interoperability with other GNSS services. The indigenously developed space-based Rubidium atomic clock designed by the Space Applications Centre Ahmedabad is an important technology that only a handful of countries possess. The satellite is powered by two solar arrays, which generate power up to 2.4 kW. The NVS-01 satellite is designed for a mission life of about 12 years.

AstroSat, India's first space observatory, was launched on September 28, 2015, with a lift-off mass of 1515 kg, by a PSLV-C30 (XL) rocket from Satish Dhawan Space Centre Sriharikota. Almost



2,000 people from 54 different countries have signed up to use AstroSat data. In September 2022, more than 275 pieces for academic journals and about 500 pieces for the GCN circular, the Astronomer's Telegram, and conference papers were published using Astrosat data.

On 5 November 2013, the Mars Orbiter Mission was launched, and after 300 days of travelling between planets, it was placed in orbit around Mars on 24 September 2014. Over the course of its eight-year lifetime, the mission, which carried a total of five scientific payloads, made major contributions to our understanding of the Martian atmosphere, exosphere, surface features, and so on. The Mars Orbiter Mission lost touch with Earth in April 2022 because of a protracted eclipse after spending nearly eight years in Martian orbit and accomplishing a wide range of scientific goals on Mars and the Solar corona. More than 7,200 users have registered with the ISSDC portal in order to have access to the MOM data, and these users have downloaded over 27,000 pieces of science data. There are almost 400 registered users that are located in over 50 different countries.

India's first spacecraft, Chandrayaan-1, was launched on 22 July 2008, and it orbited the Moon at 100 kilometres. It was equipped with eleven high-tech instruments. It was a spectacular demonstration of our technological prowess, and it forever changed the course of Indian lunar exploration. The Chandrayaan-1 Orbiting Spacecraft launched a Moon Impact Probe (MIP) designated Chandra's Altitudinal Compositional Explorer (ChACE). ChACE has a camera, altimeter, and mass spectrometer for analysing the lunar surface. The Man in the Moon (MIP) probe was the first artificial object to reach the Moon's South Pole. With this, India's lunar programme officially got underway.

India successfully launched their follow-up mission, Chandrayaan-2 on 22 July 2019. This mission consists of an Orbiter, Lander, and a Rover. Despite the unsuccessful soft landing, the orbiter is still operational and gathering data. Multiple first-of-their-kind instruments, including an L-band SAR operating for the first time on the Moon, a large area X-ray spectrometer with the ability to create elemental maps with a resolution of 12.5 kilometres, and an instrument to study the global exospheric dynamics of noble gases, are aboard the

orbiter. The ongoing observations have now lasted for five years.

The Chandrayaan-3 mission set out to prove that a soft-landing and roving capabilities could be accomplished on the Moon. The Moon mission was launched on 14 July 2023, and it made a soft landing near the Moon's South Pole on 23 August 2023. After touching down, the science payloads spent the next 14 lunar days investigating the immediate vicinity. The initial ChaSTE experiment revealed the thermal behaviour of the lunar surface to a depth of 10 cms. Sulphur was detected by LIBS on the lunar surface. Then, ILSA recorded the vibration caused by the rover's movements, while RAMBHA-LP measured the plasma near the surface. The goals of the mission have been successfully completed.

The Aditya-L1 mission is the first in India to focus solely on solar science. When the spacecraft reaches a distance of around 1.5 million kilometres from Earth, it will enter a halo orbit around Lagrange point 1 (L1) in the Sun-Earth system. The satellite will enter a halo orbit around the L1 point to ensure that its observations of the Sun are unaffected by occultation or eclipse. In addition, this will make it possible to track the effects of solar activity on space weather in real time. In order to investigate the photosphere, chromosphere, and corona of the Sun, the spacecraft is outfitted with seven instruments that measure electromagnetic fields, particles, and magnetic fields. From the privileged position afforded by the Lagrange point L1, four payloads directly observe the Sun, and the remaining three payloads conduct in-situ research on particles and fields, allowing for crucial scientific studies of the propagatory influence of solar dynamics in the interplanetary medium.

ISRO has begun its XPOSAT mission of scientific research, as well as the crucial NASA-ISRO Synthetic Apparent Temperature Radar (NISAR) initiative in which the two organisations will work together. ISRO is currently moving forth with a more comprehensive plan for a succession of lunar missions, including the man-on-the-moon and Gaganyaan missions, which will eventually result in the construction of a Bharat Space station. The requisite technologies and heavy lift launch vehicles are now in the planning stages, with a short timeline to realisation. □



INDIA'S GROWING STATURE A RISING POWER

There has been a tremendous change in India's trajectory over the last nine years. India has now entered the period of Kartavya Kaal, which will provide a golden opportunity for India to achieve unprecedented levels of scientific, technological, economic, and social progress. Today, India has emerged as a Vishwa Mitra (global friend), a Vishwa Guru (global teacher) and a Vishwa Vaid (global physician).

SUJAN CHINOV

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At a time when geopolitical contestation and conflicts have riddled the world over political, ideological, and territorial differences, the international community yearns for a new direction beyond the binary choices offered by competing powers. The Covid-19 pandemic struck a mortal blow to economies around the world. The post-Covid recovery phase, which ought to have seen the global community come together, is instead witnessing deep divisions. The multilateral system,

including the Bretton Woods structures, has failed to deliver. Help and hope are scarce for the distressed economies, especially in the Global South, which face the multi-pronged challenge of disruption in the availability of food, fuel, fertilisers, and developmental finance.

It is at a key point of inflection in geopolitical tumult that India has set an example for the rest of the world through its leadership of the G20, its values-based approach, its emphasis on global cooperation, and a human-centric vision of peace



and progress for all. India's Presidency of the G20 this year, despite doubts expressed by the perennial naysayers in India and around the world, was a big success in building consensus on key issues such as the UN's Sustainable Development Goals (SDGs), macro-economic stability, digital public infrastructure, climate challenge, a just and equitable green transition, and reforms of multilateral structures. India's image as a credible power, assiduously built over the past few years, has been further consolidated as a result of the vaccines and healthcare assistance it extended to countries around the world at the height of the pandemic.

Indian Leadership

Under Prime Minister Narendra Modi, India is no longer perceived as an observer on the global stage. It is now a key player in shaping outcomes. One example, based on the G20 motto of 'One Earth One Family One Future' and the philosophy of Vasudhaiva Kutumbakam, is the inclusion of the African Union (AU) into the G20 at the New Delhi Summit, hinged on India's strong advocacy of 'leaving none behind'. This momentous development, which makes the G20 structure more representative, highlights India's role as a true friend of the Global South.

The positive outcomes reflected in the G20 New Delhi Leaders' Declaration resonate well with many initiatives taken by the Modi government in recent years. Apart from the vaccine assistance programme during the pandemic, it is pertinent to mention the International Solar Alliance (ISA), the Coalition for Disaster Resilient Infrastructure (CDRI), the Indo-Pacific Oceans Initiative (IPOI), and Infrastructure for Resilient Island States (IRIS). To this list should be added the Green Grids Initiative—One Sun One World One Grid (OSOWOG), which was proposed by PM Modi at the First Assembly of the International Solar Alliance (ISA) in 2018.

Mission LiFE and Climate Crisis

Climate change and environmental degradation have emerged as two of the world's greatest challenges, with the potential to create unimaginably adverse consequences for future generations. It is here that India has pointed to a different path for ameliorating the situation, beyond science, technology, and the exploitative mercantilism that characterises the fissures between the developed West and the distressed Global South. India has offered a new moral compass, first expounded in Glasgow by PM Modi through Mission LiFE (Lifestyle for Environment), which places individual behaviour at the centre of the global climate action debate.

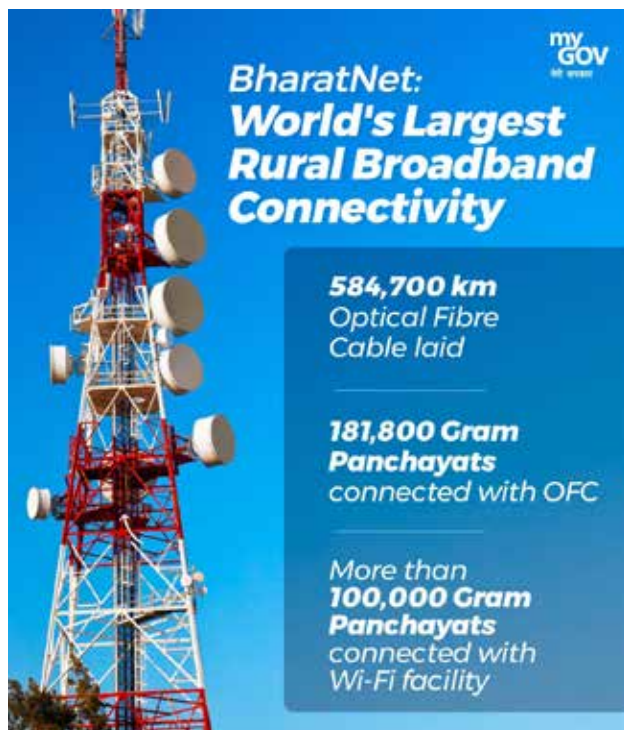


Now codified as the G20 High Level Principles on Lifestyles for Sustainable Development, this mission intends to propagate a global network of individuals committed to environmentally-friendly lifestyles based on sustainable consumption patterns. On its part, India is the only G20 country to have achieved its Paris Agreement Goals well before the stipulated target of 2030. Even US Special Presidential Envoy for Climate Change John Kerry acknowledged that India is an indisputable world leader in clean energy.

PM Modi has announced ambitious targets for 2030, including installing 500 gigawatts of renewable energy capacity and reducing the emission intensity of its economy by 45 per cent. India's clean energy transition and global climate mitigation promise to demonstrate the commitment of its leaders at the highest level. India expressed its intention to intensify its climate action by presenting an updated Nationally Determined Contributions (NDC). This update is a step towards India's long-term goal of reaching net-zero emissions by 2070.

Clean Energy

Similarly, at the G7 Summit in June 2022, PM Modi highlighted India's efforts towards clean energy. He noted, "India has the world's first fully solar-operated airport. India's huge railway system

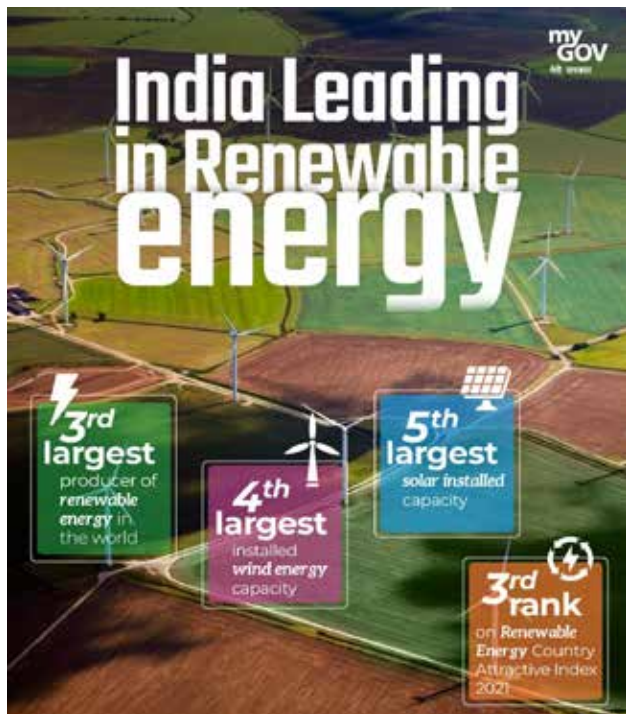


will become net zero in this decade. We achieved the 40 per cent energy capacity target from non-fossil sources nine years before time". Besides these multilateral commitments and proposals, India has also signed bilateral clean energy partnerships with the EU, Japan, and the US.

India and the US have together revamped the US-India Strategic Clean Energy Partnership (USISCEP). The partnership aims to advance energy security and innovation, scale up emerging clean energy technologies, and deploy technical solutions through five key pillars:

- Responsible Oil and Gas Pillar
- Power and Energy Efficiency Pillar
- Renewable Energy Pillar
- Sustainable Growth Pillar, and
- Emerging Fuels and Technologies.

Yet another initiative is the EU and India Clean Energy and Climate Partnership (CECP), which was established in 2016. This aims to promote clean energy cooperation and the implementation of the Paris Agreement by increasing the deployment of climate-friendly energy sources such as solar and wind energy. Current areas of cooperation include activities in offshore wind energy, roof-top solar panels and solar parks, integration of renewable



energy and storage, smart grids, biofuels, and energy efficiency in buildings. This partnership was reconfirmed in the joint statement at the EU-India Summit in October 2017, and later in July 2020, the EU-India Strategic Partnership: A Roadmap to 2025 was agreed.

The focus on energy is not only generic in nature but also specific. India will be a significant benefactor of the emerging global energy trade in hydrogen, and the country might eventually become a net energy exporter. In order to export green hydrogen and establish hydrogen hubs in various locations around the nation, India can imitate the Australian models. PM Modi has said that soon India will become a critical component in the supply chain of not only green hydrogen but also other important arenas, so as to ensure safe and secure alternatives to the ongoing disruptions. This would provide India with a quantum leap in its efforts to combat climate change.

Resilient Supply Chains

In December 2021, the Government announced a nearly \$10 billion production-linked incentive (PLI) scheme to encourage chip manufacturing in India. In March 2022, the Union Cabinet approved the Semicon India programme to develop the semiconductor and display manufacturing ecosystem. At the Semicon India Conference in

April 2022, the Prime Minister said that the Government aims to establish India as one of the key partners in global semiconductor supply chains. He said India has “an exceptional semiconductor design talent pool, which makes up to 20% of the world’s semiconductor design engineers.” Moreover, most of the top 25 semiconductor design companies have their design or R&D centres in our country.

The trilateral Supply Chain Resilience Initiative, launched in collaboration with Australia and Japan, is another significant step in addressing the supply chain crisis. This initiative aims to coordinate and incentivise supply chain diversification away from China and towards the three countries and like-minded partners. Alongside developing new initiatives, international players must also examine the wider implications of potential monopolies and supply chain disruptions with regard to lithium, cobalt, copper, nickel, and rare earths, many of which are critical to green technologies and digital infrastructure.

Digital Infrastructure

India has emerged as one of the fastest-growing digital economies in the world. There has been rapid digitalisation in India in the past few years. On 1 July 2015, the Prime Minister launched Digital India to transform India into an empowered digital economy. Since then, there has been a meteoric rise in mobile ownership across India in the last eight years. Digital India aims to increase the affordability and accessibility of the internet to Indian citizens and also to improve the digital infrastructure across the country.

Technology adoption by the Government has ensured a remarkable increase in transparency in governance. Today, almost all government programmes have a digital dashboard that provides all the details of beneficiaries. In 2021, India reported 48 billion real-time digital transactions, or 40 per cent of the global total. Interestingly, this is nearly three times higher than China and seven times greater than the combined real-time payments volume of the world’s leading economies: the US, Canada, the UK, France, and Germany. India’s digital transformation under PM Modi has not gone unnoticed. Around the world, countries have evinced interest in the Indian model of the UIDAI, Aadhaar and the unified payment portals that link India’s huge population into a seamless whole.

Yoga and Ayurveda

India has traditionally excelled at contributing to the global good, as evident during the Covid-19 pandemic, when it provided free vaccines to nearly 100 countries and sent food aid and humanitarian assistance to Afghanistan, Ukraine, and several African countries. India has supported prevention over cure not only by exporting vaccines but also by promoting healthy living habits. The western notion of disease and medicine differs from the eastern version. India believes in food and traditional practices like yoga as part of medicine that can stimulate the holistic development of an individual.

As early as in his UNGA speech in 2014, his sought to promote this while proposing the International Day of Yoga. Sharing the great Indian legacy of Yoga with the world was personal gift to humankind. Today, countries around the world see merit in the holistic health practices offered by India's ancient civilisation, transcending ideological and religious barriers. Until India offered to share its patrimony through such a path-breaking initiative, Yoga was practised overseas in expensive studios and also subjected to idiosyncratic interpretations, even being made part of sporting competitions! This initiative revived the true practice of Yoga in its purest form, making it available to the masses around the world.

During Covid, the Government promoted Ayurvedic medicine or simple home remedies to boost natural immunity. It is not an alternative to allopathic medicine, but a complement to it. The Indian initiatives were leading the discussion at the WHO regarding delaying the intellectual property of vaccines. India exported medicines and other equipment to help various countries and became the first respondent in the Indian Ocean region. Vaccine Maitri helped deliver vaccines to 101 countries. In addition, India has provided open-source apps like CoWIN and Arogya Setu to other developing countries. The government proclaimed these as Digital Public Good, which 50 countries have utilised for their vaccination drives.

International Year of Millets

On the food security front, recognising the potential of millets to meet domestic and global nutritional needs, the Government of India proposed to the United Nations that 2023 be

declared the International Year of Millets (IYoM-2023). This proposal garnered support from 72 countries, and on 5 March 2021, the United Nations General Assembly (UNGA) officially declared 2023 as the International Year of Millets. This is a primary food crop in semi-arid tropical regions, where conventional food crops struggle to thrive due to limited rainfall and poor soil quality. Millets also boast superior nutritional content in comparison to major cereal crops, contributing to food security and dietary health. They are particularly resilient to drought and extreme weather conditions, making them naturally adapted to such challenging environments.

With increasing concern about lifestyle diseases like diabetes and the prevalence of refined diets, modern consumers are gradually turning to gluten-free millets as a viable substitute for staples like wheat and rice. The Covid-19 pandemic accelerated this shift, with both urban and rural populations embracing millets to boost their nutritional intake and enhance their immunity. The health benefits of millets received a huge boost during India's G20 presidency. Scores of dishes made of millets were offered to thousands of foreign and Indian participants at the hundreds of G20 events held in India. As the Think20 Chair of India's G20 Presidency, this writer is proud to state that millets featured prominently at each of the events organised by the Think20 engagement group.

Conclusion

There has been a tremendous change in India's trajectory over the last nine years. India has now entered the period of Kartavya Kaal, which will provide a golden opportunity for India to achieve unprecedented levels of scientific, technological, economic, and social progress. When India marks the centenary of its Independence in 2047, it will be a responsible global power. It will achieve this dream on behalf of all the Indian people, particularly the youth. India will rise to the pinnacle of glory because it is today willing to assume a leadership role in diverse areas and contribute to the greater good. Today, India has emerged as a Vishwa Mitra (global friend), a Vishwa Guru (global teacher), and a Vishwa Vaid (global physician) in sharp contrast to many others embroiled in trade, military, or ideological confrontation. □

(Views expressed are personal)

IN CONVERSATION WITH R MADHAVAN

Ranganathan Madhavan has donned many hats during his illustrious career of over 30 years. Starting in the early 1990s, with the newly-booming satellite TV, Madhavan worked in around 1800 episodes of serials before getting his first break into films in the year 2000, with Mani Ratnam's Tamil film *Alaipayuthey*. Since then, he has been an unstoppable force, leaving his mark in different forms, languages, and genres of cinema. Madhavan is a versatile actor who has given memorable performances in films like *Rang De Basanti*, *3 Idiots*, *Guru*, and several others. He has recently received a National Film Award for his directorial debut, *'Rocketry: The Nambi Effect'*. This year, he has also taken up the role of the Chairman, the Film and Television Institute of India (FTII). He comes across as a person with a wide horizon, depth, and wisdom that is equally motivating and enriching like his wide array of cinematic achievements. This publication's **Editor, Shuchita Chaturvedi**, had an engaging conversation with **Actor-Director** as well as **the Chairman of FTII, R Madhavan**, where he delved into various subjects at length including his cinematic journey, the role of training in filmmaking, global cinema landscape, technology as an enabler, and his engagement with the youth. A few excerpts:

“**TECHNOLOGY MAY COME AND GO BUT THE ART OF STORYTELLING IS HERE TO STAY.**”

SC: *Congratulations on receiving the National Film Award and this new responsibility of FTII. You have come a long way from being an engineer, with a defence background, a communication professional, an actor, an award-winning filmmaker, and now the Chairman of FTII. How are your intent and motivation reflected in your work and vision for the Institute?*

RM: This is a very good question and thank you for the intended compliment as well. I am trying to revisit my journey to assess what brought me here. What was so special about my attitude, training, and conditioning that a boy from a small town like Jamshedpur made it so far?

On introspection, I find several things that may have contributed. All the qualities and opportunities that were useful to me then are available to the students of today as well—leaving your comfort zone to try new things, exploring experiences for you as well as for others around, or the way you respect the people around and treat them as equals. I will not talk about the philosophical aspects of this but I would like to discuss the tangible outcomes. When I joined the television industry way back in 1994, there were no casting directors to present the artists, no magazines to write about us, nor were people within the industry endorsing and recommending



our work. Casting was done merely with word of mouth. Reaching out to people to seek roles was a tedious process and it used to happen out of sheer luck. It was a time when cable channels had just started and there was a notable need for artists. When I got my first role in a television serial—*Yule Love Story*, where I played the role of a convict, it was because of the short haircut that I had, being from a defence background. This is how my story started. During those years, when I had no connections in the industry, I used to spend a lot of time having tea with the spot boys and light men as they were mostly from Bihar and felt a connection with me because I understood their dialect well. I don't know if this was intentional, but it was these men who endorsed my work and recommended my name to various producers by highlighting my multilingual background. I would give credit to them for the initial breaks that I got in my early career. By the time I got my first film with Mani Ratnam, I had already done almost 1800 episodes equivalent to about 300 films. I wish to share with my students in FTII the wisdom that I got out of these experiences.

SC: *Today, OTT has turned into an equaliser where movies are made and released in multiple languages simultaneously and can be consumed at the ease of our respective homes. It is breaking the barriers in terms of regions and languages. How do you see this power of streaming platforms and what they have to offer to institutes like FTII and filmmaking in general?*

RM: I would give credit to myself for identifying the power and potential of OTT at a stage when others shied away from it. At its nascent stage, senior actors did not want to give it a shot. In fact, reviewers too avoided it to safeguard their professional standing. But in those days, I chose to do a series, 'Breathe', which got an immense response that eventually changed the entire perspective towards these platforms.

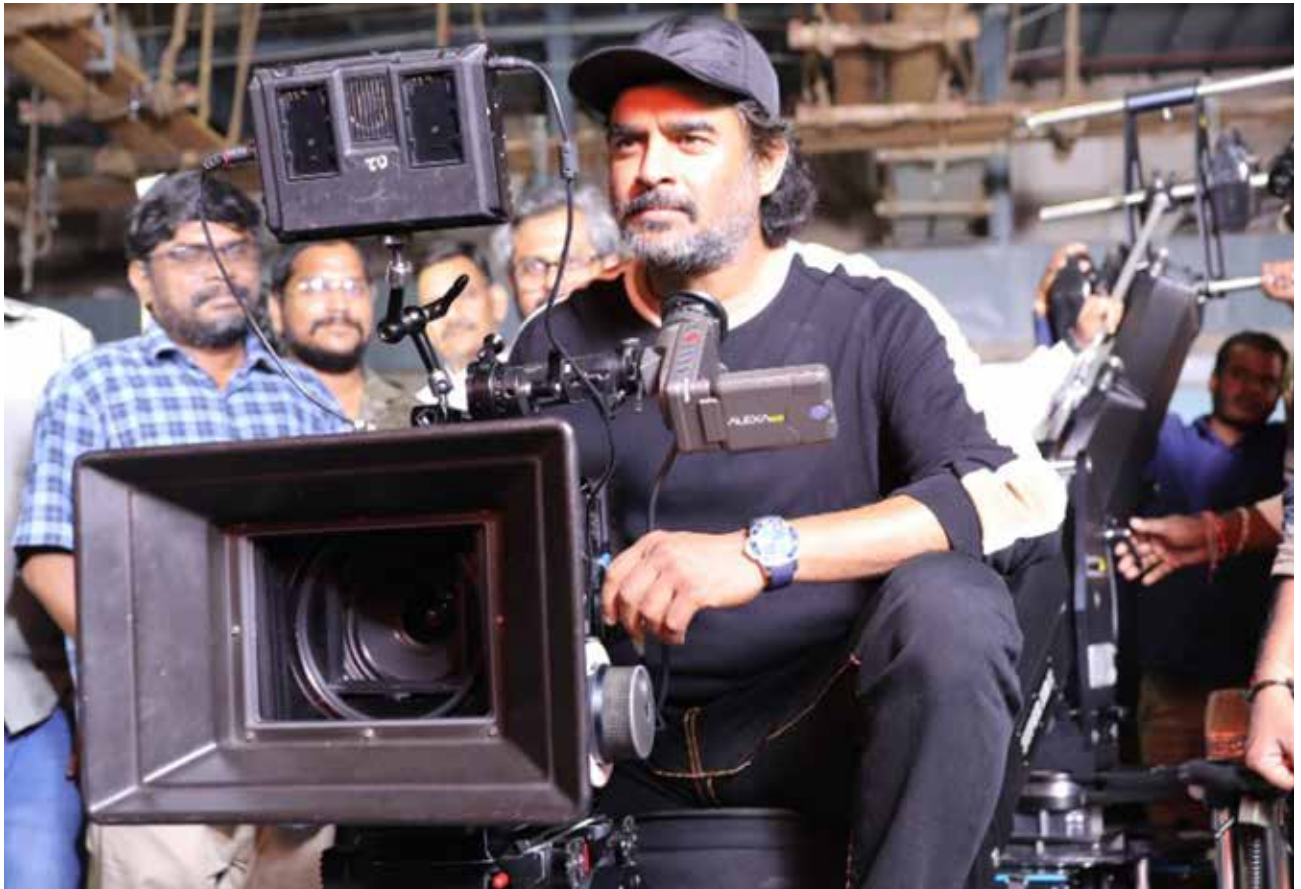
OTT is certainly a level-playing field but it comes with its challenges. It was assumed that films that couldn't get a good deal with producers often landed on OTT platforms. These platforms are a different ballgame altogether. It involves a different approach, science, and process, for an

actor, cinematographer, and especially for script and screenplay writers. An actor needs to assess the script to fit it into a certain format and treatment that would best suit the storytelling, and deciding whether it deserves to be an OTT film, a series, or a cinema. If there is an error of judgment at this stage, then the project might get doomed. *The Railway Men* (Madhavan's latest series) could not be a cinema as it needed a format and storytelling spread across four episodes to justify the subject. The hard work involved for the technical team, scriptwriters, and dialogue writers is way more than the efforts involved for an actor. Every series has a series arc, an episodic arc, and it involves a science that needs expertise. The experts in the field are required to train the professionals. In fact, I had heard somewhere that in the West, there are courses spanning six weeks that teach professionals how to read a script and take non-tangibles out of it. The description that should not be shown on screen is non-tangible. One needs to add only those elements in a script that can be tangibly shown on the screen. The acumen needed to understand and address these challenges will go a long way for

the FTII students. OTT has a longer commitment and has intricate plotting spread in long episodes. The training needs to be done accordingly with an emphasis on understanding the nature and challenges of different fields and mediums to equip the students better.

SC: *With the advent of new technology and AI, every field is evolving. Newer roles are being created while some of the roles and tasks are becoming less useful. How can we ensure up-skilling and reinventing in these changing times?*

RM: This is a very good question but, I must say that the art of storytelling will continue to exist. There might be some changes in terms of its pacing and format. Some people know how to tell a story while some fail terribly on this front. Since this technology is available to all, common people, today, are using their mobiles and devices to create good content. There are creators who are developing low-cost but extremely engaging and byte-sized content such as reels. They are able to connect with their viewers, and evoke high-level emotions, in such a short duration of time, which a filmmaker achieves





through a full-fledged film. With such content freely available, the filmmakers need to make engaging films. Cinema was once considered larger-than-life and seen with awe and respect in theaters. But, with technology and easy accessibility, the viewers have a lot of choices. Filmmakers need to recondition themselves for the changing times. Technology will always provide a basic platform that will continue to get higher in standards. AI is available to all screenplay writers, but what sets apart is its effective use for storytelling. This depends on one's talent and training. A tale of *Ghatotkach* can be as engaging and exciting as that of *Hulk* with the art of storytelling.

SC: *How can we ensure better quality in content on social media while promoting more local talent? Do FTII-like institutes offer some short-term courses that equip the content creators better?*

RM: Yes, of course, this is a very good question and we have been working on it. In fact, there are several short courses in FTII that are conducted not only in Pune but also in different cities and states, right up to Jammu & Kashmir.

We have also been conducting 75 short courses completely free of cost for the learners from Scheduled Tribes. Since 2017, on our open-learning platform, we have had 15,000 plus learners.

SC: *Filmmaking is a collaborative field. What are the efforts being made to bridge the gap between academia and industry and to help talent find a suitable place in the industry?*

RM: FTII, I think, is one of the premier institutes in the world. With its facilities, campus, and equipment fully utilised, I think one will be prepared to create content from anywhere in the world. If people came to know merely about the selection process of FTII, they would understand the calibre these students have. And there is a greater need of such educated and technically-sound people in our industry. When we induct people from IITs and IIMs and give them jobs with huge salaries, we do not make them CEOs directly. We give them a training period so that they understand their mistakes, correct them, and by giving them the right guidance, we can fully harness their capabilities after a few years. But our industry does not have this scope. For example, if you become a cinematographer, it means you are directly at the CEO level from the first day itself. You don't have an intermediate period. Our students need to understand that you can be completely equipped with what is required to be a full-fledged DoP (Director of Photography), but you have to start with baby steps. You have to prove that you are an asset to the unit, and can withstand the stress of making cinema or content. Also, someone might not have the requisite talent in terms of technicality in a group, but that person could be the life of the group. If I see that quality, I would want to have them on my team. I don't mind having a lesser technician on board. The same thing happens as a filmmaker. As producers, we want to see how many students are team players. So, these are the interpersonal skills and abilities that any artist or technician should have to be able to lead that department. If the students of FTII or the hiring teams understand this, then I think amalgamation will become much smoother and clearer.

SC: *So, is it important to inculcate these soft skills as well?*

RM: This is extremely important in every organisation. In filmmaking, you get only one chance to make a mistake. No one will spare you for making a mistake in your first film as it may entirely fall apart, which is a risk that nobody would want to take. There is no second chance, that's the thing.

SC: *If we talk about global cinema, there is a sea change. Good content is everywhere and it is a level-playing field now. How can Indian content stand out and find the place it deserves in this global market?*

RM: For this, you have to become a world-class storyteller. You have to break your conditioning. Whatever you have been taught earlier has to be unlearned and you have to make yourself completely vulnerable to learning new ways in the changing times. We have seen, how, in recent times, K-pop culture has become so popular in India due to their content that teenagers and even adults are learning the Korean language to keep themselves abreast with this culture.

SC: *So, where are we in creating such content for our children?*

RM: Exactly what I am trying to convey. We also have that technology to make our content international. I think people are watching them (Korean drama) because their performance is very realistic, their screenplay is faster, and people can relate to their philosophy. This is the opportunity that is available to us as well. You create such progressive content and utilise a higher level of skilled technicians and actors. If you continue to only believe in stardom then you will limit your films to a certain level. Sometimes money can ruin a project. You have to know the right budget for a project to keep the integrity of the people involved in the project correct. That's also a skill.

SC: *You have not taken any professional training in films. In fact, you were an engineer like Farhan (Madhavan's character in 3 Idiots) who ultimately became an artist. So, in today's time, how important are technical know-how and professional training in this field?*

RM: In a nutshell, if I had known that I had to join the film industry, and if I had this technical training, then I think that the work that I have been able to do in 18-20 years, I could have done it in six years. That makes all the difference. But at that time, there was a lot of forgiving factor. You could afford making mistakes and learn at the cost of the producer. Like I said at the beginning of the interview, I have done 1800 episodes on TV. So, I remember, when I was doing my first film with Mani Ratnam, PC Sreeram was the cameraman. He was surprised to find how well-versed I was with the nuances of the camera and frames. So, that was out of sheer experience. Until he mentioned that, I didn't even realise I have this skill. But when he mentioned it, I understood that if I had been taught this earlier, then this journey would have become much shorter.

But, in any case, the hard work cannot be reduced. The amount of hard work you have to put in to get that experience is extremely important. I think





if I had actually gone and trained, I would have been much more successful in a much shorter period.

SC: *What is your content consumption pattern? What do you read? What do you watch?*

RM: I read very little. I cannot read for some reason. However, I have made efforts to acquire a lot of knowledge because I understood from the beginning that if I merely stayed in the comfort zone of the industry, I wouldn't be able to grow as I find the people in the film industry often having the same kind of conversation.

SC: *This might apply everywhere if we limit ourselves to a profession...*

RM: Absolutely. Especially in the film industry, because the moment you enter the industry, the knowledge about the outside world decreases. You need to stay connected with the world you are showing in your films. If you do not know what the fares are for an auto rickshaw ride then you have lost that connection. It might not be the case for other industries. If you are an engineer and you are spending time with engineers talking about engineering, it will not affect your work. But in the film industry, where you want to make a story for your audience, it is important to know where society is going. So to acquire this knowledge, I take breaks from my profession from time to time. I have done only 3-4 films in the last 14 years. Many changes took place during this period. After social media, people have enhanced their knowledge and the way they perceive things. To be aware of all these developments, we need to devote some time. I watch a lot of videos. And it is more important that I spend time with different professionals. It takes a little time for them to come out of the influence and awe they usually have for a 'star' and to interact with the real

'Maddy' I am as a person. Then little by little, I get to know of their profession. Whether they are architects, hydroponic farmers, organic farmers, whatever professions they have, they start opening up and talking to me. When this knowledge and experience gained from them is successfully incorporated into our films is where we become relevant. When I was doing *Rocketry* (The Nambi Effect), I met so many people. Initially, I was not confident in directing. But I learned so much about liquid-fuel engines from professionals, I met, that I realised only I could tell this story. This is the kind of confidence that knowledge gives you.

SC: *The readership of Yojana comprises a large number of students who take various competitive exams, which is often a long journey. What would you like to tell them to help find a deeper purpose in life and to pave a new path to success?*

RM: Recently I watched a film in which there was a dialogue, '*Ae burey waqt, adab se pesh aa kyunki waqt badalne mein waqt nahi lagta.*' (O unfavourable time, behave yourself for it doesn't take much time to change the time). I liked that line. For all those who put everything on the line in a moment, it is important to know that when everything is done, there is still another moment. Because whatever they are preparing for at the competitive level, whatever they think is their goal, whatever their ambition is, many people get it in the first attempt, while some don't. But, how can your full credibility, your achievement, and your capability are judged in a few hours? It is possible that on that day, your preparation could not be adequate, or that day something else came up bothering you. That does not define, in my opinion, the ability of a student or of a professional. In golf, they say, if you hit the ball with full strength, it does not go that far and accurate. You have to hit the shots at 80% so that you can play the game well and maintain your consistency. There are many philosophies in this principle of 80%. Do everything in a manner so that you don't get affected by the outcome. If you hit 100% and don't get the desired results, you will feel that you are not worth it despite putting your best efforts. Do not take the burden of your life completely on your shoulders on the day of examination as if your life is defined by just that moment of your life. It is not worth it. Competitiveness will increase. But I can say with confidence that every person has a skill that makes them one in a million. Find your strength. □



SPORTING PROWESS

THE YEAR OF HISTORIC WINS

The Asian Games 2022 has been historic for our nation, as an event that will be cherished forever. India bagged its highest-ever medals (107) in 60 years with 75 per cent more gold medals than in Asian Games 2018 and bagged medals in 16 new sporting categories. It is a testament to not just our growing bench strength but also to the creation of a sports

ecosystem where support is being extended at every level. The remarkable achievement of our women athletes in this tournament, who clinched around 50% of the total medals of Indian contingent, is a testament to their unwavering dedication, talent, and hard work. This feat not only showcases their prowess on the field but also their resilience and determination to succeed against



all odds. At these games, the women archers won 3 gold and 2 bronze medals, making our country proud at the international level.

Indian para-athletes too have created history with India's highest-ever medal tally in the Para Asian Games with 111 medals, including 29 Gold medals. Previously India had won 14 medals in the 2010 edition, 33 in 2014 and 72 in 2018. This is India's best-ever performance since the inception of the Games where India was ranked 5th in the overall medal tally. India sent its largest contingent this year, consisting of 303 athletes (191 male & 112 female).

The Ministry of Youth Affairs and Sports has implemented various Sports Promotional Schemes across the country through Sports Authority of India (SAI), viz. National Centres of Excellence (NCOE), SAI Training Centre (STC), Extension Centre of STC, National Sports Talent Contest (NSTC) - (with its subschemes for Regular Schools, Indigenous Games & Martial Arts School & Akharas), whereby services of expert coaches, sports equipment, boarding and lodging, sports kit, competition exposure, educational expenses, medical/insurance and stipend are provided. The disciplines covered in these schemes include traditional Indian games

like Kabaddi, Archery, Wrestling, Kho-Kho, etc.

R Praggnanandhaa etched his name in the history books of Indian chess. He had become the first Indian after Viswanathan Anand to reach the final of FIDE World Cup and was a victory away from joining the Indian legend at the top.

The Government of India is fostering a culture of sports in India. One of the major schemes of the Union Government - the Khelo India Scheme - is being implemented by the Ministry of Youth Affairs and Sports through its five verticals which promote sports in the entire country including the rural areas. Khelo India is the basic platform to showcase sporting skills and spot talent at the national level. It also provides development pathways for gifted and talented children to achieve excellence. Under the 'Talent Search and Development' vertical of this scheme, Khelo India Athletes are identified, selected, and provided annual financial assistance of Rs 6.28 lakh per annum per athlete, which includes Rs 1.20 lakh as Out-of-Pocket Allowance and Rs 5.08 lakh for other facilities like coaching, sports science support, diet, equipment, consumables, insurance charges, etc.

Additionally, the scheme offers pathways to budding sportspersons by providing nationwide platforms. The Ministry in collaboration with relevant National Sports Federations, the School Games Federation of India, and university sports promotion organisations like the Association of Indian Universities, organise national-level multisport competitions, namely, Khelo India Youth Games, Khelo India University Games and Khelo India Winter Games.

TOPS (Target Olympic Podium Scheme) is another flagship program of the Ministry of Youth Affairs and Sports which is an attempt to provide assistance to India's top athletes.

The stories of various athletes excelling in sports, and making India proud at international events paint a vivid picture of the transformative power of sports in the country. India's focus on promoting sports is driving the growth of sporting talents and fostering a culture of fitness and competition. This transformation, driven by governmental support and individual determination has further strengthened India's presence in the international sports. □

(From various sources)

INDIA'S FIRST REGIONAL RAPID TRANSIT SYSTEM (RRTS)



The Prime Minister, inaugurated the priority section of the Delhi-Ghaziabad-Meerut RRTS Corridor at Sahibabad RapidX Station in Ghaziabad, Uttar Pradesh on 20 October 2023. He also flagged off the Namo Bharat RapidX train connecting Sahibabad to Duhai Depot, marking the launch of the Regional Rapid Transit System (RRTS) in India. He dedicated to the nation, two stretches of east-west corridor of Bengaluru Metro.

The 17 km priority section of the Delhi-Ghaziabad-Meerut RRTS Corridor will connect Sahibabad to 'Duhai Depot' with stations at Ghaziabad, Guldhar, and Duhai on the way. The foundation stone for the Delhi-Ghaziabad-Meerut corridor was laid by the Prime Minister on 8 March 2019.

RRTS is a new rail-based, semi-high-speed, high-frequency commuter transit system. With a design speed of 180 kmph, RRTS is a transformational, regional development initiative, which is designed to provide high-speed trains for intercity commuting every 15 minutes, which can go up to a frequency of every 5 minutes as per requirement.

A total of eight RRTS corridors have been identified to be developed in NCR, out of which three corridors have been prioritised to be implemented in Phase-I including Delhi – Ghaziabad – Meerut Corridor; Delhi – Gurugram – SNB – Alwar Corridor; and Delhi – Panipat Corridor. The Delhi-Ghaziabad-Meerut RRTS being developed at a cost of more than Rs 30,000 crore and will connect Delhi to Meerut in less than an hour of travel time going through the urban centres of Ghaziabad, Muradnagar, and Modinagar.

RRTS being developed in the country, is a state-of-the-art regional mobility solution and is comparable to the best in the world. It will provide safe, reliable, and modern intercity commuting solutions in the country. In line with PM GatiShakti National Master Plan, the RRTS network will have extensive multi-modal integration with Railway stations, Metro stations, Bus services, etc. Such transformative regional mobility solutions will boost economic activity in the region; provide improved access to employment, education & healthcare opportunities; and help in the significant reduction of vehicular congestion & air pollution. □

Source: PIB



Glimpses of 2023



January

World commemorates 2023 as the Year of Millets.

17th Pravasi Bharatiya Diwas Convention 2023 held in Indore.

World's longest river cruise MV Ganga Vilas inaugurated.

108th session the Indian Science Congress held in Nagpur.

21 unnamed islands of Andaman & Nicobar Islands named after 21 Param Vir Chakra awardees.



February

The Union Budget 2023-24 presented in Lok Sabha.

36th Surajkund International Crafts Mela gets underway.

India gets its revised Drone Policy.

Aadi Mahotsav, the mega National Tribal Festival, organised in New Delhi.

New Delhi World Book Fair 2023 gets underway.



March

India bags Golden and Silver Star at The International 'Golden City Gate Tourism Awards 2023' at ITB, 2023 held in Berlin, Germany.

Khelo India Dus ka Dum tournament organised as a part of the International Women's Day 2023 celebrations in various cities of Uttar Pradesh.

Asia's largest 4-metre International Liquid Mirror Telescope (ILMT) unveiled in Devsthal, Uttarakhand.

Sagar Setu mobile app of National Logistics Portal (Marine) launched.



April

Kashi Telugu Sangamam was held in Varanasi, Uttar Pradesh.

Rajasthan's first Vande Bharat Express between Ajmer and Delhi Cantt flagged off.

The President presents 3 Padma Vibhushan, 5 Padma Bhushan and 47 Padma Shri Awards for 2023 at the second Investiture Ceremony at Rashtrapati Bhavan.

Indian Space policy detailing public and private cooperation guidelines introduced.



Glimpses of 2023



May

‘Sanchar Saathi’ portal, developed to prevent frauds such as identity theft, forged KYC, banking frauds, launched.

The India Pavilion at Cannes film festival inaugurated.

The Khelo India University Games 2022 gets underway in Uttar Pradesh.

Prime Minister conferred with the ‘Grand Companion of the Order of Logohu’, the highest civilian award of Papua New Guinea.



June

India’s first international cruise vessel, M V Empress - from Chennai to Sri Lanka flagged off.

New Generation Ballistic Missile ‘Agni Prime’ successfully flight-tested off the Odisha coast.

9th International Yoga Day celebrated.

Gandhi Peace Prize for the year 2021 conferred on Gita Press, Gorakhpur.



July

Chandrayaan 3 launched on July 14 from Satish Dhawan Space Center in Sriharikota, Andhra Pradesh.

The Prime Minister conferred with the Grand Cross of the Legion of Honour, France’s highest award in Paris.

International Para Swimmer Satendra Singh Lohia felicitated for scripting history by crossing the English Channel to and fro.



August

The Prime Minister on the 77th Independence Day announced the launch of PM Vishwakarma Yojana that will benefit individuals skilled in traditional craftsmanship.

India participates in the 20th ASEAN-India Economic Ministers’ meeting held in Semarang, Indonesia.

Chandrayaan 3 successfully soft-lands on the surface of moon in the South Pole area.



Glimpses of 2023



September

Indian Space Research Organisation successfully launches India's first solar mission, Aditya L1 from Sriharikota Range.

The phase-1 of the India International Convention and Expo Centre - 'Yashobhoomi' dedicated to the nation in New Delhi.

G20 Leaders' Summit held at New Delhi's iconic Bharat Mandapam.

First Green Hydrogen Fuel Cell Bus flagged off in New Delhi



November

Ayurveda Day celebrated on a grand scale across the country.

India and Netherlands sign a Memorandum of Intent to cooperate of medical product regulation, and enhancing the quality of medical products.

India International Trade Fair at ITPO, Pragati Maidan commences. More than 200 unique Geographical Indications (GIs) products exhibited in Geographical Indication (GI) Pavilion.

The 9th edition of Joint Military exercise "Exercise MITRA SHAKTI-2023" took place in Aundh (Pune).



October

The 9th G20 Parliamentary Speakers' Summit (P20 Summit) was held at India International Convention Centre, Yashobhoomi, Dwarka, Delhi. The Summit was preceded by Parliamentary Forum on LiFE (Lifestyle for Environment).

The 'Mera Yuva Bharat (MY Bharat)' platform for youth is inaugurated in New Delhi.

The President confers the 69th National Film Awards in New Delhi.



REDEFINING MOBILITY: TRANSFORMING LANDSCAPE OF TRANSPORT SECTOR

PM GatiShakti - National Master Plan for Multi-modal Connectivity, 2021, is essentially a digital platform to bring 16 ministries, including Railways and Roadways together for integrated planning and coordinated implementation of infrastructure connectivity projects.

Multi-modal connectivity will provide integrated and seamless connectivity for the movement of people, goods and services from one mode of transport to another. It will facilitate the last-mile connectivity of infrastructure and also reduce travel time for people.

A well-knit and coordinated system of transport plays an important role in the sustained economic growth of a country. The present transport system of the country comprises several modes of transport including rail, road, coastal shipping, air transport etc. Transport has recorded substantial growth over the years both in the spread of the network and in output of the system. The Ministry of Shipping and the Ministry of Road Transport and Highways are responsible for the formation and implementation of policies and programmes for the development of various modes of transport save the railways and civil aviation.

Roads

The Ministry of Road Transport and Highways was formed in 2009 by bifurcating the erstwhile

Ministry of Shipping, Road Transport and Highways into two independent ministries. The Ministry of Road Transport and Highways is the apex body for formulation and administration of the rules, regulations and laws relating to road transport and transport research. It encompasses construction and maintenance of national highways (NHs); administration of Motor Vehicles Act, 1988 and Central Motor Vehicles Rules 1989; National Highways Act, 1956 and National Highways Fee (Determination of Rates and Collection) Rules, 2008; formulation of broad policies relating to road transport, environmental issues, automotive norms, etc., besides making arrangements for movement of vehicular traffic with neighbouring countries. The capacity of national highways in term of handling traffic (passenger and goods) needs to be in tandem with industrial growth. India has about

62.16 lakh km of road network, which is the second largest in the world.

Website : www.morth.nic.in

Bharatmala Pariyojana

The Ministry has taken up a detailed review of NHs network with a view to developing road connectivity to border areas, development of coastal roads including road connectivity for non-major ports, improvement in the efficiency of national corridors, development of economic corridors, inter corridors, and feeder routes, along with integration with Sagarmala, etc., under Bharatmala Pariyojana. The Pariyojana envisages the development of about 26,000 km length of economic corridors, which, along with the Golden Quadrilateral (GQ) and North-South and East-West (NS-EW) Corridors are expected to carry majority of the freight traffic on roads. Further, about 8,000 km of inter corridors and about 7,500 km of feeder routes have been identified for improving effectiveness of economic corridors, GQ and NS-EW Corridors. The programme envisages development of Ring Roads/bypasses and elevated corridors to de-congest the traffic passing through cities and enhance logistic efficiency, etc.

Green National Highways Corridor Project

The Green National Highways Corridor Project was launched in 2016. The project includes upgradation of about 781 km of various national highways passing through Rajasthan, Himachal Pradesh, Uttar Pradesh and Andhra Pradesh. It was launched under the Green Highways Policy that was unveiled in 2015 to actualise the vision of developing eco-friendly and green national highways. The objectives of the project include: to evolve a policy framework for plantation along national highways; to reduce the impact of

air pollution and dust as trees and shrubs are known to be natural sinks for air pollutants; to reduce the impact of ever increasing noise pollution caused due to increase in the number of vehicles; to arrest soil erosion at the embankment slopes; etc. The project is being run with World Bank aid.

National Highways Authority of India

The National Highways Authority of India (NHAI) was set up under the NHAI Act, 1988. It has been entrusted with National Highways Development Project (NHDP), which along with other minor projects, has vested in it 50,329 km of national highways for development, maintenance and management. Its objective is to ensure that all contract awards and procurements conform to the best industry practices with regard to transparency of process, adoption of bid criteria to ensure healthy competition in the award of contracts, implementation of projects conform to the best quality requirements, and the highway system being maintained to ensure best user comfort and convenience. The total length of NH (including expressways) in the country is 1,32,499 km while highways/expressways constitute only about 1.7 per cent of the length of all roads. They carry about 40 per cent of the road traffic.

Website : www.nhai.gov.in

National Highways Development Project

The National Highways Development Project (NHDP) is a project to upgrade, rehabilitate and widen major highways in the country to a higher standard. The project was started in 1998. This project is managed by NHAI under the Ministry of Road Transport and Highways. It represents 49,260 km of roads and highways work and construction in order to boost economic development of the country. The NHDP has been subsumed in the ongoing Bharatmala project.

PM GatiShakti Plan

PM GatiShakti - National Master Plan for Multi-modal Connectivity, 2021 is essentially a digital platform to bring 16 ministries, including Railways and Roadways together, for integrated planning and coordinated implementation of infrastructure connectivity projects. The multi-modal connectivity will provide integrated and seamless connectivity for movement of people, goods and services from one mode of transport to another. It will facilitate





the last-mile connectivity of infrastructure and also reduce travel time for people. Important features of the PM GatiShakti include:

Comprehensiveness: It will include all the existing and planned initiatives of various ministries and departments with one centralised portal. Every department will now have visibility of each other's activities providing critical data while planning and execution of projects in a comprehensive manner;

Optimisation: The National Master Plan will assist different ministries in planning for projects after identification of critical gaps. For the transportation of the goods from one place to another, the plan will help in selecting the most optimum route in terms of time and cost;

Analytical: It will provide the entire data at one place with GIS based spatial planning and analytical tools having 200+ layers, enabling better visibility to the executing agency;

Dynamic: All ministries and departments will now be able to visualise, review, and monitor the progress of cross-sectoral projects, through the GIS platform, as the satellite imagery will give on-ground progress periodically and progress of the projects will be updated on a regular basis on the portal.

Parvatmala Pariyojana

Parvatmala Pariyojana–National Ropeways Development Programme is being implemented for development of ropeways to improve accessibility and convenience for passengers and to promote

tourism. Along with hilly areas, ropeways are being developed as alternative mode of transportation in congested urban areas e.g., those of Varanasi, Ujjain.

National Registry of Vehicle and License Records

In order to usher in transformational improvements in this sector, the Ministry has put in place several policies for citizens. Transport Mission Mode Project has successfully automated RTO operations, set up a consolidated transport database. Along with it, a host of citizen and trade-centric applications have also been implemented. The salient aspects of this Mission Mode Project are two flagship applications—*Vahan* and *Sarathi*. While Vahan consolidates vehicle registration, taxation, permit, fitness and associated services across the country, Sarathi looks after the driving license, learner licence, driving schools and related activities. This has been implemented in more than 1,000 RTOs across 13 States/UTs with state-specific rules, tax structure, etc. The database is integrated with Aadhaar for biometric authentication and eKYC, integration with DigiLocker. This allows use of virtual documents like driving license, registration certificates, permits, etc., as authorised soft copies.

e-Tolling

National Electronic Toll Collection (NETC) programme, the flagship initiative of Ministry of Road Transport and Highways, has been implemented on pan- India basis in order to ensure seamless movement of traffic through fee plazas and increase transparency in collection of user fee using FASTag. The National Payment Corporation of India (NPCI) is the Central Clearing House.

Railways

The Railways provide the principal mode of transportation for freight and passengers. It brings together people from the farthest corners of the country and makes possible the conduct of business, sightseeing, pilgrimage and education. From a very modest beginning in 1853, when the first train steamed off from Mumbai to Thane, a distance of 34 km, the Indian Railways have grown into a vast network of 7,308 stations spread over a route length of 68,043 km with a fleet of 13,215 locomotives, 74,744 passenger service vehicles, 10,103 other coaching vehicles and 3,18,896 wagons. The growth of Indian Railways in these many years is thus phenomenal. It has played a vital role in the

economic, industrial and social development of the country. The network runs multi-gauge operations extending over 68,043 route kilometers. About 74.06 per cent of the route kilometre and 80.38 per cent of running track kilometre and 78.46 per cent of total track kilometer is electrified. The network is divided into 17 Zones. Divisions are the basic operating units. Their respective headquarters are given below:

Zonal Railways	Headquarters
Central	Mumbai
Eastern	Kolkata
East Coast	Bhubaneswar
East Central	Hajipur
Northern	New Delhi
North Central	Prayagraj
North Eastern	Gorakhpur
Northeast Frontier	Maligaon (Guwahati)
North Western	Jaipur
Southern	Chennai
South Central	Secunderabad
South Eastern	Kolkata
South East Central Railway	Bilaspur
South Western Railway	Hubballi (Hubli)
Western	Mumbai
West Central Railway	Jabalpur

Website : www.indianrailways.gov.in

Research and Development

The Research Design and Standards Organisation (RDSO) at Lucknow is the R&D wing of Indian Railways. It functions as a consultant in technical matters. It also provides consultancy to other organisations connected with railway manufacture and design. RDSO, in collaboration with CSIR-CSIO has developed and deployed UV-C based anti-viral and anti-pathogen system for AC coaches by way of a deterrent to Covid. It has also developed and designed high speed automobile carrier coaches which has up graded features of loading/unloading of two wheelers, four wheelers, MUVs, SUVs, tractors, etc., with a capability to cater higher payload of 18 tonnes and speed potential of 110 kmph.

Railway Finance

Though a part of the overall financial figures of the Government of India, the Railway Budget was being presented separately to Parliament since 1924-25 owing to the Separation Convention of 1924. The Railways had its own 16 demands for grants, which also used to be considered and passed by the Parliament separately. The main reason behind the Separation Convention was to secure stability for civil estimates as the Railway finance used to be a sizeable part of the general finances. The government decided to merge the Railway Budget with the General Budget from the 2017-18. The unified budget brings the affairs of the Railways to centre stage and presents a holistic picture of the financial position of the government. This merger facilitates multimodal transport planning between highways, railways and waterways.

Vande Bharat Express

The Vande Bharat Express, formerly known as Train 18, is a semi-high-speed, electric multiple-unit train operated by Indian Railways. In 2019, it was renamed as Vande Bharat Express to highlight the fact that it was manufactured entirely in India. It began its operations in 2019 when the first of its kind was flagged off between New Delhi-Kanpur-Prayagraj-Varanasi route. The latest route between Secunderabad and Visakhapatnam is the eighth in series which was inaugurated recently. Vande Bharat 2.0 kicked off with Gandhinagar to Mumbai route in 2022. By September 2023, 50 Vande Bharat trains were running across the country.

Shipping

The Ministry of Shipping was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent ministries. Maritime Transport is a critical infrastructure for the economic development of a country. It influences the pace, structure and pattern of development. The Ministry was renamed as Ministry of Ports, Shipping and Watersays (MoPSW) in 2020. The Ministry encompasses within its fold shipping and port sectors which also include shipbuilding and ship repair, major ports and inland water transport. It is the apex body for formulation and administration of the rules and regulations and laws related to shipping. The capacity of the major ports in terms of their berths and cargo handling

equipment vastly improved to cater to the growing requirements of the overseas trade and presently stands at 1617.39 MMT.

Website : www.shipmin.gov.in

Maritime Development

India has a long coastline of about 7,517 km, spread on the western and eastern shelves of the mainland and also along the Islands. It is an important natural resource for the country's trade. There are 12 major ports and about 200 non-major ports. Indian shipping industry has over the years played a crucial role in the transport sector of the economy. Approximately 95 per cent of the country's trade by volume and 68 per cent by value is moved through maritime transport.

Sagarmala Programme

To harness the coastline, 14,500 km of potentially navigable waterways and strategic location on key international maritime trade routes, the Government of India has embarked on the ambitious Sagarmala Programme to promote port-led development in the country. The vision of the Programme is to reduce logistics cost of EXIM and domestic trade with minimal infrastructure investment. This includes: reducing the cost of transporting domestic cargo; lowering logistical cost of bulk commodities by locating future industrial capacities near the coast; improving export competitiveness by developing port proximate discrete manufacturing clusters, etc. The objectives of the Programme include: port modernisation, new port development, port connectivity, coastal community development, etc.

Major Ports

Emerging global economy has opened up new avenues in all the sectors in general and maritime sector in particular. Ports provide an interface between ocean transport and land-based transport and play a vital role in the overall economic development. There are 12 major ports and about 205 non-major ports along India's coastline which is about 7,517 km. The 6 major ports—Kolkata, Paradip, Visakhapatnam, Kamarajar (Ennore), Chennai and VC Chidambaram, are on the east coast and the other major ports, viz., Cochin, New Mangalore, Mormugao, Mumbai, Jawaharlal Nehru Port (Sheva, Navi Mumbai) and Deendayal (erstwhile Kandla) are on the west coast. The major ports are under the direct administrative control of the central

government and fall in Union List (7th Schedule of the Constitution). Ports other than the major ones are under the jurisdiction of the respective maritime state government and fall in the Concurrent List of the total traffic handled by all Indian ports, 55 per cent is handled by major ports and 45 by others.

Inland Water Transport

India has about 14,500 km long navigable inland waterway network. Inland Water Transport (IWT) is a fuel-efficient, environment-friendly and cost-effective and lower carbon footprint mode of transport. However, cargo transport through it is, presently less than 2 per cent of the total cargo movement in the country. Inland Waterways Authority of India (IWAI) was set up in 1986 for regulation and development of inland waterways for the purposes of shipping and navigation in the country. IWT as a supplementary mode of transport, may help to decongest the overcrowded road and rail mode of transport by diverting certain bulk cargo through waterways. To promote IWT, Government declared 111 (including 5 existing and 106 new) National Waterways (NWs) spread over 24 states under the National Waterways Act, 2016, to promote inland water transport in the country. Jal Marg Vikas Project (JMVP) is being implemented by the IWAI for the capacity augmentation of National Waterway I on the Haldia–Varanasi stretch of Ganga-Bhagirathi-Hooghly river system with the technical and financial assistance of the World Bank.

Civil Aviation

Air transport is one of the critical infrastructures for the equitable development of a country. It is also one of those sectors which prominently influence economy and employment generation through its direct and catalytic multiplier effects. The Ministry of Civil Aviation encompasses within its ambit the civil aviation sector in the country which, inter-alia, includes air transport, air space management, non-commercial flying and civil aviation infrastructure. It administers the Aircraft Act, 1934, Aircraft Rules, 1937, Airports Authority of India Act, 1994, Carriage by Air Act, 1972 and other legislations pertaining to the civil aviation sector. It formulates legislations for carrying out the Convention on International Civil Aviation, 1944 ('Chicago Convention'). The Ministry is also responsible for implementation of treaties, conventions and agreements relating to

the civil aviation sector. Particularly, it enters into Air Services Agreement with other countries for the operation of international scheduled air services.

Website : www.civilaviation.gov.in

Regional Connectivity Scheme

The Regional Connectivity Scheme (RCS)- Ude Desh ka Aam Naagrik (UDAN) was envisaged in National Civil Aviation Policy (NCAP) 2016. The primary objective of RCS-UDAN is to facilitate/stimulate regional air connectivity by making it affordable to masses through measures such as concessions by the central government, state governments/UT administrations and airport operators to reduce the cost of airline operations on regional routes; and Viability Gap Funding (VGF) to meet the gap, if any, between the cost of airline operations and expected revenues on such routes. The scheme envisages providing connectivity to un-served and underserved airports of the country through revival of existing air strips and airports.

The first RCS UDAN flight was inaugurated in 2017 from Shimla to Delhi. Till the launching of UDAN in 2016, India had 74 airports with scheduled operations, whereas, during the last six years after the commencement of the scheme, 1,300 valid routes have been awarded to various airlines, 495 routes connecting 75 unserved and underserved airports (including 9 heliports and 2 water aerodromes) have been operationalised by 10 October 2023.

Airports Authority of India

Airports Authority of India (AAI), statutorily constituted under the Airports Authority of India Act, 1994, was created by merger of erstwhile International Airports Authority and National Airports Authority. The primary responsibility of AAI is administration and cohesive management of airports and civil enclaves where air transport services are operated/intended to be operated and of all aeronautical communication stations for the purposes of establishing or assisting in the establishment of airports and for connected. AAI is entrusted for the control and management of Indian airspace including provision for air navigation services. The Indian airspace managed by AAI measures approximately 2.8 million sq. nautical miles, which includes land area measuring about 1.0 million square nautical miles and oceanic airspace measuring about 1.8 million square nautical

miles. AAI manages 133 airports, which include 23 international airports (including 3 civil enclaves), 10 customs airport (including 4 civil enclaves) and 100 domestic airports (including 22 civil enclaves).

Website : www.aai.aero

Airports Economic Regulatory Authority

Airports Economic Regulatory Authority (AERA) is a statutory body constituted under the Airports Economic Regulatory Authority Act, 2008. AERA is entrusted with the responsibility to regulate tariff and other charges for the aeronautical services rendered at airports and to monitor performance standards of airports. As an independent economic regulator, AERA aims to create level playing field, foster healthy competition amongst all major airports, to encourage investment in airport facilities and regulate tariffs for aeronautical services. Its functions include determination of the tariff for the aeronautical services, determination of the amount of Development Fees in respect of major airports, determination of the amount of passenger service fee levied under Rule 88 of the Aircraft Rules, 1937 and to monitor the set performance standards relating to quality, continuity and reliability of services as may be specified by the government or any authority authorised by it in this behalf.

Website : www.aera.gov.in

International Connectivity

India operates a wide ranging network of international flights and currently has Air Services Agreement with 116 countries. India presently provides direct connectivity to more than 52 countries, whereas, connects more than 100 countries through indirect routes. In order to facilitate the connectivity from foreign countries, designation of foreign carriers in terms of the Air Services Agreement is carried out. In terms of the National Civil Aviation Policy, 2016, Open Sky Arrangement allows unlimited flights over and above the existing bilateral rights directly to/from 6 Indian Metro Airports viz., Delhi, Mumbai, Kolkata, Chennai, Hyderabad and Bengaluru. As of October, 2023, India has open sky arrangements with 24 countries. India has signed a protocol with Russia wherein points of call for domestic code share were shared, capacity entitlement was increased and route-wise restrictions for Russian carriers were removed.

Biometric Enabled Seamless Travel

DigiYatra policy is an initiative launched by Ministry of Civil Aviation for providing passengers seamless and hassle-free experience at airports without the need for verification of ticket and ID at multiple touch points. It envisages contactless, seamless processing of passengers at airports based on Facial Recognition Technology. Personally Identifiable Information and Passenger's ID and travel credentials are not centrally stored but are stored in a secure wallet in the passenger's smartphone itself. The data is purged within 24 hours of use. The service is presently being launched for domestic flights only and is voluntary in nature. DIGIYATRA App is available both on Android as well as IOS platforms. As of October, 2023 it is operational at 13 airports namely, Delhi, Bengaluru, Varanasi, Hyderabad, Pune, Kolkata, Vijayawada, Mumbai, Lucknow, Ahmedabad, Jaipur, Kochi and Guwahati airports.

GPS Aided Geo Augmented Navigation (GAGAN)

GAGAN is a collaborative system developed jointly by Airports Authority of India and Indian Space Research Organization to improve the accuracy and reliability of GPS signals, specifically for precision approaches in civil aviation. It has been in full operation since 2015 and is available around the clock.

Krishi Udan 2.0

Krishi Udan 2.0 scheme was launched in 2021 for facilitating and incentivising movement of cargo by air transportation by providing full waiver

of Landing, Parking, Terminal Navigational Landing Charges (TNLC), and Route Navigation Facilitation Charges (RNFC) for Indian freighters and passenger to cargo at selected airports, primarily focusing on the North Eastern Region, hilly, tribal region and islands and other identified areas. The Scheme aims to ensure seamless, cost-effective, time bound, air transportation and associated logistics for all agri-produce originating especially from North-East, hilly and tribal regions of the country. The Scheme covers a total of 58 airports in the country. Out of total 58 airports identified, 25 in the NER, hilly and tribal regions and islands and 33 airports at other regions have been included.

Sugamya Bharat Abhiyan

Sugamya Bharat Abhiyan (Accessible India Campaign), being in line with the Rights of Persons with Disabilities Act, 2016, Ministry of Civil Aviation has published the 'Accessibility Standards and Guidelines for Civil Aviation Sector' to assist people comprehend and understand the Universal Accessibility Standards. This being a significant step in promoting accessibility and inclusivity in air travel would help people providing the services at airports in understanding the needs of persons with reduced mobility, old people, children, expecting mothers and various other users to make air travel convenient for everyone by facilitating the accessibility features. This initiative reflects the effort to make air travel more equitable and accommodating by supporting the rights and dignity of all passengers. □

Source: India Reference Annual

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INDIA'S INDUSTRY SECTOR

National Logistics Policy lays down an overarching interdisciplinary, cross-sectoral, multi-jurisdictional, and comprehensive policy framework for the logistics sector. The policy complements the PM GatiShakti National Master Plan. While PM GatiShakti National Master Plan is aimed at integrated infrastructure development, the National Logistics Policy is envisaged to bring efficiency to logistics services and human resources through streamlining processes and the adoption of suitable technologies.

To improve logistics efficiency, reduce logistics cost, break interdepartmental silos in the country, a need has been felt to integrate planning and infrastructure development efforts across multiple agencies. PM GatiShakti launched in 2021 is a response in that direction, which rests on the premise of a 'whole of government approach'. PM GatiShakti has broadly two components to achieve integration, synchronisation, prioritisation, and optimisation. First, the development of GIS-based technology

platform called National Master Plan, wherein everything is linked from roads to railways, from aviation to agriculture, various ministries and departments. This will ensure that every department has the right and accurate information on time. Secondly, the administrative arrangement to integrate efforts of various line ministries/ departments for synchronised development of multimodal infrastructure and the economic zone through the formation of a three-tier institutional arrangement.



National Logistics Policy

The National Logistics Policy (NLP) was launched in 2022. It lays down an overarching interdisciplinary, cross-sectoral, multi-jurisdictional and comprehensive policy framework for the logistics sector. The policy complements the PM GatiShakti National Master Plan. While Master Plan is aimed at integrated infrastructure development, the National Logistics Policy is envisaged to bring efficiency to logistics services, and human resources through streamlining processes, a regulatory framework, skill development, mainstreaming logistics in higher education, and the adoption of suitable technologies. Its vision is to develop a technologically enabled, integrated, cost-efficient, resilient, sustainable, and trusted logistics ecosystem for accelerated and inclusive growth.

Foreign Direct Investment Policy

DPIIT was the nodal department for the formulation of the policy on Foreign Direct Investment (FDI). It is also responsible for maintenance and management of data on inward FDI into India, based on the remittances reported by the Reserve Bank of India. With a view to attracting higher levels of FDI, a liberal policy has been put in place on FDI under

which FDI up to 100 per cent is permitted under the automatic route in most sectors/activities. After abolition of the Foreign Investment Promotion Board (FIPB) in June 2017, the process for granting FDI approvals has been simplified, wherein the work relating to processing of applications for FDI and approval of the government thereon under the existing FDI Policy and FEMA is now handled by the concerned ministries/departments. The management and running of the FIF Portal is administered by DPIIT to facilitate the clearance of applications that are filed through the approval route. Further, since August 2022, FIF Portal has been integrated with National Single Window System (NSWS) and the FDI proposals requiring government approval are filed through NSWS portal.

Website : www.nsws.gov.in

Make in India

The 'Make in India' initiative was launched in 2014 to facilitate investment, foster innovation, build best-in-class infrastructure, and make India a hub for manufacturing, design, and innovation. It is one of the unique 'Vocal for Local' initiatives that promotes India's manufacturing domain to the world. The idea is to Make in India for the World. The initiative has significant achievements and presently focuses on 27 sectors under Make in India 2.0. This Department coordinates action plans for 15 manufacturing sectors, while Department of Commerce coordinates 27 service sector plans. Investment outreach activities are done through ministries, state governments and Indian Missions abroad for enhancing international cooperation and promoting both domestic and foreign investment in the country.

Production Linked Incentive Scheme

Keeping in view India's vision of becoming 'Atmanirbhar', Production Linked Incentive (PLI) schemes for 14 key sectors were announced with an outlay of Rs 1.97 lakh crore to enhance India's manufacturing capabilities and exports. With this, significant production, employment, and economic growth are expected over the next 5 years and more. The PLI schemes have major objectives that include: attracting investments in sectors of core competency and cutting-edge technology; make Indian companies and manufacturers globally competitive so that they can penetrate global markets and integrate with global value chains.

Startup India

The Startup India initiative was launched in 2016. The initiative aims to foster entrepreneurship and promote innovation by creating an ecosystem conducive to startup growth. The initiative strives to provide an impetus to the entrepreneurial setup across three major pillars i.e., (i) simplification and handholding, (ii) funding support and incentives, and (iii) industry-academia partnership and incubation. Since the launch of the initiative, several strategic amendments to the existing policy ecosystem have been introduced. As of 15 May 2023, a total of 99,371 startups have been recognised by DPIIT across 57 sectors in 674 districts with at least one startup from every State and UT of the country having created over 10.49 lakh jobs since 2016. DPIIT established Fund of Funds (FFS) with a corpus of INR 10,000 crore, to meet the funding needs of startups. The objectives of the scheme include accelerating innovation-driven entrepreneurship and mobilising larger equitylike resources for startups. FFS do not directly invest in startups, but instead provide capital to SEBI-registered Alternate Investment Funds (AIFs) which in turn invest money in growing Indian startups through equity and equity-linked instruments. DPIIT also created Startup India Seed Fund Scheme (SISFS) with an outlay of Rs 945 crore to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry, and commercialisation. It will support an estimated 3,600 entrepreneurs through 300 incubators in the next 4 years.

Heavy Industries

The Ministry of Heavy Industries promotes the development and growth of automobile, capital goods and heavy electrical equipment sectors and administer 29 Central Public Sector Enterprises (CPSEs) engaged in manufacturing, consultancy and contracting services and four autonomous organisations. In 2021, the Department of Public Enterprises was shifted to Ministry of Finance. One of the key thrust areas of MHI is aimed at transforming mobility in the country by increasing competitiveness of the domestic automobile industry and promoting advanced technology and sustainable and affordable electric mobility solutions for the citizens. These solutions comprising electric two-wheelers, electric three wheelers and electric buses, will enable India to leapfrog

from traditional fossil fuel based automobile transportation system to environmentally cleaner, advanced and more efficient Electric Vehicles (EV) based systems. Transition to electric mobility ecosystem will create new jobs for the youth in the manufacturing as well as service sector, reduce dependence on oil imports, reduce air pollution and make the environment cleaner. Heavy Electrical Equipment Industry (HEI) caters to the needs of the energy sector and other industrial sectors. Major equipment like boilers, turbo generators, turbines, transformers, switch gears, relays, and related accessories are manufactured by this segment. The performance of this industry is closely linked to its power capacity addition programme of the country. Therefore, the market trend is driven by the India's power sector requirement. Bharat Heavy Electricals (BHEL) is a leading public sector catering to HEI with a dominant market share.

Website : www.heavyindustries.gov.in

Micro, Small and Medium Enterprises

The Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last seven decades. MSMEs not only play a crucial role in providing large employment opportunities at comparatively lower capital costs than large industries but also help in industrialisation of rural and backward areas, thereby reducing regional imbalances and ensuring more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units, and this sector contributes enormously to the socio-economic development of the country. The Ministry of Micro, Small & Medium Enterprises envisions a vibrant sector by promoting growth and development of the sector, including Khadi, Village and Coir Industries, in cooperation with concerned ministries/ departments, state governments, and other stakeholders, through providing the support to existing enterprises and encouraging creation of new enterprises. The primary responsibility of promotion and development of MSMEs is of the state governments. However, the Government of India supplements the efforts of the states through various initiatives. The role of the Ministry and its organisations is to assist the states in their efforts to encourage entrepreneurship,

employment and livelihood opportunities and enhance the competitiveness of MSMEs in the changed economic scenario.

A new classification for manufacturing and service enterprises was notified in 2020, along with guidelines to facilitate the entrepreneurs. The composite criteria removed the difference between manufacturing and service sectors, besides adding a new criterion of turnover to the earlier criterion, which was based only on investment in plants and machinery. Consequent upon these changes, the classification of MSMEs includes the following: (a) a micro enterprise is one, where the investment in plant and machinery or equipment does not exceed one crore rupees and turnover does not exceed five crore rupees; (b) a small enterprise is one, where the investment in plant and machinery or equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees; and (c) a medium enterprise is one, where the investment in plant and machinery or equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees. The Ministry of MSME also launched Udyam Assist Platform in January, 2023 to bring Informal Micro Enterprises under the formal ambit of MSMEs.

Indian MSME Sector

Indian Micro, Small and Medium Enterprises (MSME) sector, with more than six crore enterprises, has emerged as a highly vibrant and dynamic sector of the economy, contributing to around 27 per cent of India's GDP, around 44 per cent of India's exports and providing employment to over 11.10 crore people. MSME sector is also important for fostering entrepreneurship and generating self-employment opportunities at comparatively lower capital cost, next only to agriculture. MSMEs are widening their domain across sectors of the economy, producing diverse range of products and services to meet demands of domestic as well as global markets. Ministry of MSME, Government of India envisions a progressive MSME sector by promoting growth and development of the sector through various Schemes/Programmes/Initiatives, thereby realising Atmanirbhar Bharat.

Udyam Registration Portal

To facilitate MSME registration process in accordance with the revised MSME definition, the Ministry of MSME launched Udyam Registration

Portal ([Website: www.udyamregistration.gov.in](http://www.udyamregistration.gov.in)), in July, 2020. The registration process is free of cost, paperless and digital. The portal has linkages with Government e-Marketplace (GeM), Income Tax, GST, TReDs and NCS (National Career Service) portals. Government has provided exemption from having mandatory GSTIN as per the provisions of the CGST Act, 2017.

[Website : www.msme.gov.in](http://www.msme.gov.in)

Khadi and Village Industries Commission

Khadi and Village Industries Commission (KVIC) established under the Act of Parliament, and as amended in 1987 and 2006, is a statutory organisation under the Ministry of MSME engaged in promoting and developing Khadi and Village Industries (KVI) for providing employment opportunities in the rural areas, thereby strengthening the rural economy. KVIC has been identified as one of the major organisations in the decentralised sector for generating sustainable non-farm employment opportunities in rural areas at a low per capita investment.

[Website : www.kvic.gov.in](http://www.kvic.gov.in)

Textiles

The Indian textiles industry is one of the largest in the world, with a large raw material base and manufacturing strength across the value chain. The uniqueness of the industry lies in its strength, both in the hand-woven sector as well as in the capital-intensive mill sector. The mill sector, with 3,400 textile mills having an installed capacity of more than 50 million spindles and 8,42,000 rotors, is the second largest in the world. Traditional sectors like handlooms, handicrafts and small scale powerloom units are the biggest source of employment for millions of people in rural and semi-urban areas. The textile industry has inherent linkages with agriculture, culture and traditions of the country, making its versatile spread of products appropriate for both domestic and export markets. The textile industry contributes to 7 per cent of industry output in value terms of 2 per cent of India's GDP and to 15 per cent of the country's export earnings. With over 45 million people employed directly, this industry is one of the largest sources of employment generation in the country.

[Website : www.texmin.nic.in](http://www.texmin.nic.in)

Steel

The Ministry of Steel is responsible for the planning and development of iron and steel industry, the development of essential inputs such as iron ore, limestone, dolomite, manganese ore, chromites, ferro-alloys, sponge iron etc., and other related functions. Crude steel production has shown a sustained rise since 2013-14 along with capacity. This industry has been a core pillar of industrial development in the country. India's crude steel capacity has steadily risen to 142 MT at present following which India has become the world's second-largest producer of crude steel, surpassing Japan. The crude steel production capacity has steadily risen to 161.30 MT. A vibrant domestic steel industry is important for a developing economy as it is a critical input across major sectors such as construction, infrastructure, automotive, capital goods, defence, rail, etc.

Website : www.steel.gov.in

Fertilisers

The Department of Fertilisers comes under the ambit of the Ministry of Chemicals and Fertilisers. The main objective of the Department is to ensure adequate and timely availability of fertilisers at affordable prices for maximising agricultural production in the country. The main functions of the Department include planning, promotion and development of the fertilisers industry, planning and monitoring of production; import and distribution of fertilisers and management of financial assistance by way of subsidy/concession for indigenous and imported fertilisers.

The Department has one attached office under it, viz., Fertilisers Industry Coordination Committee (FICC). It also administers 9 Fertiliser Public Sector Undertakings (PSUs). The Department of Fertilisers has taken various initiatives to augment growth of the sector. These initiatives aim at working in the direction of promoting the indigenous production of fertilisers, and making them available to farmers in time.

Website: www.fert.nic.in

Chemicals and Petro-chemicals

The Department of Chemicals and Petro-chemicals was under the Ministry of Industry until 1989, when it was brought under the Ministry of Petroleum and Chemicals. In 1991, the

Department of Chemicals and Petro-chemicals was transferred to the Ministry of Chemicals and Fertilisers. The Department is entrusted with the responsibility of planning, development and regulations of the chemicals, petro-chemicals and pharmaceutical industry sector, including: drugs and pharmaceuticals, excluding those specifically allotted to other departments; insecticides, excluding the administration of the Insecticides Act, 1968; molasses; alcohol - industrial and potable from the molasses route; all organic and inorganic chemicals not specifically allotted to any other ministry or department; petrochemicals; synthetic rubber; and planning, development and control of, and assistance to, all industries dealt with by the Department.

Website : www.chemicals.nic.in

Pharmaceuticals

The Indian pharmaceutical industry is the world's third-largest by volume. Total Annual Turnover of Pharmaceuticals industry is Rs 3,79,450 crore for 2022- 2023. In the last nine years, the sector has grown steadily by CAGR of 6.4 per cent (as per total pharma export). Total exports of pharmaceuticals are to the tune of Rs 1,94,254 crore and total imports of pharmaceuticals are to the tune of Rs 56,391 crore for 2022-23 (for bulk drugs, drug intermediates, drug formulations, and biologicals).

Website : www.pharmaceuticals.gov.in

Geological Survey of India

Geological Survey of India (GSI), the premier earth science organisation of the country, is the principal provider of basic earth science information to the Government, industry, and the geoscientific sector. Started in 1851 as a department engaged primarily in research for coal, GSI in its last 163 years of existence, has expanded its activities manifold and has been involved either directly or indirectly in almost all areas of nation-building. The vibrant steel, coal, metal, cement and power industries, which expanded phenomenally in the post-independence era, bear eloquent testimony to GSI's contribution to national development.

GSI is now the custodian of one of the largest and most comprehensive earth science databases developed over the century and a half. Creation and updation of a national geoscientific information

and knowledge base through ground, marine, and airborne surveys and their dissemination are the primary goals of GSI. The present activity domains of GSI include surface mapping; aerial and remote sensing surveys; offshore surveys; exploration for mineral and energy resources; engineering geology; geotechnical investigations; geoenvironmental studies; geology of water resources; geohazard studies; research and development; training and capacity building; and information services, etc. Baseline geological data at 1:50,000 scale exists for almost the whole country; efforts are on to generate similar data on geochemical and geophysical themes. Natural resource assessment and augmentation is now the prime thrust area, along with activities in public good geoscience. Dissemination of geoscience knowledge and capacity building are two other major mandates of GSI. GSI operates through a region-mission hybrid matrix, comprising six geographically distributed regions (central, eastern, northern, north-eastern, southern and western) representing administrative verticals and five missions, designating different activity domains representing the broad thrust areas.

Website : www.gsi.gov.in

Indian Bureau of Mines


Indian Bureau of Mines established in March 1948, is a multidisciplinary scientific and technical

organisation under the Ministry of Mines with statutory and developmental responsibilities for conservation and systematic exploitation of mineral resources other than coal, petroleum, natural gas, atomic minerals and minor minerals.

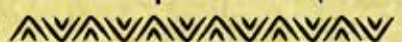
The Bureau performs regulatory functions under the relevant provisions of the Mines and Mineral (Development and Regulation) Act, 1957, amended in 2015, and rules made thereunder namely enforcement of the Mineral Conservation and Development Rules, 2017; Minerals (Other than Atomic and Hydro Carbon Energy Minerals) Concession Rules, 2016; and other new rules and Environmental (Protection) Act, 1986 and Rules made thereunder. It also undertakes scientific, techno-economic, and research-oriented studies in various aspects of mining, geological studies, ore beneficiation and environmental studies. The Ministry of Mines has three Public Sector Undertaking (PSUs) under its administrative control. National Aluminium Company Limited (NALCO), Hindustan Copper Limited (HCL) are operating in the field of mining and mineral processing, and Mineral Exploration Corporation Limited (MECL) is operating in the field of mineral exploration.

Website : www.ibm.gov.in □

Source: India Reference Annual



Pradhan Mantri Particularly Vulnerable Tribal Groups Mission (PVTG)



Budget Allocation	Mission Objective	Field Observations
<ul style="list-style-type: none"> ➤ Government allocates Rs.15,000 crore for Pradhan Mantri PVTG Development Mission in Budget 2023-24. ➤ Allocation spans three years and is part of the Development Action Plan for Scheduled Tribes. 	<ul style="list-style-type: none"> ➤ Mission targets socio-economic upliftment of Particularly Vulnerable Tribal Groups (PVTGs). ➤ Aims to provide essential amenities: safe housing, clean water, sanitation, education, health, nutrition, road and telecom connectivity, and sustainable livelihoods. 	<ul style="list-style-type: none"> ➤ Ministry of Tribal Affairs officers conduct field visits to PVTG areas. ➤ Emphasis on focused approach to enhance infrastructure, including road and internet connectivity. ➤ Report underscores the need for strengthening health and education facilities, along with improving livelihood opportunities.

Nodal Ministry

The Ministry of Tribal Affairs

Details of the scheme are available at <https://stcmis.gov.in>

Source: PIB

MERI MAATI MERA DESH



The Meri Maati Mera Desh campaign is a tribute to the Veers and Veeranganas who have made the supreme sacrifice for the country. In the spirit of Jan Bhagidari, the campaign comprises many activities and ceremonies conducted across the country at Panchayat/Village, Block, Urban Local Body, State and National levels. The activities included the building of Shilaphalakam (a memorial) to express heartfelt gratitude to all the bravehearts who have made the supreme sacrifice; 'Panch Pran' pledge taking by the people at Shilaphalakam; planting of saplings of indigenous species and developing 'Amrit Vatika' (Vasudha Vandhan), and felicitation ceremonies for honouring the freedom fighters and the families of deceased freedom fighters (Veeron ka Vandan), among others.

The campaign became a massive success, with over 2.3 lakh Shilaphalakams built in 36 States/UTs; nearly 4 crore Panch Pran pledge selfies uploaded; 2 lakh plus 'Veeron ka Vandan' programmes nationwide; more than 2.36 crore indigenous saplings have been planted; and 2.63 lakh Amrit Vatikas created under the Vasudha Vandhan theme across the country.

The 'Meri Maati Mera Desh' campaign also includes the Amrit Kalash Yatra, which comprises a collection of mitti (soil) and rice grains from over 6 lakh villages in rural areas and from wards in urban areas, which is sent to block level (where mitti of all villages in the block is mixed) and then to the state capital. The mitti from the state level is sent to the National Capital, accompanied by thousands of Amrit Kalash Yatris.

The Amrit Kalash Yatra witnessed all the states and UTs represented by their respective blocks and Urban Local bodies putting mitti from their Kalash in one giant Amrit Kalash in the spirit of 'Ek Bharat Shreshtha Bharat'. The Amrit Vatika and Amrit Mahotsav Memorial, whose foundation stone was laid by the Prime Minister, will be built from the soil collected from every part of the country. □

Source: PIB



AGRICULTURE AND RURAL DEVELOPMENT

KEY INITIATIVES & ACHIEVEMENTS

The year 2023 was declared the 'International Year of Millets' by the United Nations General Assembly. A mission was launched to boost production, processing, and marketing of millets and to position India as the global hub for millets. The Government has announced the facilitation of the 'World's Largest Grain Storage Plan in the Cooperative Sector' this year. The plan entails setting up various types of agri-infrastructure, such as warehouses, custom hiring centres, and processing units, at the level of Primary Agricultural Credit Societies.

Dr JAGDEEP SAXENA

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Livelihood security and financial empowerment of rural people are key priorities of the Government of India in its path towards *Atmanirbhar Bharat*. Continuing with its commitment this year, the Government has taken strategic steps to accelerate a transformation in agriculture and rural development sectors, eyeing an inclusive growth in villages. Centrally-sponsored welfare schemes and programmes intend to develop rural areas as hubs of profitability, productivity, and prosperity. To achieve the goal, budget allocations for 2023-24

have been increased substantially for ongoing schemes and new initiatives. The Ministry of Agriculture and Farmers' Welfare has been allocated Rs1,25,036 crore for FY 2023-24, 5 per cent higher than the revised estimates for 2022-23. In addition to allocations for continuing schemes, budget provisions were made for development of Digital Public Infrastructure and to set-up an Agriculture Accelerator Fund. The target for agriculture credit was increased to Rs 20 lakh crore and a provision of Rs 6,000 crore was made to launch a new scheme *PM Matsya Sampada Yojana*. The Union Budget also

announced setting-up of a decentralised storage capacity and multi-purpose co-operative societies.

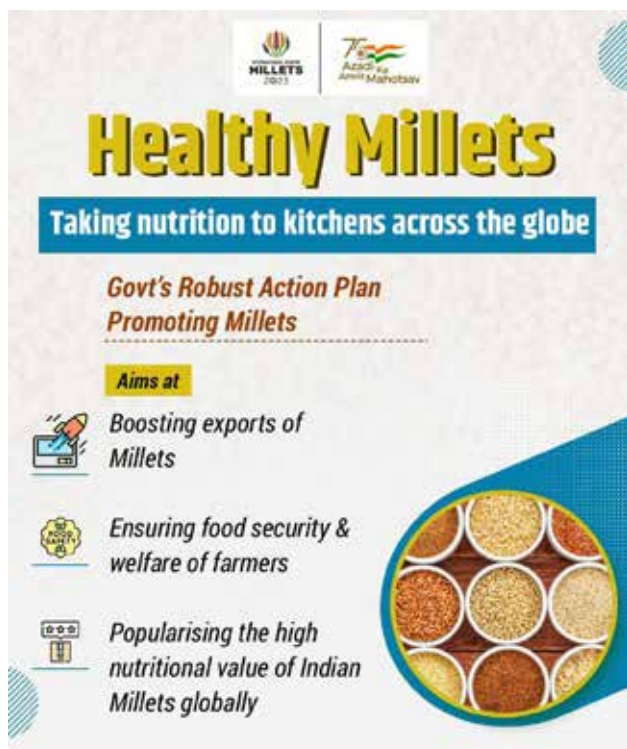
Prime Minister Narendra Modi, while addressing 17th Indian Cooperative Congress (3 July 2023), said, "On an average, the Government is spending more than Rs 6.5 lakh crore yearly on agriculture and farmers". The Prime Minister called upon cooperatives to work towards increasing production of oilseeds and pulses, and help the country become self-reliant on cooking oils. On the other hand, the Ministry of Rural Development has been allocated Rs 1,59,964 crore for FY 2023-24. The Ministry, in addition to its social responsibilities, aims to develop rural infrastructure for growth and optimise the use of land resources in the country. In the budget, outlay on the *Pradhan Mantri Awas Yojana* (rural and urban components taken together) was increased by 66 per cent to Rs 79,590 crore. Budget also announced the empowerment of rural women SHGs through the formation of large producer collectives. They will be provided raw materials and support to scale up operations.

Raising the Bar

Based on the proposal of the Government of India, the year 2023 was declared the 'International Year of Millets' by the United Nations General Assembly. A mission was launched to boost

production, processing, and marketing of millets and to position India as the global hub for millets. Meanwhile, India renamed Millets as *Shree Anna* to express its high regard and esteem, especially in a national context. With many promotional and supportive schemes at the core, the at-home consumption of millets has increased to 14 kilograms per month per person, which was previously not more than 3 kilograms. In recent times, the sale of millet-based food products has also seen a boost of around 30 per cent with demand growing in international markets as well. Millets have been selected in 19 districts of the country under the 'One District, One Product' scheme for further promotion and expansion. More than 500 startups and a large number of Farmer Producer Organisations are now engaged in the processing and packaging of various millet-based nutri-foods for direct sales in super-markets and malls. On the same pattern, women SHGs are producing millet products in small villages that are making their way into urban markets. The Millet Mission has significantly contributed to the improvement of quality of life and the uplift of socio-economic conditions of about 2.5 crore farmers engaged in the cultivation of millets. India organised the Global Millets Conference (March 2023) in New Delhi to bring forth the immense possibilities of *Shree Anna* from global perspectives. The Prime Minister inaugurated the conference and also unveiled a commemorative stamp and commemorative coin, especially designed to mark the occasion. Along with national and international dignitaries, experts, and stakeholders, over 75 lakh farmers also participated in the conference in virtual mode.

On the front of food production, the country set a new record for both food grain and horticultural produce in 2022-23 with an estimated production of 330 million tonnes and 352 million tonnes respectively. While foodgrain production touched an increase of over 4 per cent (14 million tonnes), the output of horticultural produce showed an increase of over one per cent (5 million tonnes) compared to the previous year. Chief food grains, paddy (rice), and wheat recorded an all-time high production in 2022-23 (July-June cycle) at 135 million tonnes and 110 million tonnes respectively. Among horticultural crops, fruit production stood at 108 million tonnes, and vegetables reported a record production of 213 million tonnes.





Largest Grain Storage Plan in the Cooperative Sector' this year. The plan entails setting up various types of agri-infrastructure, such as warehouses, custom hiring centres, processing units, etc. at the level of Primary Agricultural Credit Societies (PACS). With a far-reaching network of over one lakh PACS and more than 13 crore member farmers, the plan envisages a substantial reduction in food wastage, a strengthening of food security, and a boost to farmers' income.

Initiatives for Growth

As per Budget Proposal (2023-24), the Government has approved the 'PM Programme for Restoration, Awareness Generation, Nourishment, and Amelioration of Mother-Earth' (PM-PRANAM) scheme. The initiative aims to support the mass movement started by States/ Union Territories to save the health of Mother Earth by promoting sustainable and balanced use of fertilisers, adopting alternate fertilisers, promoting alternate farming, and implementing resource conservation technologies. Further, the Government has also approved market development assistance@Rs 1500/MT to promote the field application of organic fertilisers, specifically manure produced at plants under the GOBARDhan initiative. In this context, the launch of the world's first Nano-DAP liquid (Di-Ammonium Phosphate) had been a momentous achievement (26 April 2023). Developed and produced by IFFCO (Indian Farmers Fertiliser Cooperative Limited), Nano-DAP and Nano-Urea (Liquid) are patented items poised to bring a paradigm shift in the agriculture sector. The production of Nano-Urea was approved in 2021, and in 2023 the infrastructure to make about 17 crore Nano-Urea bottles will have been built up in the country. Nearly 6.3 crore bottles have been produced till March 2023. The effect of one bottle of 500 ml on the crop is equivalent to that of a 45 kg bag of granular urea! Enhanced use of liquid fertilisers will reduce quantum of fertiliser imports, thus saving the country's valuable revenue and foreign currency. It will contribute towards *Atmanirbharta* in fertiliser sector. The Government has recently approved Rs 22,303 crore subsidy for nutrient-based phosphatic and potassic fertilisers for the Rabi season. This will help increase the availability of fertilisers to farmers at cheaper prices.

In line with the Government's policy of fixing Minimum Support Price (MSP) at a level of at least 1.5 times the all-India weighted average cost of production, the Government announced the increase in MSP for mandated Rabi crops for marketing season 2024-25. In absolute terms, the highest increase in MSP has been announced for lentils at Rs 425 per quintal. This was followed by rapeseed and mustard (Rs 200/quintal); wheat and safflower (Rs 150/quintal); and barley and gram (Rs 115 & Rs 105/quintal respectively). With this increase, the expected margin over the cost of production now stands at 102% for wheat, 98% for rapeseed and mustard, 89% for lentil, 60% each for gram and barley, and 52% for safflower. The pattern of increase in MSP reflects the intent of the Government to promote crop diversification towards oilseeds and pulses to strengthen food security, increase farmers' income, and reduce dependence and imports. Meanwhile, the Commission of Agricultural Costs and Prices (CACP), which recommends MSP, has suggested the Government thoroughly review its open-ended procurement policy for wheat and rice. The panel, in its latest report, highlighted the accumulation of high stocks of wheat and rice, distorted cropping patterns, and overexploitation of groundwater due to current policy. The country has more stocks of wheat and rice than are required by the National Food Security Act and other welfare schemes.

In this reference and context, the Government has announced the facilitation of the 'World's

This year, the Government launched some specific IT-based initiatives that aim to revolutionise agriculture, enhance financial inclusion, optimise data utilisation, and improve the lives of farmers across the nation. The first among these, called the Kisan Rin Portal, is designed to facilitate access to credit services under the Kisan Credit Card (KCC). It will also assist farmers in availing of subsidised agriculture credit through the Modified Interest Subvention Scheme (MISS). To further ensure unhindered access to credit facilities, the Government initiated a special drive called 'Ghar Ghar KCC Abhiyaan' from 1 October to 31 December 2023. It aims to connect around 1.5 crore beneficiaries of *PM Kisan Samman Nidhi* who are not yet connected to the KCC scheme. A comprehensive WINDS (Weather Information Network Data Systems) manual was launched to provide an in-depth understanding of the portal's functionalities, data interpretation, and effective utilisation. WINDS is an effort to establish a network of automatic weather stations and rain gauges at the taluk/block and gram panchayat levels. Weather data will help improve crop management, resource allocation, and risk mitigation.

During prestigious Presidency of G20 this year, India organised a G20 Agriculture Ministers' Meeting in Hyderabad (15 to 17 June 2023). Various issues were discussed with the perspective of G20 nations, such as food and nutrition; sustainable agriculture with climate smart approach; inclusive agri-value chains and food systems; and digitalisation for agricultural transformation. The two key outcomes of the meeting: (i) Deccan High

Principles on Food Security and Nutrition 2023, and (ii) International Millets and Other Ancient Grains Research Initiative (MAHARISHI). The G20 nations also pledged to alleviate the immediate suffering and build resilience in communities affected by the food security crisis by providing assistance and support.

Path of Prosperity for Rural India

Rural inhabitants, making up nearly 65 per cent of the population, are at the core of national development goals, with a specific agenda of building safety nets and enhancing livelihood opportunities. The Ministry of Rural Development is all ready to chalk out a medium-term plan for 2024-30, and a long-term plan for 2024-47, to chalk out the future of rural development in the country. This year, in his Independence Day address, Prime Minister announced an ambitious goal, "Today, 10 crore rural women are part of the self-help groups. When you go to a village, you will find 'bank-wali didi', 'Anganwadi didi', and 'dawai-wali didi'. It is my dream to make two crore lakhpati didis in the villages". To realise this vision, the Ministry of Rural Development has launched a special drive under its flagship programme, 'Deendayal Antyodaya Yojana– National Rural Livelihoods Mission' (DAY-NRLM). The drive aims to enable two crore 'Lakhpati Didis – SHG Didis' who can earn a sustainable income of at least Rs 1 lakh per annum per household. During the drive, each SHG household is being encouraged to take up multiple livelihood activities coupled with value chain additions. 'Sangathan Se Samridhhi: Leaving no rural woman behind' was another national campaign under DAY-NRLM that aimed at mobilising an additional one crore women from vulnerable and marginalised rural households under the lap of SHGs. The campaign, organised in all the States, targeted the formation of over 1.1 lakh SHGs through interventions, motivation, facilitation, and trainings. On the successful completion of the campaign, a total of 10 crore rural women will be part of the SHG movement. As a digital step towards strengthening market support for products made by women SHGs, DAY-NRLM launched an innovative eSARAS mobile app. It will be used for processing, packaging, and shipping of products that customers purchase through the eSARAS portal and eSARAS mobile app. It will handle the logistics required to bring an online order to a customer's doorstep.





crore in just four years. On an average, 87,500 tap connections have been provided every day since 1 January, 2023. This year, the Government has approved an extension of the *PM Ujjwala Yojana* for the release of 75 lakh LPG connections over three years (2023-24 to 2025-26). This will take the total number of beneficiaries to 10.35 crore. As per the existing modalities of Ujjwala 2.0, the first refill and stove are also provided free of cost to beneficiaries. The *PM Gram Sadak Yojana* has helped create 1,77,119 number of roads measuring 7,45,780 km under all its verticals/interventions. Surveys indicate that the scheme has had a positive impact on agriculture, health, education, and employment generation in rural areas. The inclusion of various IT mechanisms has accelerated the implementation of the Mahatma Gandhi National Rural Empowerment Guarantee Act, 2005 with greater transparency. As per records, it has created 201.96 crore

To promote digital transactions in rural areas, the Ministry of Rural Development has launched a campaign, 'Promoting Digital Transactions in 50,000 Gram Panchayats', under the 'Amrit Mahotsav' in Lucknow. It started on 1 February 2023 and continued until 15 August 2023, with a focus on rural women. 'Banking Correspondent or BC Sakhis' is making significant contributions in this endeavour and is accelerating the empowerment of women in villages. BC Sakhis are also helping rural masses with bank encashment of direct benefit transfers. Government has revamped its 'Rashtriya Gram Swaraj Abhiyan' (1.04.2023 to 31.3.2026) with a focus on reimagining Panchayati Raj Institutions as vibrant centres of local governance and economic growth. Its nine themes include poverty-free, healthy, child-friendly, water-sufficient, clean and green, self-sufficient infrastructure, socially secured, good governance, and women-friendly villages.

Among welfare schemes, the Jal Jeevan Mission achieved the milestone of providing tap water connections to 13 crore households. Setting a new record, the life-changing mission has increased rural tap connection coverage from only 3.23 crore households at the beginning (August 2019) to 13

person days and 14.35 crore active workers during 2023-24. During this period, 5.04 crore households were benefited, and 33.5 crore DBT transactions were recorded. With a view to conserving water for the future, Mission Amrit Sarovar is aiming for the rejuvenation and development of 75 water bodies in each district of the country. So far, over 67,000 such sarovars have been constructed, while over 1.10 lakh sites have been identified.

This year marks nine years of the Swachh Bharat Mission (SBM), and the achievement of 75% ODF (Open Defecation Free) Plus villages is a significant milestone in this regard. SBM-Gramin Phase II has been instrumental in improving the health and well-being of millions of people across the country. The nation observed 'Swachhata Hi Seva' campaign from 15 September to 2 October 2023 with the theme 'Garbage-Free India'. More than 109 crore individuals participated in the campaign cleaning beaches, river-banks, water bodies, etc. The Government continued its emphasis on improving the quality of life in rural areas to ensure more equitable and inclusive development. It aims to 'transform lives and livelihoods through proactive socio-economic inclusion, integration, and empowerment of rural India'. □