

RAJYA SABHA

*SYNOPSIS OF DEBATE

(Proceedings other than Questions and Answers)

Friday, March 28, 2025/ Chaitra 7, 1947 (Saka)

OBSERVATIONS BY THE CHAIR

MR. CHAIRMAN: (i) Hon'ble Members, if we, as Members of this House, express in the manner we are doing, irrespective of gravity or enormity of the situation, then we are not contributing to evolution of peace in society. And, we will have to introspect and reflect that in this House, on such sensitive issues, if we do not send a message of peace and tranquility, then we will be failing in our duty. In every situation, our conduct should be decent and serious, but at times in life, a person being gets carried away by emotions or feelings. There is always an occasion when we are carried away by emotion. We must be in rectification area. But, I wish to make it very clear that sentiments of the people are very precious. Similarly, dignity of a Member of the House, his security, his prestige is equally important. I would appeal to all segments of the House that what happened in the House was expunged for a simple reason that it was outrageous, it was unexpected of a Member, but our problem, because of technology, is that whatever we expunge is expunged only in our record. Social media gives a traction to it.

I would, therefore, urge this House to unanimously endorse that as Members of this House, we will maintain highest rectitude when it comes to sensitive issues.

Hon'ble Members, only yesterday, I had indicated a very explosive situation that there was a time when whatever a Member spoke in the House and it was expunged, it was expunged, because we did not have the speed of electronic messaging. But now it is beyond us. Proceedings are there. That being the situation, expunction in the House does not have a practical meaning. It has the meaning only for the repository of the record. I therefore had indicated that the Ethics Committee, headed by Shri Ghanshyam Tiwari, will engage into wider consultations to evolve a code of conduct, so that the Members, when they speak on sensitive issues, they are extremely careful and they are really sensitive. I am sure both the situations have their separate merit. One, what was spoken in the House, I do not wish to repeat. But no one in the House will endorse it. Words were chosen that were avoidable. Aspersions were cast; that should not have happened. Historical perspective was absolutely in oblivion for making reflections about one of the greatest fighters and sons of Bharat. The hon'ble Member, after having made the observations, has accepted the expunction. I would therefore urge everyone that from this House let us send a call to all those who are agitated outside. And their number, I can share with hon'ble Members, is very extensive and not limited to one State. Therefore, let us calm down the atmosphere a little more in harmony with our values. Similarly, as was reflected by Kharge ji, we have to take care of the security of the person concerned also. It goes both ways.

*This Synopsis is not an authoritative record of the proceedings of the Rajya Sabha.

I would only make one appeal that one thing which emanates from Dr. Radha Mohan Das Agrawal's reflections here is that the hon'ble Member, who made highly disparaging objectionable remarks here and the remarks were expunged, according to the hon. Member, Dr. Radha Mohan Das Agrawal, the hon. Member has reiterated that: "I stand by those disparaging observations and will never retract." Now, I am not aware about the reality of it. But if that be so, then, you keep that in mind because according to me what has been expunged in the House, the hon. Member will not reiterate.

He says that after these objectionable, disparaging words against a great patriot of this nation were expunged by the Chair, the hon. Member has, in public domain, taken a firm stand that he stands by those observations and he will never retract those observations..... Let us take all steps..... Let us take all steps so that a voice emanates from this House, we calm down the situation.

(ii) Hon'ble Members, I need to inform that if a former Prime Minister, who is a Member of this House, would like to make reflection in any debate, it has been found fit, after consultation with Leaders, that there will be a time allocation of ten minutes, where the former Prime Minister does not belong to a Party that has time at his disposal. This has been done consistent with the dignity of the office so held and the potential to make contributions for larger public welfare.

GOVERNMENT BILL

The Protection of Interests in Aircraft Objects Bill, 2025

THE MINISTER OF CIVIL AVIATION (SHRI KINJARAPU RAMMOHAN NAIDU): I move that the Bill to provide for protection of interests in aircraft objects and to implement the Convention on International Interests in Mobile Equipment and the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Aircraft Equipment, each signed at Cape Town on 16th November, 2001 and for matters connected therewith or incidental thereto, be taken into consideration.

SHRI NEERAJ DANGI: The Bill has two objectives- to give legal foothold to international agreements, the Convention on International Interests in Mobile Equipment, 2001 and the Protocol to the Convention on International Interests in Mobile Equipment on matters relating to aircraft equipment. The Cape Town Convention and its Aircraft Protocol were adopted at Cape Town, South Africa on November 16, 2001 and signed by India on July 1, 2008. The Convention and Protocol aim to establish an international law framework for the recognition, protection and transformation of interests in aircraft goods, including air frames, aircraft engines and helicopters.

The manner in which airports are being privatised by the Centre, in which 6 airports were awarded to a single company, despite the Finance Ministry's recommendation not to award more than two airports, and the rules for Public Private Partnership were circumvented by the government panel, was not fair. Adani Enterprises Ltd emerged as the winning bidder for all the airports and the change in criteria allowed a new entrant into the airport sector. This resulted in the decision being taken by circumventing the recommendations of the Finance Ministry and Niti Aayog in the privatisation of airports. Due to this privatisation of the airport, the right of the Airport Advisory Committee in which the local MP had the right to become the Chairman or the nearby MP had the right to become the Co-Chairman, was abolished at that airport. The government has found a new way of first showing operational losses at the airports, and then selling these airports at a low price. This is a new method of corruption.

Second priority towns, business-hub towns or education-hub towns where airports are not operational should be made operational and if there are no airports of any kind here, then after building airports, we should provide security to them, so that business and education can be promoted. Keeping medical tourism in mind, attention should be paid to the accessibility of air ambulance. Due to the monopoly in airports and aircraft, quality is deteriorating and air fares are increasing. Wherever the 'Udaan Yojana' has been implemented, negative results have come to the fore. The real benefits that should have been received are not being received. Air fares have increased so much that they have gone out of the reach of the common man. In such a situation, there is a need for us to try to reduce air fares and fulfill the government's idea of enabling the common man to travel by air. It is also being heard that there are 26 such airports, which will also be privatized. And there should be a full discussion on how fares will be brought down despite privatisation. This is a country of 150 crore people, so there should be a robust aviation infrastructure here. Aircraft emissions contribute significantly to climate change and airplanes burn fossil fuels.

These days, there is a continuous series of accidents in airports and aircrafts. It is not right to inaugurate airports which are not fully built, whose construction is incomplete, just to gain political mileage. Airport accidents are worrisome. Accidents have happened in Rajkot Airport, Jabalpur Airport, Bengaluru International Airport, Guwahati, Port Blair International Airport, Biju Patnaik International Airport in Bhubaneswar, Chennai Airport in the last few years. Accidents should be stopped, but there is no sign of it stopping. I believe that in such circumstances, simply introducing and passing the Bill in a hurry should not be enough.

The Cape Town Convention was signed in 2008, but after that three successive governments delayed it for 17 years and this legislative inaction has put India in a high-risk jurisdiction. Similarly, in 2023, NCLT injunctions under the Insolvency and Bankruptcy Code (IBC) prevented more than 50 global lessors from taking back aircraft leased to GoFirst. Delays and legal ambiguity have undermined international investor confidence. These need to be addressed.

I would like to suggest some reforms. Clearly define how the Convention will integrate with India's domestic aviation financial and insolvency regulations to prevent legal disputes; transparent processes and safeguards for discretionary powers of the Central Government and DGCA to prevent abuse; introduce specific guidelines for creditors, ensuring that international obligations do not impact domestic consumer and debtor protection; also need to establish clear guidelines and procedural safeguards for discretionary powers of the Central Government and DGCA to ensure accountability and transparency.

SHRI PRAFUL PATEL: We are a modern, vibrant democracy. With the vast geography and large population that India has, civil aviation has become one of the mainstays of transportation for a large number of people. Civil aviation of India today, in modern India, is the third largest sector among all the nations of the world. After the United States and China, India is the third largest domestic civil aviation market. I won't dwell on the finer details, but I must say that civil aviation is a subject close to my heart. I have seen, both here and in the Lok Sabha, how aviation has captured the same enthusiasm that railways once did. Every district in the country aspires to have its own flight connectivity, and why not? Air travel, once seen as a luxury for the elite, has now become accessible to all. I extend my appreciation for making civil aviation a key national priority. The fact remains that aviation is an international domain. The International Civil Aviation Organisation (ICAO) plays a critical role in global aviation governance, ensuring alignment in safety and regulations. When a flight departs from Delhi and traverses multiple countries before landing at its destination, seamless coordination is essential.

The Cape Town Convention, central to this Bill, emerged from various civil disputes over leased aircraft. India has about 700-800 civil aircraft in operation. Lessors need protection to ensure timely lease payments and proper aircraft maintenance. In the past, Indian airlines have defaulted on payments, and legal complications have made aircraft repossession difficult, driving up leasing costs. Since 85% of India's fleet operates on leases, a strong legal framework is crucial for both lessors and lessees. This Bill addresses these concerns, ensuring better accountability and making leasing smoother and more cost-effective.

As India rises to become the world's third-largest aviation market, it must remain aligned with global aviation norms. It demands better infrastructure. We have expanded significantly, nearly doubling our airport count from around 75 in the past. However, to sustain growth, we need second airports in major cities like Delhi, Mumbai, Hyderabad, Bengaluru, Chennai, and Kolkata to handle rising air traffic. I urge the government to reevaluate past infrastructure contracts and adapt to the present scenario. In aviation, where we soar to great heights, India's flight must continue to rise, evolving with time. This Bill is a necessary step forward.

SHRI DHANANJAY BHIMRAO MAHADIK: I want to express my views on the Protection of Interests in Aircraft Objects Bill, 2024. Our Prime Minister has set the vision for a developed India by 2047, and I see this bill as a crucial step toward that goal. This bill is rooted in the 2008 Cape Town Convention, which addressed key aspects of aircraft purchase, maintenance, leasing, and financing. Over the years, India's civil aviation sector has witnessed remarkable growth—from 74 operational airports in 2014 to 149 today, and from 209 airline routes to nearly 900. Passenger traffic has doubled from 8.5 crore to around 16 crore. These advancements highlight our commitment to progress and technology adoption, making air travel more accessible and efficient. The bill ensures transparency and legal security in aircraft transactions, protecting the rights of all stakeholders, including airlines, financial institutions, and lessors. Given that leasing plays a significant role in our aviation sector, clear legal provisions will enhance investor confidence and make leasing more affordable. Additionally, it aligns India's aviation industry with global standards, strengthening our international competitiveness. The Bill also streamlines dispute resolution related to aircraft leasing and ownership, ensuring quick and effective legal recourse. Contrary to some concerns, this legislation is not just for large corporations—it will also support small and medium-sized airline operators by providing them with a stable regulatory framework. Furthermore, under the UDAN scheme, air connectivity has improved significantly, linking smaller towns to major cities and boosting industrialization, tourism, and agriculture. I take this opportunity to highlight Maharashtra's connectivity needs, including proposed routes such as Mumbai-Belgaum, Mumbai-Kolhapur, and Pune-Indore, which will contribute to the state's economic growth and align with its goal of becoming a \$1 trillion economy. In conclusion, I fully support this bill as it strengthens India's aviation sector, promotes economic growth, and aligns us with global best practices.

SHRI PRAKSH CHIK BARAIK: I rise on behalf of the All India Trinamool Congress to highlight the shortcomings of the Protection of Interests in Aircraft Objects Bill, 2025. This bill has been delayed for years, yet it remains incomplete. The 2023 airline bankruptcy case exposed major flaws, with over 50 lessors unable to reclaim aircraft due to IBC restrictions. This has damaged investor confidence, making India a high-risk leasing market and forcing airlines to pay 10-15% higher leasing costs. Unlike other countries, India has not streamlined aircraft recovery under the Cape Town Convention. This bill needs proper scrutiny. It should be sent to the Standing Committee for a detailed review if the government is serious about aviation reforms.

India's aviation sector is in crisis. Airlines suffered ₹2,000 -3,000 crore losses in 2024 due to high fuel prices, poor management, and supply chain disruptions. Airfares are skyrocketing—during the Maha Kumbh. There is no regulation on fares. Privatization has worsened costs. Instead of making air travel accessible, the government is making it unaffordable. Infrastructure is crumbling. While passenger traffic grew 39% in 2023, the airport management budget fell from 12% to 8.5%. Despite expansion claims, 114 UDAN routes were shut down in three years. 164 aircraft remain grounded, further driving up airfares. Pilot safety is another neglected issue. In 2023, two pilots died due to excessive workload, yet no action has been taken. Fatigue-related incidents are rising, putting both pilots and passengers at risk. The government must act before a disaster occurs. Aviation is key to connectivity, employment, and economic growth. If these issues are not fixed, India will lose its chance to become an aviation hub. Finally, I urge the Civil Aviation Minister to ensure direct flight connectivity between Kolkata and London at the earliest.

SHRI P. WILSON: The Protection of Interests in Aircraft Objects Bill, 2025 seeks to ratify the Cape Town Convention (2001) and its protocol, providing a global legal framework for aviation asset transactions. Despite signing the convention in 2008, India delayed ratification for nearly two decades, rendering its provisions ineffective. This inaction led to India's compliance downgrade by the Aviation Working Group (AWG), increasing leasing costs, shaking investor confidence, and adding unnecessary financial strain on airlines. This delay was not due to ignorance. The Ministry of Civil Aviation proposed ratification in 2018 and 2022, but nothing was done. Now, in 2025, the Bill finally reaches Rajya Sabha, but only after significant economic damage. Aviation needs proactive, not reactive, governance.

Privatization has led to monopolization, with Adani Group controlling 8 major airports, handling 25% of traffic and one-third of cargo, stifling competition. Regional airports like Madurai, Trichy, Coimbatore, Salem, and Tuticorin suffer from neglect, while the Parandur second airport project drags on despite state support. India's aviation sector demands urgent intervention, not half-measures and corporate favoritism. The government must act decisively to ensure fair competition, infrastructure development, and global compliance.

Hosur Airport has not taken off yet. In just two years, fares have surged by 40 per cent. Airlines are manipulating demand, artificially creating scarcity, and exploiting passengers for profit. The seat of the aircraft is not maintained properly. Toilets are also not maintained properly. Aircraft announcement should also be done in Tamil, Malayalam or Telugu. Right to travel is a fundamental right. Therefore, providing aircraft is a public service. There can be a profit, but not profiteering. I urge the Government to take immediate steps to strengthen airport infrastructure, introduce climate-conscious policies and establish regulatory mechanism, including fair pricing, regulations to make air travel accessible and sustainable for all Indians.

SHRI SANDEEP KUMAR PATHAK: Despite India agreeing to The Cape Town Convention in 2001, our country is ranked 108th among 190 countries. We are not paying attention to it. This bill is very much delayed. Aviation sector is very capital intensive sector. This bill is for giving support to the investors and for making them confident to invest in this sector. This is very important and very good. Through this Bill, you are saying that investors can take back their aircraft within 2 months. In such a situation, a small and genuine investor can go bankrupt. There should be equal opportunity competition in all such sectors. The Government had come up with the 'Udaan' scheme. Its purpose was to connect small cities with air travel. But there were some shortcomings in its implementation, due to which it could operate properly only on 50 percent of the routes. Now only two competitors, Indigo

and Air India, are left in this entire sector. Due to this, the public is suffering losses. Fares are being increased arbitrarily. This was seen recently during the Kumbh. It was the responsibility of the Government to take care of the interests of the public. In the last 2 years, the luggage of one out of every two passengers has either been damaged or has been delivered late.

SHRI AYODHYA RAMI REDDY ALLA: This Bill seeks to boost investment in our aviation industry and ensure smoother aircraft financing. It helps Indian Airline to secure loans and lease aircraft more easily and ensuring financial stability in the aviation sector. It provides clear legal rules for handling aircraft-related financial agreements, reducing legal disputes and regulatory confusions. By making aircraft financing and ownership transfers easier, India can attract more global investors and strengthen its position as a growing aviation hub. This Bill prioritizes international creditors and leasing companies over domestic airlines. This could destabilize the domestic aviation sector. There is also a major conflict on the Insolvency Code, which governs corporate insolvency. There is a limited scope of Government's intervention. I wish to know the vision of the Government for our airports and the aviation industry, making all our airports carbon neutral at the earliest, for rationalization of our air travel costs. The plan to bring in domestic aircraft manufacturing. The details of plan to strengthen the regional airlines and air connectivity. I urge the Government to provide international air connectivity to Tirupati, Kadapa and Rayalaseema region to Kuwait and Gulf areas.

SHRI SASMIT PATRA: I want to take this opportunity to place some aviation needs of my State of Odisha. The proposed International Airport at Puri must be fast-tracked with direct international connectivity. Expansion of Jharsuguda Airport. It must be upgraded with night landing facilities, cargo terminals and additional runways. Direct international connectivity from Bhubaneswar. It also requires a new modern terminal. Fourth, strengthening the Raurkela Airport. Development of the Rangeilunda Airport in Ganjam. Six, revival and development of airstrips in Odisha. These airstrips can be crucial in enhancing intra-State connectivity. Seventh, and the last one, coastal surveillance and emergency response aviation support. Given Odisha's vulnerability to cyclones and natural disasters, it is required to have aviation-based disaster response and coastal surveillance units in Bhubaneswar and Paradeep.

SHRIMATI SEEMA DWIVEDI: All of us have memories from our past associated with the aviation sector. I would like to congratulate the Hon'ble Prime Minister that India has been selected for the 2022-2025 ICAO 41st Meeting. Only those countries can be included in this, which make a major contribution to the facilities of international air operations. There has been a huge increase in the number of passengers in our country. During January-December 2024, domestic airlines carried 161.3 million passengers. We have also made great progress in Krishi Udan 2.0. Five more airports were added to it, taking the total number of airports to 58. More than 22,500 Indian citizens were evacuated safely from Ukraine through Operation Ganga. The fare of the evacuation flights was also borne by the Government of India. Our government has taken a big step in increasing the number of airports. Till 2014, the total number of airports in the country was only 74. But during the Government of the Prime Minister in 2014, today the number of airports in our country has increased to 159. Not only this, our Government has so far given in-principle approval to 21 greenfield airports across the country. 12 greenfield airports have become operational and 11 greenfield airports have been completed. Our government has started Digi Yatra at 24 airports, due to which passengers are getting its benefit. Earlier, about 40 percent of the aerial areas were not available for civilian use. Under the *Atmanirbhar Bharat* initiative, our Government has agreed to release this aerial area for civilian use by the Indian Air Force. The

Government has provided special facilities to the disabled and the elderly at the airports. A new FTO and four new training sites have been started in 2022-23. Our Government has also worked to control the fare from time to time. Today we can reach on time, there can be no delay. Recently Maha Kumbh was organized in Prayagraj. I would like to express my gratitude to the hon'ble minister for taking care of the security, maintenance and passenger comfort of the airspace. The person living in the village, who never even had a bicycle, today also feels happy by traveling by plane. I would like to request the government to regulate the fares.

SHRI MASTHAN RAO YADAV BEEDHA: This Bill is an example of how under the guidance of our hon. Prime Minister, our shared vision for a Viksit Bharat is taking shape. Promoting Make in India and Gift City we are taking bold steps to ensure that India becomes self-reliant in aircraft financing and leasing. This Bill aligns with the efforts to making India an attractive destination for global aviation companies. Lowering the leasing costs will help airlines to expand their fleets to make flying affordable for every Indian. The Cape Town Convention will bring multiple benefits that will shape the future of air travel in India. This will reduce operational costs for airlines, making air travel more affordable. The Bill will establish legally-secure framework for aircraft leasing companies.

Discussion not concluded.

PRIVATE MEMBERS' RESOLUTION

Need for Establishing Council for Future Affairs to Drive Innovation in Artificial Intelligence, Blockchain, Quantum Computing and Water Reuse to Create Policies for Technology Transfer, IP Ownership and Market Deployment

SHRI KARTIKEYA SHARMA: I move the following Resolution:

Having regard to the fact that: -

(i) the rapid evolution of Artificial Intelligence (AI), Blockchain, Quantum Computing, Small Modular Nuclear Energy, Water Reuse and Purification, and other emerging technologies is reshaping economies, industries, and global power structures;

(ii) India has a strong research ecosystem, but fragmentation between research institutions, industry players, policymakers and investors limits the transition of research into market-ready products;

(iii) amidst rapidly evolving global scenarios, there is a pressing need for a holistic unified strategic body, equipped with research and production facilities, which will eliminate the siloisation of development efforts, and prevent delays in innovation, duplication of efforts, and inefficiencies in scaling up technological breakthroughs;

(iv) the next era of global leadership will be determined by nations that successfully integrate cutting-edge research, product innovation, and strategic policymaking under a single, forward-looking framework;

(v) India must proactively position itself as a leader in future affairs, anticipating and shaping technological, economic, and geopolitical trends rather than merely reacting to them; and

(vi) there is a pressing need for a centralized institutional mechanism that aligns research, product development, industry collaboration, and policy formulation to ensure that India remains ahead of global disruptions and leads in future technologies.

The House urges upon the Government to –

(a) institute a Council for Future Affairs (CFA) to provide a unified, strategic framework for research-driven innovation and product development in critical future domains such as AI, Blockchain, Quantum Computing, Small Nuclear Energy, Water Reuse, and other emerging fields;

(b) structure the Council for Future Affairs (CFA) as an apex body comprising leading experts, industry leaders, policymakers, global investors, academic institutions, and startups, ensuring a multi-stakeholder approach to deep-tech research, product commercialization, and national strategy formulation;

(c) establish Research and Product Development Councils (RPDCs) under the CFA, each dedicated to a specific critical field such as AI, Blockchain, Quantum Computing, Small Modular Nuclear Energy, and Water Reuse, ensuring that research and development efforts are aligned with national priorities;

(d) allocate sufficient budgetary support to CFA and its RPDCs to fund long-term research, prototype development, and commercialization of innovative technologies in partnership with industry and global investors;

(e) mandate CFA to set long-term national goals in emerging technology domains, ensuring India's leadership in future global markets and technological disruptions;

(f) require each RPDC to define clear research and product development objectives at the beginning of each financial year and submit an annual report to Parliament detailing progress, challenges, and policy recommendations;

(g) develop a policy framework that facilitates technology transfer, intellectual property (IP) ownership, and market deployment, ensuring that research breakthroughs lead to indigenous industrial growth and global competitiveness; and

(h) promote international collaborations through CFA to attract cutting-edge expertise, funding, and technology partnerships, ensuring India remains connected to global innovation ecosystems.

I rise today to present a Private Members' Resolution of profound national importance, the establishment of a Council for Future Affairs (CFA) for our nation. This Resolution emerges from a deep responsibility and a golden opportunity towards securing India's position as a global leader in the era of rapid technological transformation. The rapid evolution of transformative technologies such as Artificial Intelligence, Blockchain, Quantum Computing, Small Modular Nuclear Energy and advanced water reuse systems is fundamentally reshaping the global economies, industries and power structures. While India possesses a robust research ecosystem, we need to harmonize research institutions, industry players, policy makers and investors.

In today's rapidly evolving global scenario, there exists a pressing need for a holistic unified strategic body equipped with strategic execution and legislative capabilities. Through this Resolution, I am urging the Government to institute a Council for Future Affairs that would provide a unified, strategic framework for research-driven innovation and product development in critical future domains.

The Haryana model shows how a dedicated future-thinking institution can integrate planning across multiple sectors, including agriculture, healthcare, manufacturing, education, energy, IT, transport, urban development and urban living, tourism and environmental management. The States' approach demonstrates how federal structures in India can incubate

and innovate governance models that can later be scaled to national level. There are umpteen global examples of future-focused governance.

The UAE established the Ministry of Cabinet Affairs and the Future in 2016, demonstrating institutional commitment to the future planning at the highest Government level, created the position of Minister of State of Artificial Intelligence in 2017, becoming the first country in the world and dedicated AI Minister. Singapore is another good example which has set up the strategic foresight and execution excellence. Singapore consistently ranks amongst the top 5 nations for digital competitiveness and attracts 17.2 billion dollars in fixed asset investments in 2023 despite global economic uncertainties. Another great example is Israel, which has created the innovation ecosystem with defence technology integration. The Government allocates 5.6 per cent of the GDP to R&D, which is highest globally, with strategic coordination between defence needs and commercial applications. Finland, has set up the Parliamentary Foresight and Participatory Futures. Finland's Committee for the Future, established in 1993 as a Parliamentary Standing Committee, ensures long-term thinking in political decision-making. The Committee engages directly with citizens through a deliberative democracy process to develop inclusive future visions such as the Finland 2050 Initiative.

South Korea's National Science and Technology Council coordinates technology policy across 17 Ministries and agencies, ensuring alignment with national strategic objectives. South Korea has transformed as one of the world's poorest countries to a technological leader in a single generation, with the world's highest robot density in manufacturing, 1,000 per 10,000 workers.

Japan has also set up a Society 5.0 and the Moonshot Research Program. The Japan's Council for Science, Technology and Innovation (CSTI) developed the Society 5.0 version for human-centered technology integration across all aspects of life. The results are that Japan maintains leadership in robotics with 52 per cent of the global market share, and it holds 40 per cent of patents in regenerative medicine despite demographic challenges. China centralized planning with their market mechanisms. China has a five-year plan which provides comprehensive technology development roadmaps with the 14th Plan of 2021-25 prioritizing quantum information, AI, integrated circuits and space technology. The Made in China-25 Initiative targets 70 per cent self-sufficiency in key technologies by 2025 through a co-ordinated industry policy. Germany's high tech strategy, which is for 2025, co-ordinates innovation policies across federal Ministers with 3.5 billion Euro annual investment in key Technologies. The U.K. established the Advanced Research and Innovation Agency (ARIA) in 2022 with 800 million funding and gave an exceptional autonomy to pursue high-risk research. As a result, despite relatively modest research and development of 1.7 per cent of the GDP, the U.K. produces 14 per cent of the world's most highly-cited research papers and has created 43 per cent of Europe's unicorn start-ups. The key lessons are that we are going to build institutional commitment. Also, the policy consistency is a very important factor. Risk tolerance is also very important.

Nationalistic technology strategies maintain international scientific collaborations and talent attraction. The mission stated by the proposed Council is to establish India as a global leader in the future technologies, integrated research, development and deployment of strategic emerging technologies, advanced national security, economic prosperity and social well-being while ensuring technological sovereignty. The vision is to position India as a pre-eminent creator and developer of critical future technologies by 2035. The most important aspect of this proposal is alignment with the Modi Government's vision of Digital India and the technological self-reliance. The Government's push for innovation is evident in its

initiatives like Start-Up India, Atal Innovation Mission and the National Research Foundation. The Council would provide a strategic umbrella to coordinate these efforts towards future-focused Technologies. The strategic governance through technology is a very important aspect. The Modi Government has embraced technology as a governance tool. The Government's focus on using technology for transparency and efficiency aligns with the Council's proposed role in developing next-generation public service delivery systems. There are huge implications as far as national security and strategic autonomy is concerned. The Council would institutionalize capabilities to develop indigenous technologies in critical domains. This proposal is completely aligned with the vision of Viksit Bharat, 2047.

Contributing to the economic growth targets of Viksit Bharat, which envisions India as a developed nation with a 30 trillion dollar economy by 2047, the Council of Future Affairs would directly contribute by accelerating technology-driven growth across sectors. The Council would focus on technologies like renewable energy, water management and sustainable agriculture to address environmental challenges while growing at that pace. We are living in a world where technology is not only enabler, but is a disruptor as well. And accelerating pace for technological change is very important. The collective impact of AI, quantum computing, biotechnology and renewable energy technologies is expected to create an economic value of 15 to 30 trillion dollars globally by 2030. Countries that lead in adopting AI technologies are projected to gain an additional 25 per cent in economic benefits compared to those that lag, potentially adding 1.2 to 1.5 per cent to annual GDP growth. Nations with coordinated approach to technology development like China's five-year plans for technology have demonstrated 30 to 40 per cent greater efficiency in research commercialization compared to countries with fragmented approaches. India possesses the world's largest youth population with 600-plus million citizens under 25 years of age creating an unparalleled talent pool for technological innovation.

India produces over 1.5 million engineering graduates annually, the highest in the world, providing a steady stream of technical talent. India has the world's second largest English-speaking scientific and technical workforce, facilitating global collaborations and knowledge exchange. The India Stack, Aadhaar, UPI, DigiLocker, etc., have demonstrated India's capability to build public digital infrastructure at unprecedented scale and pace. India's data consumption has grown exponentially to over 20 GB per user per month. It is among the highest in the world, creating a very rich database of AI and ML applications. Then comes innovation ecosystem and its strengthening. India has the world's third largest StartUp ecosystem with over one lakh registered StartUps and 100 plus unicorns, demonstrating strong entrepreneurial capacity. The Digital India programme has transformed citizen-Government interaction with over 4,000 Government services now available online, reducing corruption and improving efficiency, which is one of the mainstays of this proposal. The fundamental premise is that India is on a transformation path and we are heading towards becoming Viksit Bharat by 2047. This suggestion can definitely aid in that process. The semiconductor revolution propelled economies like South Korea, Taiwan and Japan from the developing status to global economic powers. The internet revolution enabled the United States to establish economic and cultural dominance.

Previous waves of digital technologies experienced a 25 per cent higher GDP growth rate in the subsequent decade according to the World Bank data. The economic impact of AI alone is estimated to be 15.7 trillion dollars by 2030. There are lots of sectors that have been impacted by future of technologies and especially the critical sectors requiring strategic focus, whether it's healthcare and life sciences, whether it's financial services or education and skill development. The blockchain technology can be used for crypto currency, and we all know the impacts of that. On the other hand, a blockchain technology can be used for

governance. Distributed ledger technology can create tamper-proof land ownership records, potentially resolving India's estimated 7.7 million land dispute cases. Distributed Power Generation; SMRs can provide reliable baseload powers for industrial clusters, remote regions, and strategic facilities. The powers and functions of the Proposed Council is an important aspect which will formulate a comprehensive national future technology strategy with 5, 10, and 25-year horizons. Research and Innovation Ecosystem Development allocate substantial multi-layer funding for fundamental and applied research in priority technology domains, ensuring stability on long-term research programs. Legislative and Regulatory Framework Development advise Parliament and Government on legislative reforms required to govern emerging technologies while enabling innovation and develop agile regulatory frameworks. With the spirit of Vishwa Mitra Bharat, we can establish strategic technology partnerships with like-minded nations to pool resources, share capabilities and develop common standards. The council's integrated approach could increase research commercialization rates from the current 5 to 7 per cent to 20 to 25 per cent by creating clear pathways from laboratories to market. The deep tech startup ecosystem could grow from the current base of approximately 3,000 startups to 15,000 to 20,000 startups by 2030. Strategic missions focused on societal challenges could create early markets for technologies addressing healthcare access and digital inclusion. The direct job creation in high technology sectors could reach anywhere between five to seven million by 2030. I would urge upon the Government to pay attention to this issue of umpteen importance, which affects directly our mission to becoming a Viksit Rashtra by 2047. At the national level, a Council for Future Affairs would amplify this approach and create an integrated ecosystem. The economic security and the societal benefits would be substantial from accelerated GDP growth and creating millions of high-quality jobs to addressing critical national challenges in healthcare, agriculture, energy, and Defence.

SHRI SANDEEP KUMAR PATHAK: The future of any country depends on its science, education and research. We should form a council to improve the advanced technologies in the country like Artificial Intelligence, Blockchain, Quantum Computing and various other advanced technologies - Council for Future Affairs. We can see whether the Government is taking any interest in research or innovation. We are comparing ourselves with the United States, China etc., we must understand the significant amounts they invest in research and development. Artificial Intelligence is not a technology that has come into existence suddenly, it has been born out of basic science and advanced technologies. If we want to make good products and innovate, then we will have to start from school education. We should see how many of our government schools are there where children are getting research facilities. The laboratories in the schools are not proper and equipped. If you come to the university level, you will be saddened to see the research infrastructure of majority of government universities and even private universities. The infrastructure of research and development of government institutions is very less. If you are investing 0.6 percent of the total GDP, then it means that there are no chances of improvement in the infrastructure. You go to CSIR laboratories, you take DRDO, majority of the research institutions there are under-equipped. Unless you strengthen your research infrastructure, desired results are not going to come out. The Government cannot create the entrepreneurial culture in one go, there is a whole ecosystem for it. There should not be fear of failure in it. Whether you take Google, Amazon, Microsoft, there are Indians everywhere and they are in very good positions, but they are not able to succeed here. Therefore, the question arises that what should we do so that our children serve in our country itself, so that all these innovations can happen here. It is very important for the Government to implement the policies without much lag. The Government should work under a collaborative ecosystem. No matter which party is in power in a state, it should cooperate fully. The Government should also work to protect

intellectual property rights. The work being done in the field of artificial intelligence, quantum chemistry, quantum physics, and biomedical is the result of investing in those areas. The Government should keep these subjects away from politics and work seriously on them.

DR. BHAGWAT KARAD: India needs research to become a developed nation. Through research and development, India can become a developed nation. Every citizen of the country should get research facilities so that an advanced and self-reliant India can be built. The gross expenditure on Research and Development has doubled in the last decade. A National Research Foundation has been created which is a uniform research ecosystem bridging science, humanity and social science. To support Atmanirbhar Bharat and Viksit Bharat, the Government of India approved One Nation, One Subscription scheme that ensures nationwide access to international research articles. 'One Nation, One Subscription' has acquired national licenses of e-journals database from 30 major international publishers, granting access to all their journals. This initiative will benefit 1.8 crore students, faculty and researchers across all disciplines, including those in two-tier and three-tier cities helping crores of people. It is a crucial step in integrating India into the global research ecosystem by making high quality knowledge easily accessible.

Scientists are working on the Artificial Intelligence. The Government is actively building an AI ecosystem with affordable computing power, GPUs and research opportunities. A high-end computing facility with 18,693 GPUs is being developed. IndiaAI database platform provides StartUps and researchers with high-quality database to reduce innovation barriers. The Government has established three Centres of Excellence for AI in healthcare, agriculture and sustainable cities. Five National Centres of Excellence will train youth in industry-relevant AI skills in collaboration with the global firms. IndiaAI is funding the development of the indigenous AI models. BHASHINI, Sarvam-1, Chitrlekha and Everest 1.0 are few examples of multilingual AI systems. 'AI for All' is a self-learning online programme that is designed to raise public awareness about Artificial Intelligence. In the economic sector, India has made a commendable innovation like UPI. There is a need to innovate for the future digital economy as well. Work is also being done on digital economy in the economic sector. The Anusandhan National Research Foundation has been established through an Act. It will receive funds amounting to Rs.50,000 crores in the form of ANRF Fund, Innovation Fund, Science and Engineering Research Fund, and Special Purpose Fund. ANRF has formulated programmes aimed at enhancing India's position in key sectors globally, driving scientific advancements and fostering an innovation ecosystem. Electric Vehicle (EV) Mobility Programme has been launched for Advancement in High-Impact Areas. It encourages multi-institutional, multi-disciplinary collaborations with close industry partnerships. Several programmes have been formulated for promoting indigenous research and development in the country. There is the vision for transformation of institutions to the global standards. ANRF has developed programmes aimed at transforming institutions to meet global standards, promoting translational research and supporting basic research initiatives.

These efforts ensure that scientists and researchers received adequate resources and financial assistance to establish their global presence. These initiatives reflect ANRF's commitment to advancing India's research and innovation landscape through strategic funding and collaborative programmes. ANRF has launched Partnership for Accelerated Innovation and Research to enhance research capabilities of universities. The main intention of ANRF is to make the country number one in innovation as well as to make the country a Viksit Bharat. This Resolution draws the attention of Government to the rapid evolution of emerging technologies which are reshaping the global economies and power structures. The Resolution urges for the establishment of a Council for Future Affairs (CFA) to provide a

unified framework for research-driven innovation in AI. It is also suggested that Research and Product Development Councils should be created under the CFA. Sufficient budgetary support should also be allocated to fund long-term research, prototype development and commercialisation in collaboration with industry and global investors. The issues raised in the Resolution have already been receiving appropriate attention from the Government. Empowered Technology Group serves as an institutionalized structure to proactively oversee national policies on research, development, procurement and adoption of emerging technologies, and ensuring India's leadership in critical domains. India can be made a developed nation only through research.

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****Supplement covering rest of the proceedings is being issued separately.