

## 7 PM COMPILATION

16<sup>th</sup> to 30<sup>th</sup> June, 2022

### Features of 7 PM compilation

- ❖ Comprehensive coverage of a given current topic
- ❖ Provide you all the information you need to frame a good answer
- ❖ Critical analysis, comparative analysis, legal/constitutional provisions, current issues and challenges and best practices around the world
- ❖ Written in lucid language and point format
- ❖ Wide use of charts, diagrams and info graphics
- ❖ Best-in class coverage, critically acclaimed by aspirants
- ❖ Out of the box thinking for value edition
- ❖ Best cost-benefit ratio according to successful aspirants

Agnipath Scheme: Need, Benefits and Challenges – Explained, pointwise

**Topic:-** Governance

**Sub topic:-** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Air Quality Life Index (AQLI) – Explained, pointwise

**Topic:-** Environment and Bio-diversity

**Sub topic:-** Environmental pollution and degradation

Nuclear Disarmament and India's Stance – Explained, pointwise

**Topic:-** International Relations

**Sub topic:-** Effect of policies and politics of developed and developing countries on India's interests

Access to Assistive Technology: Challenges and Solutions – Explained, pointwise

**Topic:-** Science and Technology

**Sub topic:-** Developments and their applications and effects in everyday life.

12th Ministerial Conference of the WTO – Explained, pointwise

**Topic:-** International Relations

**Sub topic:-** Important International institutions, agencies and fora- their structure, mandate.

Ban on Single-Use Plastic – Explained, pointwise

**Topic:-** Environment and Bio-diversity

**Sub topic:-** Environmental pollution and degradation

[Kurukshehra June Summary] Rural Tourism: India an Incredible Tourism Destination – Explained, pointwise

**Topic:-** Economic development

**Sub topic:-** Changes in industrial policy and their effects on industrial growth.

Space Economy in India – Explained, pointwise

**Topic:-** Science and Technology

**Sub topic:-** Indigenization of technology and developing new technology.

Geoengineering Technologies: Applications and Concerns – Explained, pointwise

**Topic:-** Science and Technology

**Sub topic:-** Indigenization of technology and developing new technology.

Issues in the IBC Resolution Process and Possible Solutions – Explained, pointwise

**Topic:-** Economic development

**Sub topic:-** Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment

Rare Earth Elements: Strategic Importance and Reducing Import Dependence – Explained, pointwise

**Topic:-** Human and Economic Geography

**Sub topic:-** Distribution of key natural resources across the world

Pre-Legislative Consultation Framework in India – Explained, pointwise

**Topic:-** Indian Constitution and Polity

**Sub topic:-** Parliament and State legislatures—structure, functioning, conduct of business, powers & privileges and issues arising out of these.

Gig Economy in India and the Issues faced by Gig Workers – Explained, pointwise

**Topic:-** Economic development

**Sub topic:-** Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

## Agnipath Scheme: Need, Benefits and Challenges – Explained, pointwise

### Introduction

The Government has unveiled a new Agnipath scheme for recruiting soldiers across the three services. This new defense recruitment reform has been cleared by the Cabinet Committee on Security and will come into effect immediately. The soldiers recruited under the scheme will be called *Agniveers*. The changes in the recruitment policy of **non-officer personnel** to the armed forces is being termed as a radical shift. The scheme is expected to make the force leaner and reduce the defense bill. However there are some challenges and concerns which would require redressal.

### What is the Agnipath Scheme?

It is a short-service manpower model under which around 45,000 to 50,000 soldiers **will be recruited annually**. Of these, 75% will **leave the service in four years**. 25% will be allowed to continue for another 15 years under permanent commission.

**Eligibility Criteria:** The new system is only for personnel below officer ranks (those who do not join the forces as commissioned officers). Aspirants between **the ages of 17.5 years and 21 years** will be eligible to apply. The recruitment standards will remain the same, and recruitment will be done twice a year through rallies.

**Post Selection Scenario:** Once selected, the aspirants will go through training for six months and then will be deployed for three and a half years. During this period, they will get a starting salary of INR 30,000, along with additional benefits which will go up to INR 40,000 by the end of the four-year service.

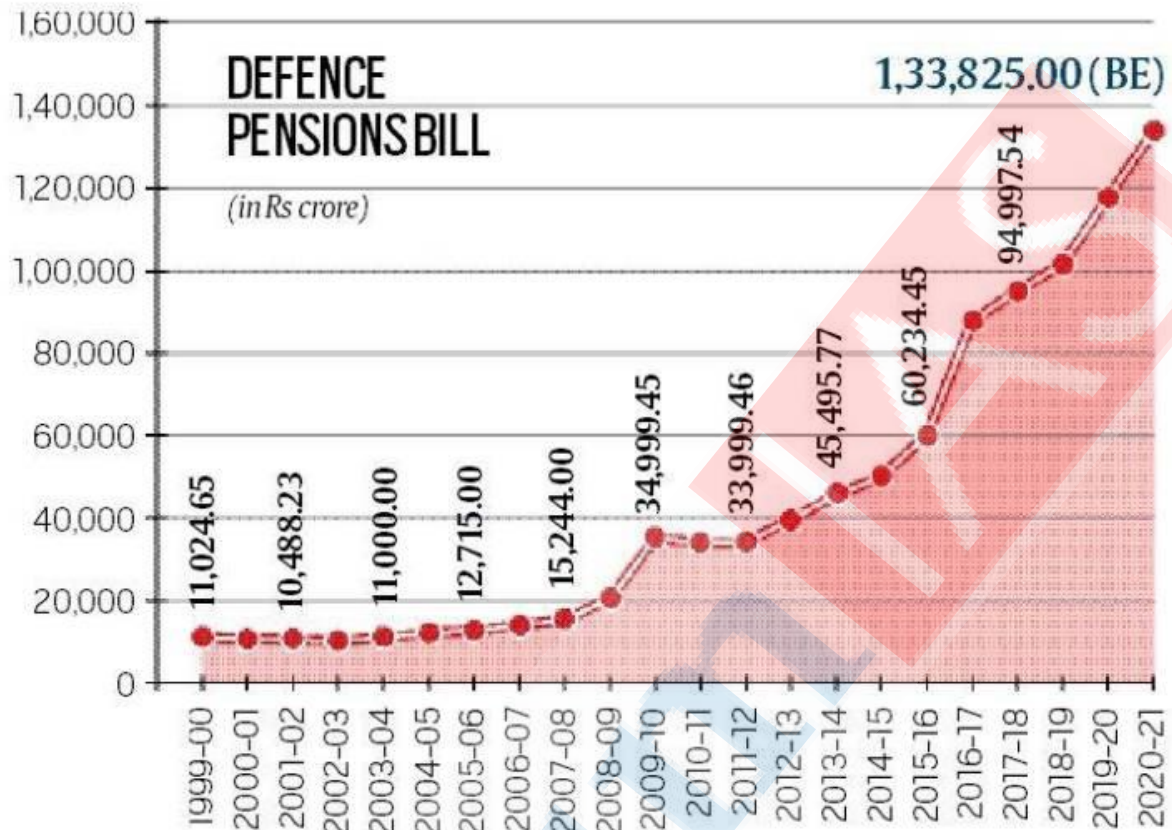
30% of their salary will be set aside under a **Seva Nidhi programme**, and the Government will contribute an equal amount every month, and it will also accrue interest. At the end of the four-year period, each soldier will get INR 11.71 lakh as a lump sum amount, which will be tax-free. They will also get a **INR 48 lakh life insurance** cover for the four years. In case of death, the payout will be over INR 1 crore, including pay for the unserved tenure.

There shall be **no entitlement to gratuity and pensionary benefits**.

### What is the significance of the Agnipath Scheme?

**Leaner and Younger Force:** The move will make the permanent force levels much leaner for the over 13-lakh strong armed forces in the country. As only 25% recruits will be allowed to continue for another 15 years under permanent commission. Further, the average age in the forces is 32 years today. It is expected to go down to 26 in 6 to 7 years with the implementation of the scheme. Notably, the Indian army in 1978 was more youthful than at present at the level of Other Ranks (ORs), with **sepoys comprising 72.6%** of a total of 8,45,025 men. Today, the number of sepoys has **fallen below 40%**. This is not a desirable mix when it comes to physically strenuous deployments, especially in high-altitude areas.

**Reducing Defense Bill:** A leaner force and reduced benefits will considerably decrease the defence bill, which has been a major concern for governments for many years. This year's Budget estimate on defense pension is INR 1,33,826 Crore which is 4.4% of total expenditure (0.6% of the GDP). Pensions made up 28.4% of this year's defense budget.

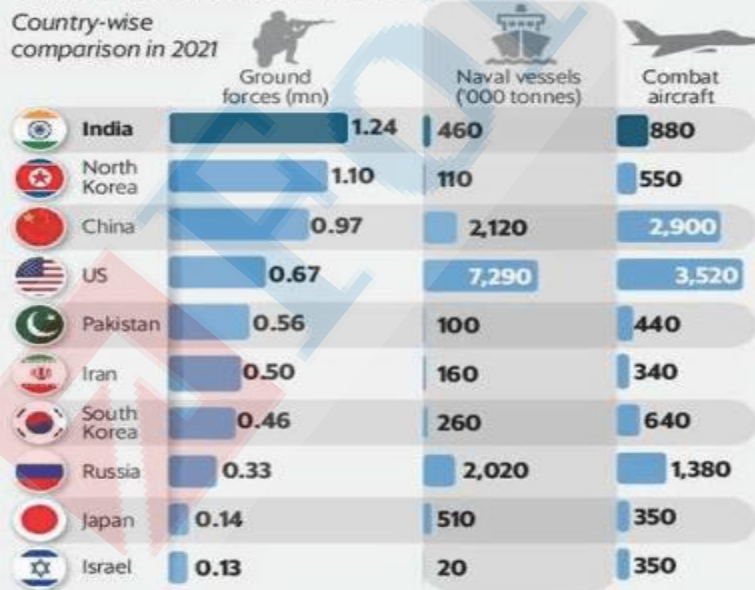


Source: Indian Express

Further, the saved money can be utilized to buy state-of-art technology and equipment which are the backbone of modern warfare.

### India has more troops than China but far fewer aircraft and vessels

Country-wise comparison in 2021



Source: Mint

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**All India, All Class Recruitment:** The scheme will ensure 'All India, All Class' recruitment to the services. This is significant for the Army, where the regiment system has region and caste bases. These would be eliminated with time to allow anybody from any caste, region, class or religious background to become part of existing regiments. National unity, camaraderie and bonding should not be predicated on caste, community, religion or provincial affiliation but on the more equitable notion of being a patriotic Indian.

**Adhoc Buffer Force:** The ex-agniveers could act as an adhoc buffer force who may be called to serve again for boosting national security in times of external/internal threats.

**Economic Benefits:** The skills and experience acquired during the 4-year service will allow the soldiers to get employment in various fields. This will also lead to availability of a higher-skilled workforce to the economy which will be helpful in productivity gain and overall GDP growth.

**Global Parity:** All major militaries in the world are undergoing reform. There is a trend towards reduction in the number of personnel and emphasis on increasing capital expenditure on modern weapons and equipment.

The People's Liberation Army (PLA) underwent a massive demobilization from the 1980s onwards, bringing down total numbers from 4.5 million to about 2 million, with the focus on modernisation. Similarly, in many modern armed forces around the world, the service period ranges from 2 to 8 years with options for active and reservist service.

The Israeli army has service of 30 months and 22 months respectively for men and women, yet enjoys a reputation for being among the best in the world.

#### What are the challenges associated with the Agnipath Scheme?

**First,** The government hopes to hire 46,000 "agniveer" this year. Although with the age limits, the **recruitment may not include** those who have been waiting for the hiring freeze since 2020 to end. More than a lakh vacancies have built up in the Indian Army alone over the last two years, but under the new policy, not all may be filled.

**Second,** the Indian Army's experiments so far with diversity in closed regiments have yielded mixed results. There is a **probability that the new scheme may do more harm** than good in diversifying the static regiments.

**Third,** ex-agniveers may have to **face hardships in getting employment** after 4 years of service. Especially when meaningful employment opportunities in significant or adequate numbers still elude an ever-increasing number of graduates. Further, 'trained-to-kill' soldiers being demobilized every year **could prove dangerous** if they remain jobless and frustrated. Many believe it may lead to **militarisation of society**.

**Fourth,** Many experts believe that shorter duration service **could compromise on training, morale and commitment** in comparison to the permanent recruits. Critics argue that agniveers may turn out of to be risk-averse with the bulk looking to secure an alternate career. Moreover, the Government should have tested this scheme as a pilot, before scaling it up further.

#### What lies ahead?

**First,** the impact of changes such as hiring without the promise of lifelong benefits, the shortened training, and the opening out of regiments to AIAC **can only be assessed in the coming years**.

**Second,** in more immediate terms, when recruitment begins under the Agnipath Scheme in September, the response will show to what extent **the absence of a pension** acts as a spoiler.

**Third,** the Government should help **rehabilitate soldiers who leave the services after four years**. They can be provided with skill certificates and bridge courses that will help them in finding gainful employment.

### Conclusion

No reform can be fool-proof and without teething troubles. But as Agnipath Scheme concerns national defence and security, the Government will need to have a plan to anticipate and address the problems that lie beyond the bold step forward.

Source: [Indian Express](#), [Indian Express](#), [Indian Express](#), [Business Standard](#)

## Air Quality Life Index (AQLI) – Explained, pointwise

### Introduction

The recently released Air Quality Life Index (AQLI) shows a dismal picture of India with respect to the degree of air pollution. It has ranked India as the world's second most polluted country. The AQLI Analysis noted that the air pollution shortens average life expectancy in India by 5 years (relative to what it would be if the World Health Organization (WHO) standards on fine particulate pollution (PM<sub>2.5</sub>) were met). Some areas of India fare much worse than average, with air pollution shortening lives by almost 10 years in the National Capital Territory of Delhi, the most polluted city in the world. The report is a reminder for the Governments to take proactive measures for giving the masses a cleaner air to breathe.

### What is Particulate Matter?

Particulate matter, or PM, is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. They remain suspended in the air for long periods of time. Some particles are large or dark enough to be seen as soot or smoke. Others are so small that individually they can only be detected with an electron microscope.

Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM.

These solid and liquid particles come in a wide range of sizes. Particles less than 10 micrometers in diameter (PM<sub>10</sub>) pose a health concern because they can be inhaled into and accumulate in the respiratory system.

Particles with diameters between 2.5 and 10 micrometers are referred to as 'coarse'. Particles less than 2.5 micrometers in diameter (PM<sub>2.5</sub>) are referred to as 'fine' particles and are believed to pose the greatest health risks. Due to their small size (approximately 1/30th the average width of a human hair), fine particles can lodge deeply into the lungs.

Exposure to fine particles can cause short-term health effects such as **eye, nose, throat and lung irritation, coughing, sneezing, runny nose** and **shortness of breath**. Exposure to fine particles can also affect lung function and worsen medical conditions such as asthma and heart disease. Long term exposure to fine particulate matter may be associated with **increased rates of chronic bronchitis, reduced lung function and increased mortality from lung cancer and heart disease**.

### What is the Air Quality Life Index (AQLI)?

The AQLI is released by the Energy Policy Institute at the University of Chicago (EPIC) every year. It is a pollution index that **translates particulate air pollution** into one of the most important metric: **its impact on life expectancy**. The AQLI is rooted in recent research that quantifies the causal relationship between long-term human exposure to air pollution and life expectancy.

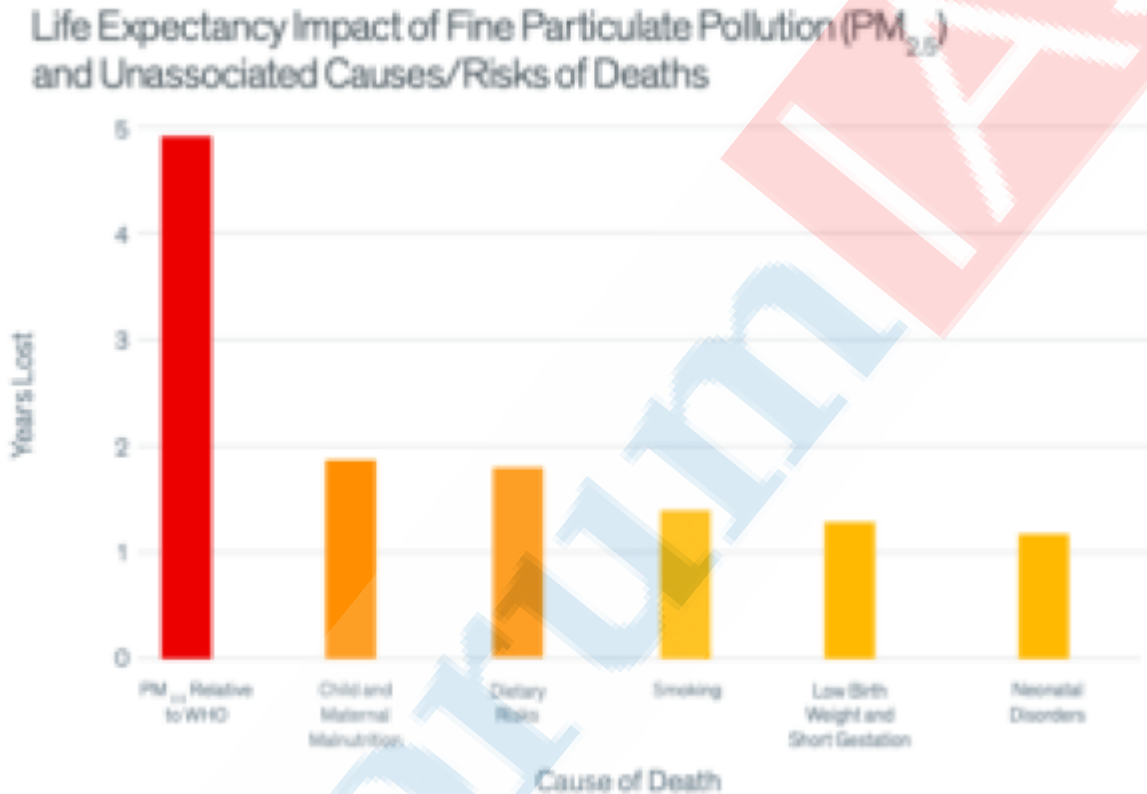
The Index then combines this research with hyper-localized, global particulate measurements. The recently released report has considered 2020 as the base year and included the revised guidelines of WHO. Last year, WHO had revised its guidelines and reduced the safe limit for PM<sub>2.5</sub> from 10 micrograms per cubic metre to 5 micrograms per cubic metre.

### What are the key findings of Air Quality Life Index?

India is the second most polluted country in the world after Bangladesh. Nepal, Pakistan and Democratic Republic of Congo were placed at third, fourth and fifth position.

**All of India's 1.3 billion people** live in areas where the annual average **particulate pollution level exceeds the WHO guideline of 5  $\mu\text{g}/\text{m}^3$** . Further, more than 63% of the population live in areas that exceed the country's own national air quality standard of 40  $\mu\text{g}/\text{m}^3$ .

Particulate pollution is the greatest threat to human health in India, reducing life expectancy by 5 years. In contrast, child and maternal malnutrition reduces average life expectancy by about 1.8 years, while smoking reduces the average life expectancy by 1.5 years.

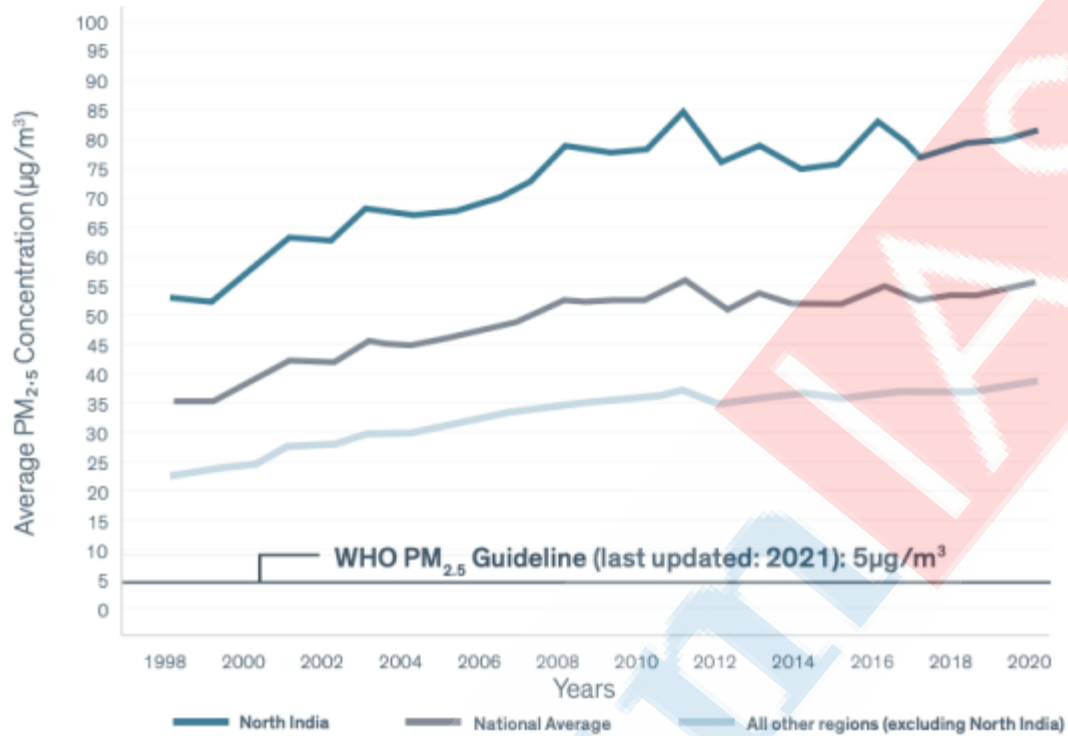


Source: EPIC

**Temporal:** Particulate pollution has increased over time. Since 1998, average annual particulate pollution has increased by 61.4%, leading to a further reduction in average life expectancy of 2.1 years. Since 2013, about 44% of the world's increase in pollution has come from India.



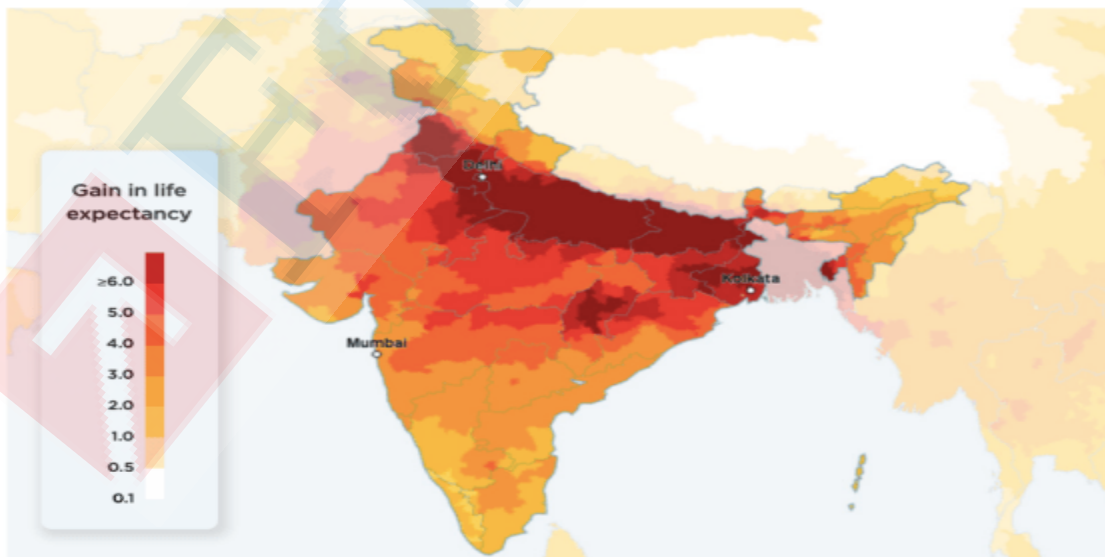
### Average PM<sub>2.5</sub> Concentrations in India, 1998 to 2020



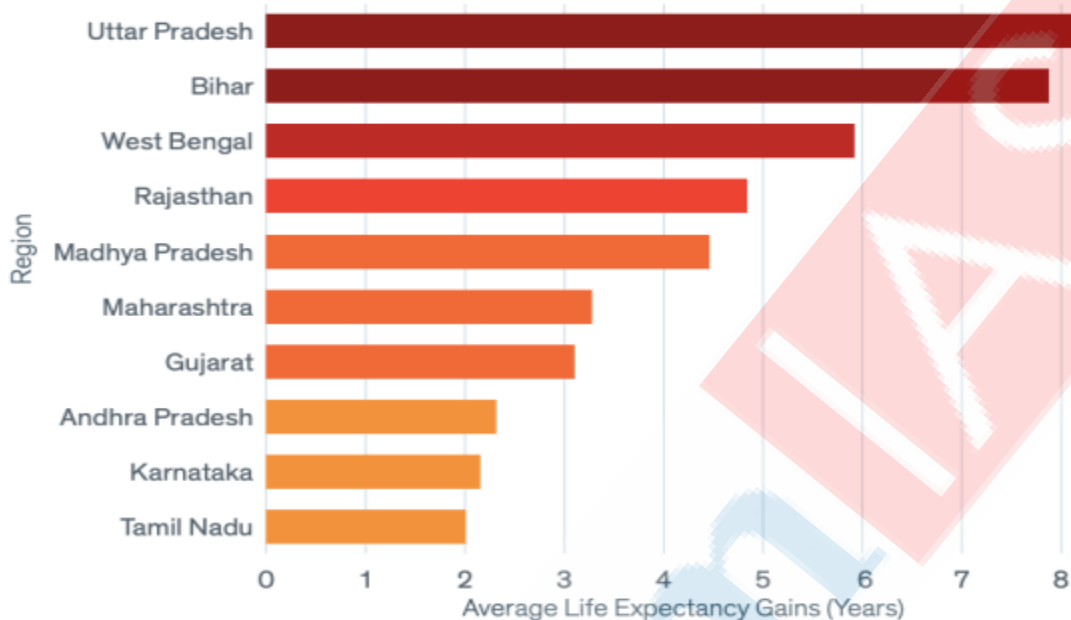
Source: EPIC

**Region Specific Findings:** In the Indo-Gangetic plains of Northern India, 510 million residents are on track to lose 7.6 years of life expectancy on average, if current pollution levels persist. Similarly, residents of Lucknow stand to lose 9.5 years of life expectancy if pollution levels persist.

### Potential Gains in Life Expectancy through Permanently Reducing PM<sub>2.5</sub> from 2020 Concentration to the WHO Guideline



### Potential Gain in Life Expectancy from Reducing PM<sub>2.5</sub> to the WHO Guideline in the 10 Most Populous States of India



Source: EPIC

#### How dangerous is Particulate Matter?

In 2019, over 7 million deaths annually were linked to exposure of various pollutants in the world with analysts claiming that **around 80% of deaths attributed to PM2.5 exposure.**

Among all classes of air pollutants, inhalable PM2.5 is considered the most hazardous as it gets deposited in lungs through breathing and causes serious respiratory problems.

AQLI noted that the impact of air pollution on life expectancy is comparable to that of smoking, more than three times that of alcohol use and unsafe water, six times that of HIV/AIDS, and 89 times that of conflict and terrorism.

#### What is the significance of the Air Quality Life Index?

**First**, it presents **unprecedented insight** into the true **cost of particulate pollution** in communities around the world.

**Second**, the Index also **illustrates how air pollution policies can increase life expectancy** when they meet the WHO's guidelines for what is considered a safe level of exposure.

**Third**, the information presented by AQLI **can help to inform local communities and policymakers** about the importance of air pollution policies in concrete terms. Thereby inducing them to formulate robust policies.

#### What are the reasons behind deteriorating air quality in India?

**First**, vehicular pollution mainly due to trucks, tempos and other diesel-run vehicles. These vehicles negate the impact of cleaner fuel and emission technology.

**Second**, combustion in power plants and industries using dirty fuels, like pet coke, Fuel Oil and its variants, coal and biomass release hazardous air pollutants.

**Third**, garbage burning, both in landfills and other places where there is no collection, processing or disposal.

**Fourth**, road dust; dust due to construction sites etc. also adds to the particulate pollution.

**Fifth**, use of insecticides, pesticides and fertilizers in agricultural activities release ammonia which is a major air pollutant.

Further, **large-scale burning of crop residues** in the States of Punjab, Haryana and western Uttar Pradesh contributes significantly to the air pollution in the Delhi NCR Region every year. The climatic conditions during winter aggravate the condition.

#### What steps have been taken towards reduction of air pollution?

**National Clean Air Programme (NCAP):** It aims to reduce particulate pollution by 20 to 30% by 2024, relative to 2017 levels. The NCAP targets are non-binding.

**Read More:** [National Clean Air Programme \(NCAP\)](#)

**National Air Quality index (AQI):** The AQI classifies air quality of a day considering criteria pollutants through colour codes and air quality descriptor. Further, it also links air quality with likely human health impacts. The index measures eight major pollutants, namely, particulate matter (PM10 and PM2.5), nitrogen dioxide, sulphur dioxide, ozone, carbon monoxide, ammonia and lead.

**The Air (Prevention and Control of Pollution) Act, 1981:** It provides for the prevention, control and abatement of air pollution. It calls for the establishment of Boards at the Central and State levels with a view to carrying out the aforesaid purposes.

#### What steps can be taken going ahead?

**First,** the Government should **provide all forms of support** (money, staff and infrastructure) for timely achievement of NCAP targets. According to AQI, a permanent, nationwide reduction of 25% would increase India's average national life expectancy by 1.4 years.

**Second,** emphasis should be laid on reducing emissions from thermal power plants and industry by instituting strong emissions standards. There should be a strong monitoring and enforcement system that ensures limits are met and excess emissions lead to punishments.

**Third,** the Government should incentivise the **use of machines like happy seeders** to curb pollution from stubble burning. Further innovative methods should be adopted to reduce the magnitude of crop residue along with creation of a market for the use and management of stubble outside of the field (ex-situ management).

#### Conclusion

There is mounting evidence about the effects of air pollution on health. The important message from new studies and analysis is that air pollution related deaths and illness are preventable. Reducing pollution and meeting clean air targets can save lives. Given its widespread impact, combating air pollution should be one of the top agenda for the Union and State Governments

Source: [The Times of India](#), [The Times of India](#), [Down to Earth](#), [EPIC](#)

### Nuclear Disarmament and India's Stance – Explained, pointwise

#### Introduction

The Stockholm International Peace Research Institute (SIPRI) has released its yearbook. The Report has highlighted some worrying trends in international security in the past year. The expected rise of the global nuclear arsenal was the chief cause of concern among SIPRI experts. The comprehensive report claims that while absolute numbers of nuclear arsenal have reduced, they are expected to grow over the next decade. Considering this scenario, it is imperative countries come forward and take prudent steps in order move towards Nuclear Disarmament.

#### About Nuclear Weapons

A nuclear weapon is a device designed to release energy in an explosive manner as a result of nuclear fission, nuclear fusion, or a combination of the two processes.

Fission weapons are commonly referred to as atomic bombs. Fusion weapons are also referred to as thermonuclear bombs or, more commonly, hydrogen bombs. Nuclear weapons produce

enormous explosive energy. For example, the atomic bomb dropped on Hiroshima, Japan, in 1945, contained only about 64 kg (140 pounds) of highly enriched uranium. However, it released energy equaling about 15 kilotons (1000 tons) of chemical explosive.

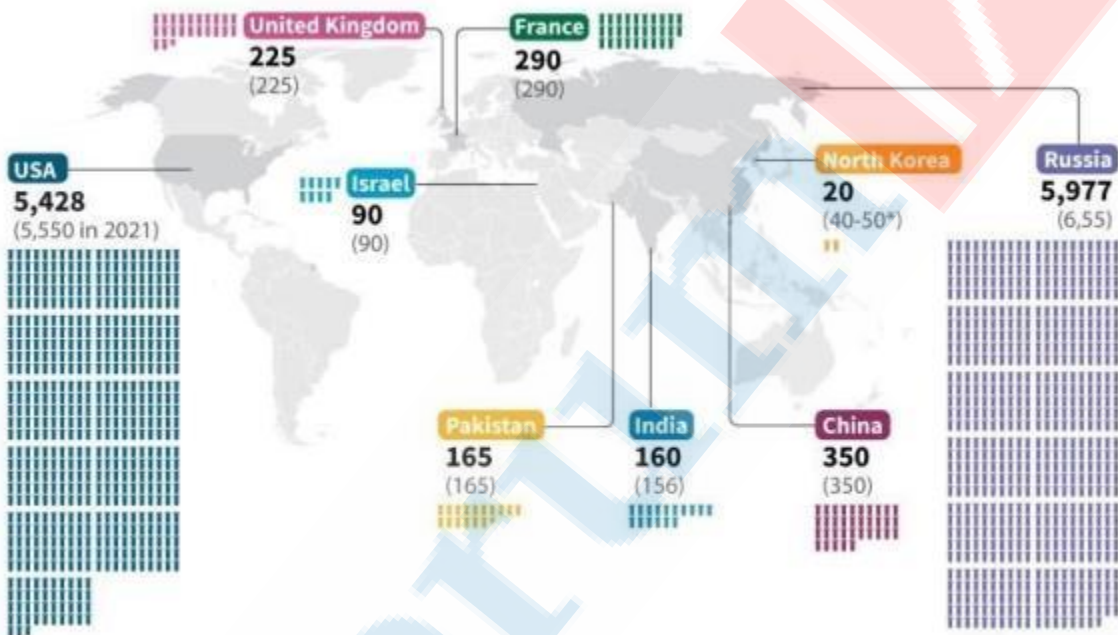
### What are the key findings of the SIPRI Report?

Russia has the highest number of nuclear weapons with 5977 warheads, followed by the US. The US possesses 5428 nuclear weapons. However, the US has the highest number of deployed warheads (1744) followed by Russia (1588).

The US and Russia are followed by China (350), France (290), the UK (225), Pakistan (165), India (160), Israel (90) and North Korea (20). Thus, the rest of the nuclear powers are way behind the US and Russia in terms of nuclear weapon stockpiles.

## Nuclear weapons stockpiles

Warheads by country in 2022, according to the Stockholm International Peace Research Institute (SIPRI)



Source: SIPRI estimates in 2022

\*Estimates 2022 based on production of fissile material by the regime, the number of warheads being "extremely uncertain"

Source: AFP

The **marginal downsizing observed in the nuclear arsenal has come mostly from the U.S. and Russia dismantling retired warheads**. But the Russian invasion of Ukraine has raised some serious concerns because of the continuous rhetoric of not shying away from the use of nuclear weapons.

Further, China's recent activities surrounding construction of 300 new nuclear missile silos have also been turning heads. In the subcontinent, India and Pakistan seem to be making gains over their nuclear arsenal (in absolute numbers).

**Concerns:** The yearbook mentions low level border clashes between India and Pakistan, the civil war in Afghanistan, and the armed conflict in Myanmar as some of the worrying indicators of an unstable system.

It also highlighted three cause of concern trends: Chinese-American rivalry, involvement of state and non-state actors in multiple conflicts, and the challenge that climatic and weather hazards pose.

### Why do countries value Nuclear Weapons?

**Symbol of modernization:** Adding nuclear weapons to the arsenal shows that the military is getting prepared for future emergencies and attaining modern capabilities. Countries are focusing on development of newer and more efficient nuclear submarines, aircraft carriers, fighter jets, manned and unmanned aerial vehicles etc.

**Deterrence Effect:** Nuclear weapons create a deterrence effect even on strong military powers. For instance, many experts are saying that Russia wouldn't have invaded Ukraine if the latter hadn't given up nuclear weapons in early 1990s.

**Regional Superiority:** Any country which desires to establish a steady control over its region wishes to obtain/retain control of nuclear weapons. For instance, the U.S exercises substantial control over the American continent due to its huge arsenal of nuclear weapons.

**Permanent Membership of UNSC:** Permanent members enjoy veto over the decisions of the UN and in a way controls the world affairs. All of them possess a huge arsenal of nuclear weapons which was a crucial factor kept in mind while offering them a permanent seat in UNSC.

### What is the need for Nuclear Disarmament?

**Huge Magnitude of Destruction:** The Nuclear Explosion at Hiroshima released energy equaling about 15 kilotons of chemical explosive. The blast immediately produced **a strong shock wave, enormous amounts of heat, and lethal ionizing radiation**. The enormous toll in destruction, death, injury, and sickness produced by the explosions at Hiroshima and Nagasaki was on a scale never before produced by any single weapon.

**Against Rules of War:** Nuclear Weapons can't strictly obey the rule of differentiating between combatants and civilians. Even if it is used over the military, then also radiation can impact nearby civilian populations.

**Sovereign Equality:** The destruction of nuclear weapons is imperative to truly realize the principle of sovereign equality of nations. Otherwise the world would remain divided between nuclear haves and have nots.

**Fake Triggers:** As per recent reports, the U.S and Russia have a sufficient nuclear arsenal to completely destroy the earth. In such a scenario, any fake trigger using misinformation or fake news can destroy the very existence of human beings from earth.

**Non state Actors:** The growing recruitment of educated youth in terrorist organizations raises a fear that they may attain nuclear prowess in future. This situation can be disastrous and bring a state of anarchy as terrorist have no regard to international law.

### What steps have been taken to prevent Nuclear Proliferation?

**Non-proliferation of Nuclear Weapons (NPT), 1968:** It was put forward by the USA, UK and USSR. It was signed in 1968 and came into force in 1970. The treaty has 3 pillars: **(a) Non-proliferation:** Nuclear Weapon States (NWS) pledge not to transfer nuclear weapons and technology and Non-nuclear Weapon States pledge not to acquire nuclear weapons; **(b)**

**Disarmament:** All parties to pursue good-faith negotiations on effective measures to control nuclear arms race, and to general and complete disarmament; **(c) Peaceful Use of Nuclear**

**Energy:** The Treaty recognizes the right of all Parties to develop nuclear energy for peaceful purposes.

India considers the treaty discriminatory as it creates a club of 'nuclear haves' and a larger group of 'nuclear have-nots' by restricting the legal possession of nuclear weapons to those states that tested them before 1967. India hasn't signed the treaty. Pakistan, Israel and South Sudan are other non-signatory countries.

**Read More:** [50 years of Nuclear Non-Proliferation Treaty \(NPT\)](#)

**Treaty on the Prohibition of Nuclear Weapons, 2017:** It prohibits and makes it illegal to possess, use, produce, transfer, acquire, stockpile or deploy nuclear weapons. States are also prohibited from using or threatening to use nuclear weapons and other nuclear explosive devices. It came into force in 2021.

**Export Control Groupings: Nuclear Suppliers Group (NSG) and the Missile Technology Control Regimes (MTCR)** are some of the nuclear export control groupings. These ensure that nuclear fuel export doesn't result in nuclear weapons development.

**Conference on Disarmament (CD):** It is a multilateral disarmament forum established by the international community to negotiate arms control and disarmament agreements based at Geneva. The Conference was first established in 1979 as the Committee on Disarmament. It was renamed the Conference on Disarmament in 1984. The Conference succeeded three other disarmament-related bodies: **(a)** Ten-Nation Committee on Disarmament (1960); **(b)** Eighteen-Nation Committee on Disarmament (1962–68); **(c)** Conference of the Committee on Disarmament (1969–78).

**Read More:** [Proliferation of Nuclear Weapons and Its Prevention](#)

#### **What is India's Nuclear Doctrine?**

**(a)** Building and maintaining a credible minimum deterrence; **(b)** A 'No First Use' policy i.e. nuclear weapons to be used only in case of any nuclear attack on Indian territory or on Indian forces anywhere; **(c)** Non use of nuclear weapons against non-nuclear weapon states; **(d)** Nuclear retaliatory attacks to be authorised only by civilian political leadership through the Nuclear Command Authority; **(e)** Nuclear retaliation to a first strike will be massive and designed to inflict unacceptable damage; **(f)** India may retaliate with nuclear weapons to retaliate against attack with biological or chemical weapons; **(g)** Strict controls on export of nuclear and missile related materials and technologies; **(h)** A commitment to the goal of a nuclear weapon free world.

#### **What is India's Stance on Nuclear Disarmament?**

India is fully committed to complete Nuclear Disarmament. India supports complete disarmament within a specified timeframe which distinguishes its stance from Nuclear Weapon States (NWS) which have an ambiguous stand regarding timeline for disarmament.

India also insists that disarmament must be 'non-discriminatory' and pursued 'on the basis of equality' i.e., there must be no discriminatory provisions in favor of NWS as is the case with the Non-Proliferation Treaty (NPT). The NPT call for ultimate elimination of nuclear weapons but hasn't put on timeframe for the same. India calls for complete disarmament despite being a non-signatory of the NPT.

#### **What lies ahead?**

The recent geopolitical events transpiring around the world in practically all regions have made the global security climate more unstable. It is further aided by actions of authoritarian leaders of not just non-democratic systems but also of strongmen leaders of democratic systems.

The two largest nuclear weapons holding states need to take on a more engaging role in the international arena. SIPRI's yearbook should force the Governments to look critically at how the global disarmament project seems to be going.

Apart from this, clear and constant communication between Nuclear weapon states is desired in order to avoid the usage of a nuclear weapon based on fake news or misinformation.

#### **Conclusion**

The nations must come forward and prepare a road map for a gradual phase down of nuclear weapons. It is sine qua non for long term well being of humankind keeping in mind the saying

of **Albert Einstein** – “ I do not know with what weapons World War III will be fought, but World War IV will be fought with sticks and stones”.

Source: [The Hindu](#), [NTI](#)

### **Access to Assistive Technology: Challenges and Solutions – Explained, pointwise**

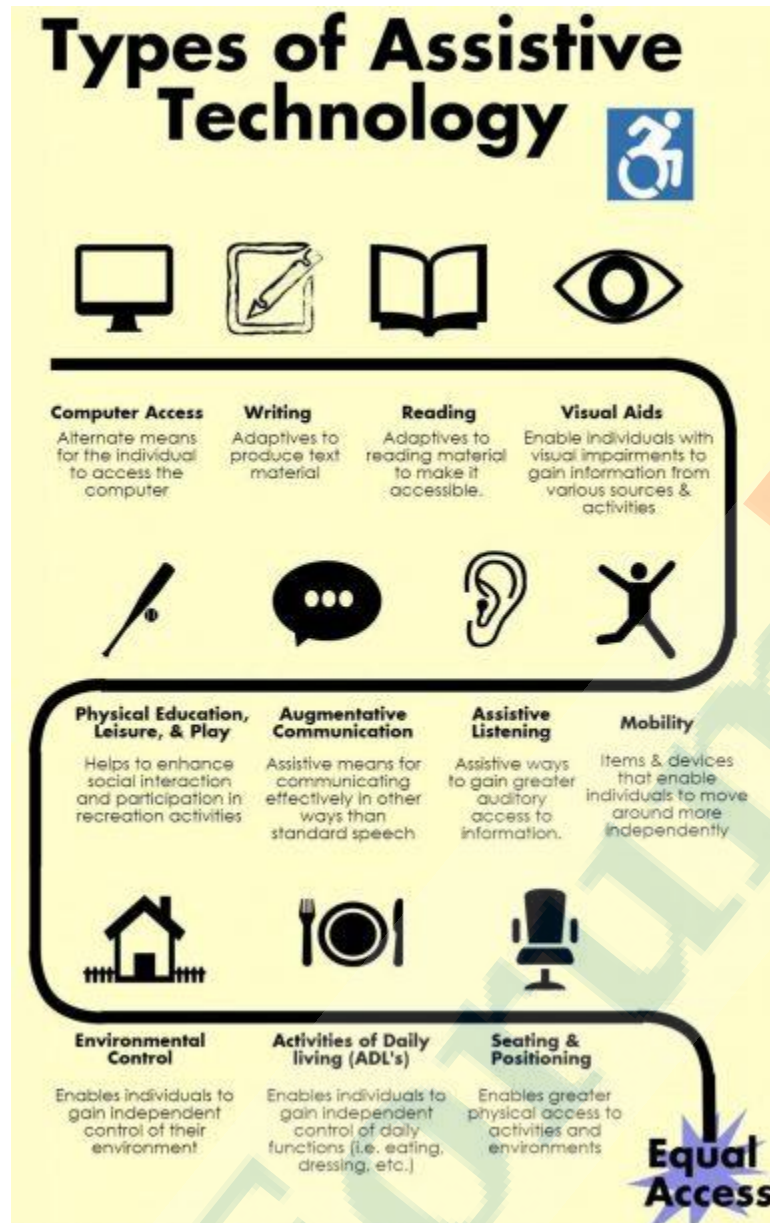
#### **Introduction**

The WHO and UNICEF recently released the Global Report on Assistive Technology. The Report has been developed in response to the World Health Assembly resolution (WHA71.8) on improving access to assistive technology. The resolution was adopted in May 2018. The Report assumes significance as globally 90% of those who need assistive technology do not have access to it. The Report is expected to play an instrumental role in setting the global roadmap for improving access to assistive technology for everyone, everywhere. It is primarily directed at policy-makers, providers of assistive technology, donors and funding agencies, and industry leaders.

#### **What is meant by Assistive Technology?**

These include any item, piece of equipment, software programme or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities. These aids could be **(a) Physical products** such as wheelchairs, eyeglasses, hearing aids, prostheses, walking devices or continence pads; **(b) Digital** such as software and apps that support communication and time management; or **(c) Adaptations to the physical environment**, for example, portable ramps or grab-rails.

Different disabilities require different assistive technologies, and these are designed to help people who have difficulty speaking, typing, writing, remembering, seeing, hearing, learning, or walking.



Source: [edtechnology.co.uk](http://edtechnology.co.uk)

## What are the key findings of the WHO Report?

The GREAT report draws upon surveys conducted in 20 countries. These indicate that the proportion of the population currently using at least one assistive product ranges from less than 3% to about 70%. This indicates widespread disparity in access to assistive technology.

More than 2.5 billion people need one or more assistive products, such as wheelchairs, hearing aids, or apps that support communication and cognition.

A billion of them are denied access, particularly in low- and middle-income countries, where access can be as low as 3% of the need for these life-changing products.

What is the situation regarding disability in India?

The 2011 Census puts the national estimate of the number of people with disabilities at 2.21% of the total population (26.8 million persons). This includes persons with visual, hearing, speech, locomotor and mental disabilities with the majority in the 19-59 age group.



Amongst the people with disabilities, 49% are literate, 34% employed and 75% live in rural areas. The country's disabled population increased by 22.4% between 2001 and 2011 census periods. The 76th round (July-December 2018) of the National Sample Survey (NSS) reported that among persons with disabilities, 21.8% reported receiving aid/help from the government and another 1.8% from other organizations.

### What is the significance of Assistive Technology?

**Ease in Day to Day activities:** As a life changer, assistive technology (AT) can support people in need in all aspects of life. Using AT, a child can go to school, make friends, and participate in sports and recreation like any other child in the school or community. Adults can be independent and access higher education and jobs, carry out household activities, and participate in social life. For instance, **Arunima Sinha** used Jaipur Foot to climb Mount Everest and became the first female amputee to do so.

**Realization of True potential:** It helps an individual to overcome barriers and unleash its true potential. For instance, **Stephen Hawking** used an assisted communication system and a speech synthesizer to compose lectures and papers. This helped him emerge as one of the greatest physicists and cosmologists of all time.

**Prevents Isolation and Hardships:** Without assistive products, people may suffer exclusion, be at risk of isolation and live in poverty. They may face hunger, and be forced to depend more on family, community and government support.

**Achieving SDGs:** Including assistive technology into health systems is critical for progress towards the Sustainable Development Goals (SDG) especially SDG 3 which calls for Universal Health Coverage (UHC).

### What are the barriers in accessing Assistive Technologies?

**First**, there is **lack of awareness** that often drives low uptake, compounded by an absence of information on the types and availability of assistive products.

**Second, high costs** due to over-priced assistive products and associated service delivery cost is one of the most common barriers.

**Third, limited physical and geographical access** puts assistive technology out of reach for many potential users.

**Fourth, inadequate product range, quantity, quality and suitability** can make assistive products unavailable, unsafe, ineffective and even abandoned. Further, Procurement and delivery challenges delay and reduce access.

**Fifth, capacity gaps exist in the assistive technology workforce** along with a shortage of workforce with adequate knowledge.

**Sixth, low policy profile and lack of legislation** lead to the low prioritization of assistive technology, and in many cases legislation fails to cover people with all types of functional difficulty.

**Seventh, Lack of funding and investment** for the strengthening of national assistive technology systems exists in many countries which restricts access to the marginalized section.

**Eighth**, there is **Fragmentation of the assistive technology sector**, including between professions, user groups, funding and provision mechanisms.

### What steps have been taken for persons with disabilities?

National

**The Rights of Persons with Disabilities Act, 2016:** The Act, increased the number of disabilities from 7 to 21. It made provision for reservation in higher education and government jobs. It mandated free education for children between 6 to 18 years. It also mandates the

Government to take measures to promote health, education, skill development, and employment opportunities for PwDs.

**Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP) scheme:** Under this aid and assistive devices are distributed to divyangjan to improve their mobility. This helps them in carrying out daily living activities independently and earn a living.

**Accessible India Campaign:** It focuses on accessibility in the built-up environment, transportation system, and ICT ecosystem.

**Read More:** [\[Yojana May Summary\] Empowering Divyangjan – Explained, pointwise](#)

Global

**Universal Declaration of Human Rights (UDHR):** It places an obligation on member states to provide assistive technology to persons with disabilities.

**United Nations Convention on the Rights of Persons with Disabilities (UNCRPD):** The UNCRPD in its preamble emphasizes mainstreaming disability and acceptance of persons with disabilities as part of human diversity and humanity.

**Priority Assistive Products List:** The WHO launched the Priority Assistive Products List in 2018. These include hearing aids, wheelchairs, communication aids, spectacles, artificial limbs, pill organizers, memory aids and other essential items for the elderly and persons with disabilities.

## Improving the Assistive Technology System

The Report notes that Improving the assistive technology system means developing and strengthening its four components: Products, Provision, Personnel and Policies.

- **Products:** The **range, quality, affordability** and **supply** of assistive products need to improve. **Repairing, refurbishing** and **reusing** can be faster and more cost-effective. **Harmonizing product standards** can ensure safety, performance and durability.
- **Provision:** Service delivery or provision of assistive products and related services should be as close as possible to people's own communities, including in rural areas. Services should be designed to minimize and prevent further injuries or disabilities. Services **need to be delivered across all geographic areas and populations.**
- **Personnel:** The workforce required to ensure access to assistive technology for everyone, everywhere needs to be mapped and addressed. **Training and education** for dedicated as well as allied assistive technology workforce and support networks are a prerequisite.
- **Policy:** **Political will, legislation** and **adequate funding**, along with permanent implementation systems and structures, are required to **ensure universal, rights-based assistive technology access** for everyone, everywhere.

Source: Global Report on Assistive Technology

Created by | ForumIAS®

### What further steps can be taken?

**First,** Assistive technology provision needs to be **integrated in all key development sectors**, especially within health, education, labor and social care. Every country needs to have an integrated or standalone assistive technology policy and plan of actions with adequate budgetary support.

**Second,** Assistive products should be **affordable, durable, safe and effective**. This includes: **(a)** Developing or strengthening necessary regulatory systems and standards; **(b)** Systematic feedback mechanisms built into the supply chain; **(c)** Provision of assistive products with the

support of a competent workforce; **(d)** Active engagement of users and their families in product selection as well as training on use and maintenance.

**Third**, focus should be on **increasing public awareness and combating stigma**. The assistive technology sector can be de-stigmatized through better product design, preferably universal design, and larger acceptance. Political support is required to develop the assistive technology sector to achieve universal coverage through a rights-based approach.

**Fourth**, every country should have **periodical population-based data on the need and demand for, and supply of assistive technology**. This will help in understanding the gaps and trends for developing evidence-based strategies. The WHO rapid assistive technology assessment (rATA) tool can be used to collect population-based data.

**Fifth**, greater **investment should be made in research and development** of assistive technologies. This will help in creation of more affordable and durable products.

**Sixth**, there should be greater engagement of countries and organizations at international level. **Article 32 of the UN Convention on the Rights of Persons with Disabilities** states that international cooperation to support national efforts is necessary to improve access to assistive technology across the world.

### Conclusion

Countries must work with full vigor to achieve Universal coverage to Assistive Technology. This implies that everyone, everywhere receives the assistive technology that they need without financial or any other hardship.

Source: [Indian Express](#), [The Hindu](#), [Financial Express](#)

## 12th Ministerial Conference of the WTO – Explained, pointwise

### Introduction

The 12th Ministerial Conference (MC) of the WTO concluded recently. The members of the World Trade Organization agreed to a series of deals the Conference. This includes temporary waivers on COVID-19 vaccines, a moratorium on e-commerce trade, food security and setting limits on harmful fishing subsidies. India played a significant role in developing consensus on these deals. However, certain long-standing issues in the WTO need to be addressed in order for it to regain its dwindling stature, especially after the growing focus towards regional agreements and groupings.

### About the World Trade Organization (WTO)

The World Trade Organization is the only international organization that deals with the rules of trade between countries. The WTO officially commenced in 1995 under the Marrakesh Agreement signed by 124 nations, replacing the General Agreement on Tariffs and Trade (GATT). Currently, it has 164 members and 23 observer governments (like Iran, Iraq, Bhutan, Libya etc).

According to its rules, **all decisions are taken through consensus** and **any member can exercise a veto**.

Its aim is to promote free trade, which is done through trade agreements that are discussed and signed by the member states. The WTO also provides a forum for countries to negotiate trade rules and **settle economic disputes between them**.

## Key Agreements under the WTO

- **Agreement on Subsidies and Countervailing Measures (SCM):** The WTO SCM Agreement contains the **definition of the term 'subsidy'**. A subsidy contains three basic elements: **(a)** A financial contribution **(b)** By a Government or any public body within the territory of a Member **(c)** Confers a benefit. All three of these elements must be satisfied in order for a subsidy to exist.
- **General Agreement on Trade in Services (GATS):** The GATS was inspired by essentially the same objectives as its counterpart in merchandise trade, GATT. It aimed at **creating a credible system of international trade rules** and **ensuring fair and equitable treatment of all participants** (Principle of Non-discrimination).
- **The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS):** It sets down minimum standards for many forms of **intellectual property (IP) regulation** as applied to nationals of other WTO Members. It was negotiated at the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in 1994.
- **Agreement on Agriculture:** It was concluded in 1994. It was aimed to **remove trade barriers, promote transparent market access** and **integration of global markets**. It is often criticized as a tool in the hands of developed countries to exploit weak countries. Negotiations are still going on for some of its aspects.

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### What is WTO's Ministerial Conference?

The Ministerial Conference is the **WTO's top decision-making body** and usually meets every two years. All members of the WTO are involved in the MC and they can take decisions on all matters covered under any multilateral trade agreements.

The 12th Ministerial Conference of the WTO was held in Geneva, Switzerland from 12-17 June. It was supposed to end on 15 June, but with intensifying negotiations, the conference was extended by two days.

### What are the key takeaways from the 12th Ministerial Conference of the WTO?

**Curtailling harmful fishing subsidies:** The WTO passed a multilateral agreement that would curb 'harmful' subsidies on illegal, unreported and unregulated fishing for the next four years. Since 2001, member states have been negotiating the banning of subsidies that promote overfishing.

**Exemption for Food Security:** Members agreed to a binding decision to exempt food purchased by the UN's World Food Programme (WFP) for humanitarian purposes, from **any export restrictions**. However, countries would be allowed to restrict food supplies to ensure domestic food security needs.

**Moratorium on e-commerce transactions:** Members agreed to continue the long-standing moratorium on custom duties on e-commerce transmissions. It will be continued until the subsequent Ministerial Conference or until March 31, 2024, depending on whichever comes first.

**Temporary Waiver on Covid 19 vaccines:** WTO members agreed to temporarily waive intellectual property patents on Covid-19 vaccines without the consent of the patent holder for 5 years.

### What is the significance of the recent agreements?

**First**, the fisheries agreement is of immense significance as it is the first time that members concluded an agreement with **environmental sustainability** at its heart. It will also help in the **protection of livelihoods** of the 260 million people who depend directly or indirectly on marine fisheries. It is **only the second multilateral agreement on global trade** rules struck in its 27-year history.

**Second**, the exemption of WFP's food from tariffs is vital for **promoting global food security** especially in light of the global food shortages and rising prices caused by the war between Ukraine and Russia.

**Third**, the temporary waiver will contribute to ongoing efforts to **concentrate and diversify vaccine manufacturing capacity** so that a crisis in one region does not leave others cut off.

#### Why are the current agreements being criticized?

**First**, critics believe that the fisheries agreement **would only restrict and not eradicate subsidies on illegal fishing**. After 20 years of delay, the WTO failed again to eliminate subsidized overfishing. This in turn allows the countries to continue to pillage the world's oceans.

**Second**, India has asked the WTO to review the extension of the moratorium on custom duties on e-commerce transactions. Developing countries faced the brunt of the **financial consequences of such a moratorium**. From 2017-2020, developing countries lost a potential tariff revenue of around \$50 billion on imports from only 49 digital products.

**Third**, the recent temporary waiver is a **watered down version of the original proposal made by India and South Africa** in 2020. They had wanted broader intellectual property waivers on vaccines, treatments and tests. The current waiver does not adequately waive IP on all essential COVID-19 medical tools and it does not apply to all countries.

#### What are other issues surrounding the WTO?

**Burden for Poor countries:** The WTO rules include many Non-trade subjects as well. The subjects like environment, labour standards, fossil fuel subsidies, plastic pollution and transparency in government procurement have been brought into the fold of the WTO. This is expected to raise costs for the poor and developing countries and impact the competitiveness of their goods. For instance, a poor country exporting cotton shirts must first meet high environmental standards at home. This will only raise costs and cut exports from poor countries.

**Trade wars:** The US administration imposed steep tariffs in January 2018 on China alleging IP violations. In December 2019 the US also blocked the appointment of new nominees to WTO's appellate body. This has paralysed the WTO as a judge and enforcer of global trade rules.

**Lack of consensus:** The developed nations' game plan is to put the old obligations on the back-burner and push the WTO to form rules on new areas like e-commerce. It is an area where the US firms have a clear edge. Most WTO member countries want them to first deliver on the agreed issues like reduction in agriculture subsidies.

#### What lies ahead?

**First**, India's key demand to allow it to export food from its public stockholdings to other countries will reportedly be discussed in the next Ministerial Conference in 2023.

**Second**, Majority of negotiations are usually blocked by dissenting countries. Therefore, guidelines should **spell out clear criteria for when a country may use its veto power**. Veto usage needs to be weighed against the interests of all, and in light of the WTO's mandate.

**Third**, an **independent panel** could play the role of arbiter, evaluating the competing claims and helping to overcome the political deadlock.

**Fourth**, **New rules** are required to keep pace with changes in the market and technology. Rules and disciplines on topics ranging from trade-distorting industrial subsidies to digital trade require updates.

**Fifth**, **Plurilateral negotiations** should be promoted as they allow like minded members come together to deliberate on a specific issue. This makes it easier and faster to negotiate than multilateral accord like passage of Trade Facilitation Agreement in 2013.

#### Conclusion

The WTO holds immense relevance considering the rapid pace of globalization and technological advancement across the world. It is still the most fundamental organization to protect the trade

interest of small and developing countries against the diktat of the developed world. However, the deadlock on contentious issues like agriculture subsidies must be resolved urgently, for WTO to stay relevant. Else, the regional trade agreements will continue to take WTO's place and this will prove detrimental to the interests of the developing countries.

Source: [Indian Express](#), [The Hindu](#), [Business Standard](#), [Mint](#)

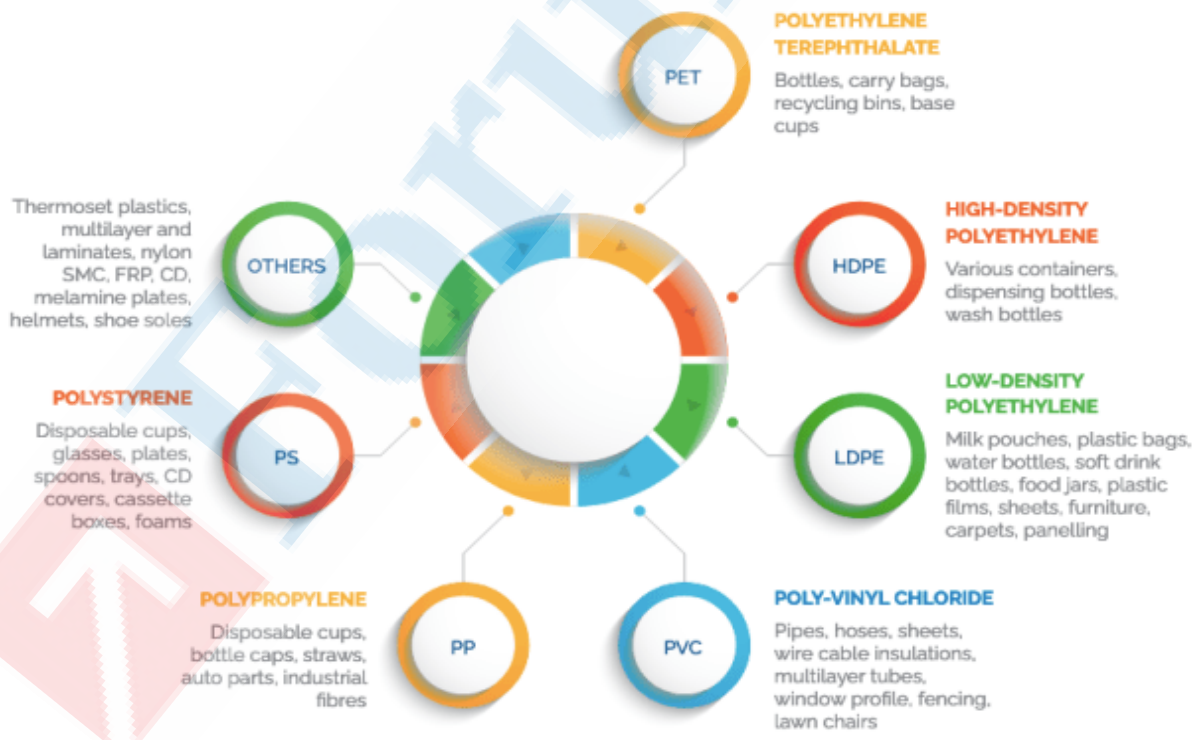
### Ban on Single-Use Plastic – Explained, pointwise

#### Introduction

Plastic waste management is becoming a challenging task for countries across the globe and India is no exception to it. The use of plastic is on rise while its disposal and safe management hasn't been commensurate with increased usage. This has resulted in creation of landfills on land and garbage patches in oceans. Considering this, the Government of India has put a **ban on 'Single-Use Plastic' from July 1** under the **Plastic Waste Management Amendment Rules, 2021**. The Ministry for Environment, Forest and Climate Change had issued a gazette notification last year announcing the ban, and has now defined a list of items that will be banned from next month.

#### What is Single-Use Plastic (SUP) and magnitude of its usage?

It refers to plastic items that are used once and discarded. The Plastic Waste Management Rules, amended in 2021, define single-use plastic as plastic item intended to be used once for the same purpose before being disposed of or recycled. There are different types of plastic: PET, High-density Polyethylene, Low-density Polyethylene, Linear low-density polyethene (LLDPE), PVC, Polypropylene and Styrofoam.



*Types of Plastics and their Applications. Source: NITI Aayog-UNDP Handbook Sustainable Urban Plastic Waste Management*

There is also a category of multi-layered plastic made by combining different plastics and materials. For instance, wafers or gutka packets or shampoo sachets. SUP can belong to any of these categories.

Single-use plastic has among the highest shares of plastic manufactured and used. It is present in packaging of items, bottles (shampoo, detergents, cosmetics), polythene bags, face masks, coffee cups, cling film, trash bags, food packaging etc.

A 2021 report by the Minderoo Foundation (Australian philanthropic organization) said **single-use plastics account for a third of all plastic produced globally**. Single-use plastic also accounts for the majority of plastic discarded – 130 million metric tonnes globally in 2019. All of this is burned, buried in landfills or discarded directly into the environment.

The report found that India features in the top 100 countries of single-use plastic waste generation – **at rank 94**. The top three being Singapore, Australia and Oman. With domestic production of 11.8 million metric tonnes annually, and import of 2.9 MMT, India's net generation of single-use plastic waste is 5.6 MMT, and per capita generation is 4 kg.

#### **What is the current status and coverage of plastic ban?**

The items on which the Central Pollution Control Board (CPCB) have announced a ban are earbuds; balloon sticks; candy and ice-cream sticks; cutlery items including plates, cups, glasses, forks, spoons, knives, trays; sweet boxes; invitation cards; cigarette packs; PVC banners

The Ministry had **already banned polythene bags under 75 microns in September 2021**, expanding the limit from the earlier 50 microns. **The ban will be extended to polythene bags under 120 microns** from December 2022. The ban is being introduced in phases to give manufacturers time to shift to thicker polythene bags that are easier to recycle.

As per **the Plastic Waste Management Rules, 2016**, there is also a complete ban on sachets using plastic material for storing, packing or selling gutkha, tobacco and pan masala.

#### **How will the ban on single-use plastic be enforced?**

The ban on single-use plastic will be monitored by the CPCB from the Centre, and by the State Pollution Control Boards (SPCBs) that will report to the Centre regularly.

Directions have been issued at national, state and local levels. For example, all petrochemical industries have been instructed to not supply raw materials to industries engaged in the banned items. Directions have also been issued to SPCBs and Pollution Control Committees. They must modify or revoke 'consent to operate' issued under the Air/Water Act to industries engaged in single-use plastic items.

Those found violating the ban can be **penalized under the Environment Protection Act 1986**. It allows for imprisonment up to 5 years, or a penalty up to INR 1 lakh, or both. Violators can also be asked to pay Environmental Damage Compensation by the SPCB. In addition, there are municipal laws on plastic waste, with their own penal codes.

#### **How are other countries dealing with single-use plastic?**

Bangladesh became the first country to ban thin plastic bags in 2002. New Zealand became the latest country to ban plastic bags in July 2019. China issued a ban on plastic bags in 2020 with phased implementation. As of July 2019, 68 countries have banned the use of plastic bags with varying degrees of enforcement.

Eight states in the US have banned single-use plastic bags, beginning with California in 2014. Seattle became the first major US city to ban plastic straws in 2018.

On July 2, 2021, the Directive on Single-Use Plastics took effect in the European Union (EU).

### What are the harmful effects of plastic pollution?

**Longevity:** The chemical bonds that make-up plastics are strong and made to last. The decomposition rate of plastic typically ranges from 500 to 600 years, depending on the type. This makes them one of the major environment pollutants.

**Greenhouse gas Emissions:** On the current trajectory of production, it has been projected that single-use plastic could account for 5-10% of greenhouse gas emissions by 2050.

**Landfill Creation:** The country is witnessing a rise in landfill creation especially across major cities like Delhi, Mumbai etc. The Ghazipur landfill in Delhi is soon expected to surpass the height of Qutub Minar. Single use plastic has played a crucial role in enhancing the extent and height of such landfills. Plastics keep on **releasing harmful toxins** in the adjacent areas **polluting local soils and groundwater.**

**Impact on Health:** When plastic remains in the environment for long periods of time and does not decay, it turns into microplastics. This enters food sources and then the human body, causing severe health problems.

**Impact on the Marine Ecosystem:** According to the International Union for Conservation of Nature, the world produces over 300 million tonnes of plastic every year, of which 14 million tonnes end up in the ocean. Marine species **ingest or are entangled by plastic debris**, which causes severe injuries and death.

### The pathway by which plastic enters the world's oceans

Our World  
in Data

Estimates of global plastics entering the oceans from land-based sources in 2010 based on the pathway from primary production through to marine plastic inputs.



Source: Our World in Data

### What are the challenges in plastic waste management?

**First,** While manufacturers can use the same machine for 50- and 75-micron bags, the machinery will need to be upgraded for 120 microns. This will **enhance the cost of production** and put a greater burden on consumers. Similarly many sellers fear that the **alternatives will cost more** than single-use plastic. The availability of the **substitutes might not be enough to meet** the demand.

**Second,** there is **currently no dedicated international instrument** in place designed specifically to prevent plastic pollution throughout the entire plastics lifecycle.



**Third**, the success would rely largely on how effectively these norms are governed by the Central and State Pollution Control Boards. Their **past records in plastic waste management are quite uninspiring**. This is testified by frequent violation of plastic rules in major cities like Delhi, Bengaluru etc.

**Fourth**, the **prevalence of corruption** impedes the effective implementation of ban and fails to create a substantial deterrence on violators. India's rank has slipped six places to 86th among 180 countries in Corruption Perception Index (CPI) 2020.

**Fifth, informalized Structure of Rag Pickers** inhibits a strong linkage between waste collectors and processing plants.

#### What lies ahead?

**First**, an **international instrument** to manage plastic pollution can be formulated by parties of the UN Environment Assembly. Earlier this year, 124 parties of UNEA including India, signed a resolution to draw up an agreement. The agreement will make it legally binding for the signatories to address the full life of plastics from production to disposal, to end plastic pollution.

**Second**, the Government should support the **creation of sustainable bioplastics**. These plastics can be decomposed by the action of living organisms, usually microbes, into the water, carbon dioxide, and biomass. Recently, the BIS passed standards for biodegradable plastic.

**Third**, the masses should be sensitized over adverse impacts of plastic use by collaborating with organizations like **Hasiru Dala**. It is an organization that seeks to enhance the lives of waste-pickers and improve waste collection in Bengaluru.

**Fourth**, the Government should **take proactive steps** to ensure that plastic ban becomes a success. The recent launch of a public grievance app to track complaints of single plastic use is a laudable step in this regard.

**Fifth**, an **independent environment regulator** as envisaged by the Supreme Court should be created to oversee prudent implementation of the new rules.

#### Conclusion

The ban on single-use plastic is just a small step towards attainment of sustainable development. The current scenario warrants that all the countries develop a higher degree of environmental consciousness and realize there **is no 'Planet B' in this whole universe**.

Source: [Indian Express](#), [The Times of India](#), [Outlook](#)

### [Kurukshetra June Summary] Rural Tourism: India an Incredible Tourism Destination – Explained, pointwise

#### Introduction

India showcases rich heritage and natural abundance of many incredible places that are worthy enough to represent the nation globally. The Tourism sector has been instrumental in providing mass employment opportunities and substantially increasing income levels of both the formal and informal sectors of the economy. Realizing this, the government has undertaken various steps to promote the tourism sector. However, it has failed to unleash the true potential of its rural tourism. The Government must promote rural tourism as the majority of India resides in villages and has numerous things to offer to the tourists.

#### What is Rural Tourism?

It is any form of tourism that showcases the rural life, art, culture, and heritage at rural locations, thereby benefiting the local community economically and socially. Numerous local traditions like plays, art forms, dances etc. enhance the cultural wealth of rural areas, making these attractive

for the tourists. Lush green forests in south Indian villages, sacred groves etc. make them an ideal site to promote tourism.

### How is India an incredible tourism destination?

India is one of the world's oldest civilisations which offers a kaleidoscope of cultural experiences. The country has a rich heritage and numerous attractions.

**Adventure Tourism:** This involves exploration of remote areas and exotic locales and engaging in various activities. For adventure tourism in India, tourists prefer to go trekking to places like Ladakh, Sikkim, and the Himalayas.

**Beach Tourism:** India's vast coastline and islands provides ample opportunities for fun packed tourism. Kerala, Goa, Andaman & Nicobar Islands, Lakshadweep islands attract tourists in large numbers all around the year.

**Cultural tourism:** India is known for its rich cultural heritage and an element of mysticism, which is why tourists come to India to experience it for themselves. The various fairs and festivals that attract a large number of tourists are the *Pushkar fair* (Rajasthan), *Taj Mahotsav* (Uttar Pradesh), and *Suraj Kund mela* (Haryana).

**Eco tourism:** Ecotourism entails the sustainable preservation of a naturally endowed area or region. This is becoming more and more significant for the ecological development of all regions that have tourist value. A large number of National Parks and Biosphere Reserves offer vast opportunities in ecotourism like the Kaziranga National Park (Assam), Gir National Park (Gujarat), and Kanha National Park (Madhya Pradesh) etc.

**Medical tourism:** Tourists from all over the world have been thronging India to avail themselves of cost-effective but superior quality healthcare in terms of surgical procedures and general medical attention. The city of Chennai (Tamil Nadu) attracts around 45% of medical tourists from foreign countries.

### What is the current status of the Tourism Industry?

The travel and tourism Industry is one of the fastest-growing industries globally, with a growth rate of 3.5% vis-a-vis a global economic growth rate of 2.5% in 2019. The sector contributed around 10.4% to global GDP, generated 330 million employees worldwide, and accounted for 27.4% of global services exports.

However, COVID-19 had a detrimental impact on the travel industry worldwide, with the sector's contribution to global GDP and employment declining by 49% and 19%, respectively.

The tourism sector in India contributes immensely to foreign exchange reserves in the country and provides employment opportunities, both in the formal and informal sectors. In 2019, the sector accounted for 8.8% of the total employment, 5.8% of the total exports, and 5.9% of GDP. However, Indian Tourism Sector also suffered due to COVID-19. The sector now contributes only 4.7% to GDP, 7.3% to total employment, and 2.5% to total exports.

### What steps have been taken to promote Tourism in India?

**Swadesh Darshan Scheme:** It was launched by the Ministry of Tourism in 2014-15. It aims to develop theme-based tourist circuits on the principles of high tourist value, competitiveness and sustainability in an integrated manner. Under the scheme, 15 themes have been identified. These themes include Buddhist Circuit, Coastal Circuit, Desert Circuit, Rural Circuit, Heritage Circuit etc..

**PRASHAD Scheme:** The National Mission on Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive (PRASHAD) was launched by the Ministry of Tourism in the year 2014-15. It is a Central Sector Scheme launched with the objective of integrated development of identified pilgrimage and heritage destinations.

**Adopt a Heritage Scheme:** It is an initiative of the Ministry of Tourism in collaboration with the Ministry of Culture and the Archaeological Survey of India. It was launched in September 2017

on World Tourism Day. It aims to ensure quality & inclusive provision of amenities and facilities across heritage, natural, & tourist sites through active participation of private and public sector organizations. These organizations would be known as 'Monument *Mitras*' for their collaboration initiative.

### What is the need to focus on Rural Tourism?

**Huge Potential:** There is a huge potential to capture domestic and international tourists. Despite having a diverse culture and rich architectural heritage, India holds only a 1.2% share of the international tourism market (2019). While Spain has 5.7%, the USA – 5.4 %, China – 4.5% and the UK – 2.7%. Similarly, there has been a growing trend of short-break holidays in cities and proximity of rural areas allows them to act as great tourism destinations.

**Creation of Employment Opportunities:** The tourism industry generates both direct and indirect employment. When developed to its fullest potential, it could provide jobs to many young men and women who otherwise are increasingly migrating to cities. Rural tourism has the potential to generate large-scale productive employment that is multifaceted in nature, ranging from highly skilled to semi-skilled.

**Development of rural regions:** It will boost the overall rural economy as rural tourism will augment both consumption as well as investment potential of the rural regions.

**Curbing Over-tourism:** Over-tourism means a very high number of people visiting a few tourist destinations, which suffer from the excessive presence of tourism such as Shimla and Goa. Over-tourism has consequences like destruction of the natural ecosystem, increase in the amount of waste, inflation, migration of residents and so on.

**Raising India's Soft power:** If the concept of rural tourism is well marketed, then people from developed countries would be drawn towards India. Especially millennials who are fascinated about traditions, culture and art.

**Revival of arts:** Rural tourism can revive many of the arts and crafts traditionally being practiced in the rural communities but dying a slow death.

### What steps have been taken to promote Rural Tourism?

The Ministry of Tourism has designated **rural tourism as one of the Niche Tourism** sectors for growth in the country. The Ministry has developed a **Draft National Strategy and Roadmap for Rural Tourism**, which focuses on developing and promoting local products through tourism. It focuses on the following key pillars: **(a)** Model policies and best practices for rural tourism; **(b)** Digital technologies and platforms for rural tourism; **(c)** Developing clusters for rural tourism; **(d)** Marketing support for rural tourism; **(e)** Capacity building of stakeholders; **(f)** Governance and institutional framework.

The Ministry of Tourism has designated **the Rural Circuit** as one of the fifteen thematic circuits for development under the *Swadesh Darshan* Scheme.

### What more steps can be taken going ahead?

**First**, the Government must adopt **innovative approaches** to boost and promote different tourism segments such as niche tourism, wellness tourism, adventure tourism, and spiritual tourism. Given that India has been recognised as a destination for spiritual tourism for ages for both domestic and international tourists, the Government must unleash the potential of spiritual tourism.

**Second**, Villages **must learn from successful models of rural tourism** so as to achieve maximum output with minimum inputs. For instance, strategies of Pochampally Village in Telangana State can be adopted. It was selected as one of the best Tourism Villages by the United Nations World Tourism Organization (UNWTO) in 2021.

**Read More:** [Pochampally village in Telangana selected as one of the best Tourism Villages by United Nations World Tourism Organisation](#)

**Third**, the Government needs to focus on handholding the States on a few significant parameters in rural India for tourism development: **(a) Infrastructure development:** Modern buses and stations at reliable frequency, taxi/ shared mobility, App-based integration of guides, parking/charging/refueling etc.; **(b)** Identifying and linking heritage spots in the given destinations; **(c)** Facilities like signage in English and other foreign languages; **(d) Tax issues:** One India, one tax system for tourist vehicles in order to protect the tourists from facing multiple taxations; **(e)** Promotion of homestays and high ended branded hotel rooms in resorts to fulfil the interest of staycations and workstations.

### Conclusion

Tourism in rural regions can only be maintained if an inclusive planning strategy based on a multi-action, multi-stakeholder participatory approach is adopted and implemented. This will help in unleashing the true potential of rural regions and ensure adherence to the concept of **Atithi Devo Bhava – Guest is our God.**

Source: Kurukshetra June 2022, [Ministry of Tourism](#)

## Space Economy in India – Explained, pointwise

### Introduction

Space exploration commenced with the launch of Sputnik 1, the first artificial satellite, in 1957. The cold war era was characterized by the intense race between the erstwhile USSR and the US, to dominate the space. This space race was led by the Government owned agencies of the US and USSR. The global space economy has undergone considerable changes since then, with the entry of the private sector in space economy as the most prominent development. In the modern day, for the first time in 2020, humans accessed space in a vehicle not built by a government agency.

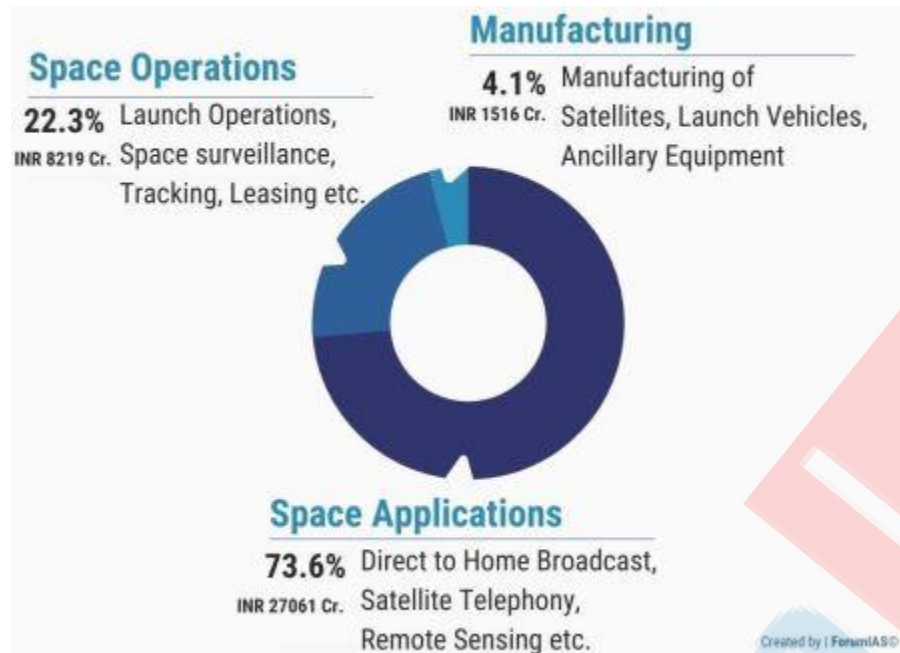
### What is the current status of the Space Economy?

The \$447 billion global space market includes: **(a) Upstream market** (commercial satellite market, launch market, and institutional market); **(b) Midstream market** (operator revenue, ground infrastructure, and operations); **(c) Downstream market** (space services and consumer equipment).

Another basis of classification divides space economy into 3 components: **(a) Manufacturing of Space-related Equipment** (satellites, launch vehicles and ancillary equipment); **(b) Space operations** (launch operations, space surveillance, tracking, lease, brokerage, etc); **(c) Space Applications** (Direct to Home broadcast, satellite telephony, remote sensing, etc).

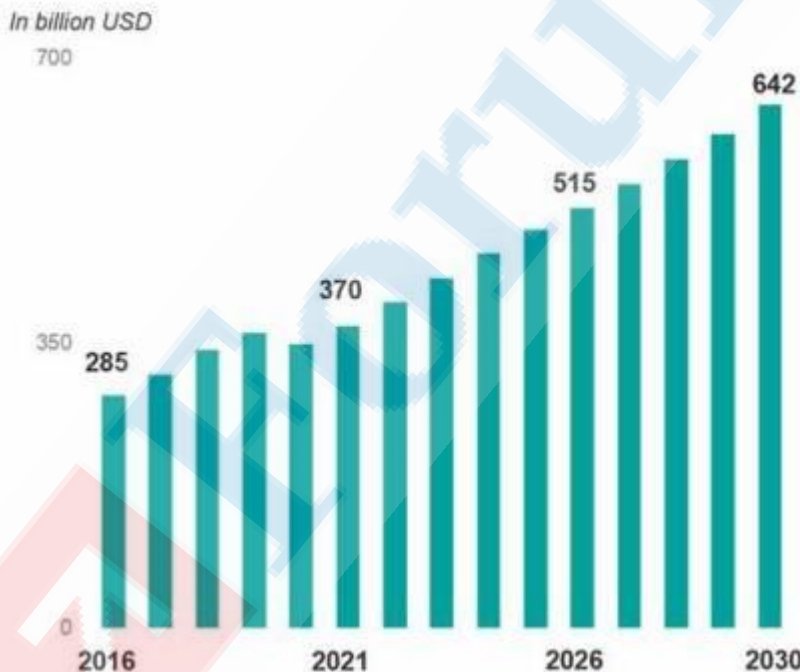
Researchers from the Centre for Development Studies (CDS) and the Indian Institute of Space Science and Technology (IIST) undertook a first-of-its kind attempt at measuring the size of India's space economy. The findings were outlined in a paper titled **'The Space Economy of India: Its Size and Structure'**

They arrived at a figure of INR 36,794 crore (approximately US\$ 5 billion) for the 2020-21 fiscal. Further, the estimated size of India's space economy, as a percentage of the GDP, has slipped from 0.26% in 2011-12 to 0.19% in 2020-21. According to the paper, **space applications** accounted for the major chunk of this evolving space economy, constituting 73.57% (INR 27,061 crore) in 2020-21. It was followed by **space operations** (INR 8,218.82 crore or 22.31%) and **manufacturing** (INR 1515.59 crore or 4.12%).



In terms of GDP, India's spending is more than that of China, Germany, Italy and Japan, but less than the U.S. and Russia. The Global Space Economy is poised to reach US\$ 650 billion by 2030. India has the potential to capture a large share of this expanding sector.

#### Evolution of the space economy 2016-2030



Source: Euroconsult

#### What is the need to focus on the Space Economy?

**Huge untapped potential:** India manages to occupy only 2%, or US\$ 7 billion, of the global space economy. The small share isn't solely due to technology and resources but also because of policy.

**Read More:** [\[Yojana January Summary\] India as a Space Power – Explained, pointwise](#)

**Boosting the Economy:** Allowing private entities into end-to-end space activity would help in achieving a US\$ 5 trillion economy by 2024. Further, the space economy market is said to grow over US\$ 1 trillion by 2040.

**Low Cost:** The Indian space sector has the potential of launching space vehicles at a much lower cost. This was seen in the Mars Orbiter Mission which was 10 times cheaper than western missions. This will help in getting many foreign contracts.

**Rising Demand:** It is estimated that around 10,000 satellites will be launched into low-earth orbit by 2026. Further, the projected growth of small and miniature satellites has increased three times, growing from US\$ 12.6 billion to US\$ 42.8 billion. This provides ample opportunities for small and medium enterprises to enter into the sector.

**Presence of Budding Entrepreneurs:** According to a global report published in June 2021, India has 368 private space firms, placing it 5th in the world in size after the US, the United Kingdom, Canada, and Germany. With these many firms, India is leading China (288), France (269), and Spain (206) in the private space industry.

**Read More:** [A launch window for India as a space start-up hub](#)

#### **What steps have been taken by the Government to boost the Space Economy?**

**Indian Space Association (ISpA):** It aspires to be the collective voice of the Indian Space industry. ISpA will be represented by leading domestic and global corporations that have advanced capabilities in space and satellite technologies.

**Read More:** [Indian Space Association \(ISpA\) – Explained, pointwise](#)

**Indian National Space Promotion and Authorisation Centre (IN-SPACe):** It aims to provide a level-playing field for private companies to use the Indian space architecture. IN-SPACe will act as a channel between ISRO and any private players that want to participate in space activity, thereby culling lengthy bureaucratic procedures. It will benefit in two ways: **(a)** It will allow more research and scholarly work by individuals who have the capability. For example encouraging something similar to SpaceX in India; **(b)** It will allow ISRO to focus on more challenging missions and especially next-generation technology development.

**Opening the Space Sector:** The Government in June 2020 opened up the Space sector allowing the participation of the Indian private sector in the entire domain of space activities. This includes satellite creation, launches, and space-based services that were earlier not open to them.

**Antrix Corporation:** It is a government-owned company under the administrative control of the Department of Space. It was established in 1992 for commercially utilizing space products of ISRO, providing technical consultancy services and transferring technologies to industry.

**Draft Space Activities Bill, 2017:** The Bill aims to promote and regulate the space activities of India. It focuses on encouraging the participation of private sector agencies under the guidance and authorisation of the government through the Department of Space.

**New Space India Limited (NSIL):** It is a Central Public Sector Enterprise under the Department of Space that was established in 2019. It has been mandated to transfer the technologies emanating out of the Indian space programme and enable Indian industry to scale up high-technology manufacturing base.

#### **What are the challenges in the development of the Space Economy?**

**Budgetary Constraints:** The CDS and IIST study noticed a decline in the budget for space-related activities. This led to a reduction in the size of the space economy in the last two years. The budget outlay in 2020-21 was INR 9,500 crore, shrinking from INR 13,033.2 crore in the previous fiscal.

**Lack of Data:** The current CDS and IIST paper was a first-time attempt at scientifically measuring the size of the space economy. Further even this was unable to establish the size of the space-based remote sensing industry.

**Space Debris:** Since the market is open, more corporations can send their vehicles and satellites up into space, which is already crowded. By some estimates, there are over 15,000 traceable and over 200,000 1-10 cm pieces.

**Absence of a Legislative Framework:** The draft Space Activities bill was introduced in 2017 but has been pending since then.

**Brain Drain:** India produces the best brains of the world but is unable to retain them. People emigrate from the country for better opportunities and careers that might hamper development of the space sector.

**Lack of robust Dispute Settlement Mechanism:** This discourages private investment in the space sector e.g., the cancellation of Antrix-Devas deal has impacted investor confidence and hurt India's reputation as investment destination internationally.

### What more steps can be taken?

**First,** the **policies of opening the space sector** to private players should be duly implemented. They are likely to enlarge the size of the sector through enhanced private investment and improved integration with the global private space industry. The government should also enhance collaboration between Indian private players and big private players from across the globe like **SpaceX, Virgin Galactic** etc.

**Second,** the **FDI reform is crucial to further decentralize investments.** The US firm Hughes Communications announced a US\$ 500 million investment but has not been able to get approvals since 2017. Therefore, IN-SPACe needs to act on its mandate and allow not only foreign entities but also domestic innovators to get around the bureaucracy.

**Third,** in case of **space debris**, coordination between the public and private sector will come into play. The government can decide on exactly how many programmes can be allowed in space and if they can partner in the removal of space debris.

**Fourth,** The **passage of the Space Activities Bill** should also be done in order to give private players greater clarity and protection. This should involve proper consultation and discussions with the concerned stakeholders.

### Conclusion

The current scenario presents an ideal opportunity for India to unleash the potential of space economy. In this regard, right policy initiatives and support are desired to make the space economy reach its target of US\$ 50 billion by 2024.

Source: [The Times of India](#), [The Hindu](#), [Mint](#)

## Geoengineering Technologies: Applications and Concerns – Explained, pointwise

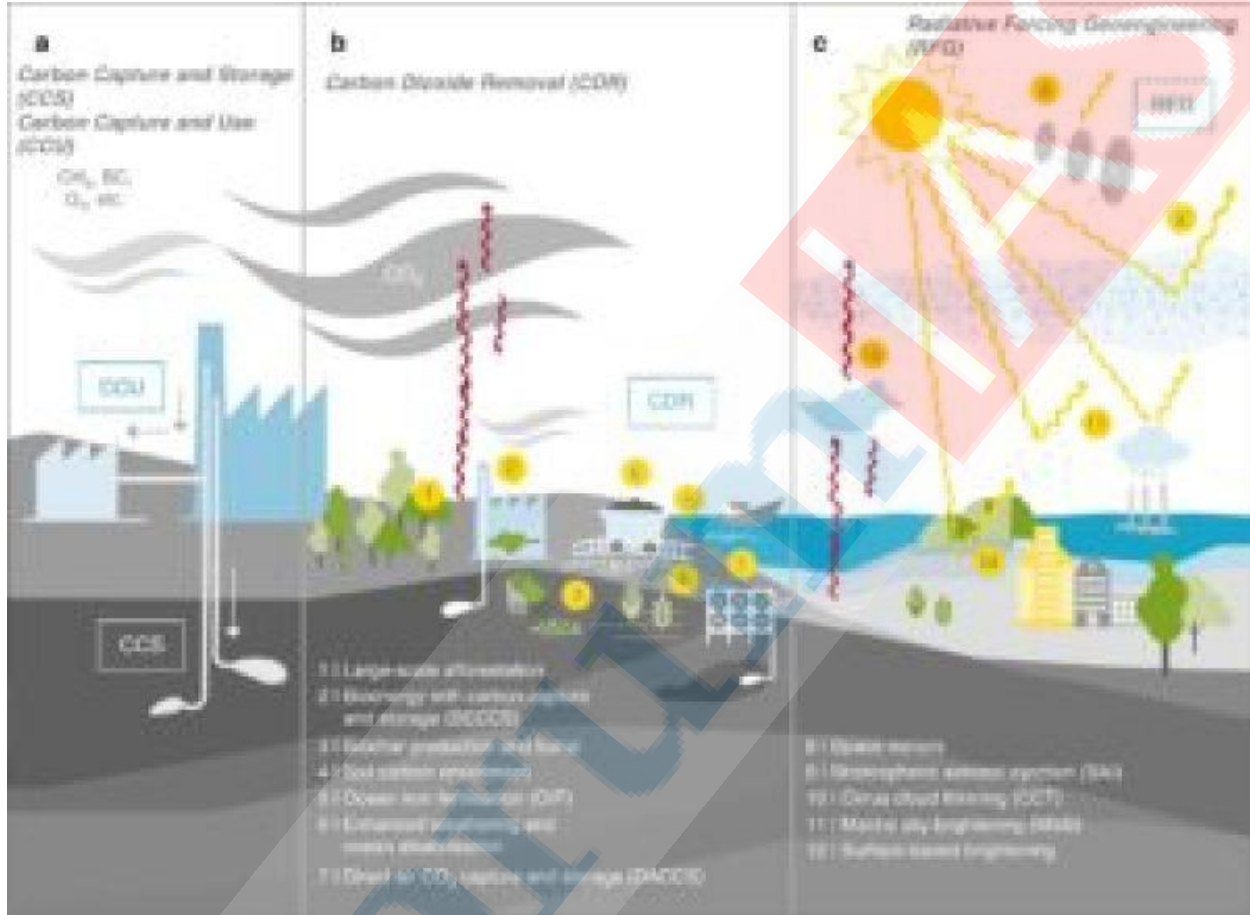
### Introduction

Climate Change is no longer a myth and the adverse impacts of the phenomena are increasingly becoming evident. Anthropogenic interventions have significantly enhanced the magnitude and extent of climate change. With record-breaking heat waves hitting many parts of the world over the last few months, scientific circles have been hotly debating whether countries should prepare to deploy geoengineering technologies to deal with such climate emergencies.

**Read More:** [Heat Waves: Rising Frequency and Intensity – Explained, pointwise](#)

### What is Geoengineering?

Geoengineering is an umbrella term for various experimental technologies. It refers to deliberate, large-scale intervention carried out in the Earth's natural systems to reverse the impacts of climate change. They are slowly but steadily gaining salience and broadly fall under two categories: **Solar Radiation Modification (SRM)/Radiative Forcing Geoengineering (RFG)** and **Carbon Dioxide Removal (CDR)** technologies.



Source: Nature

### What is Solar Radiation Management/Modification (SRM) or Solar Geoengineering?

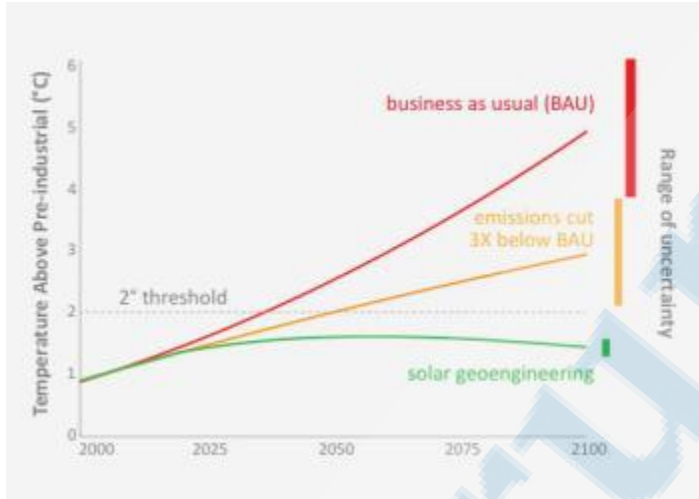
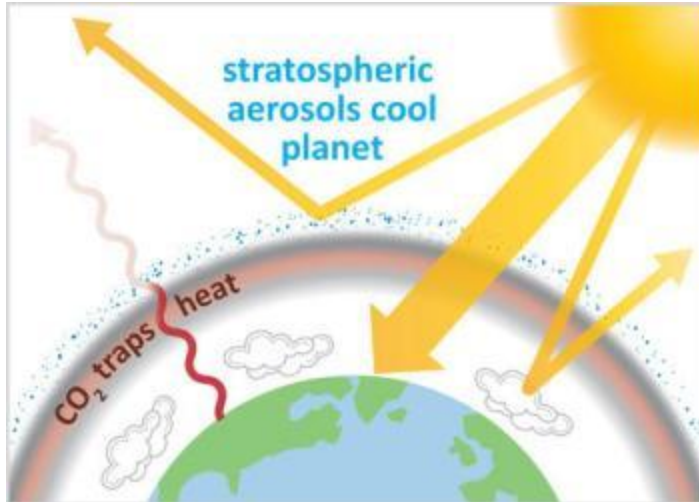
SRM techniques aim to reflect a small proportion of the Sun's energy back into space. This counters the temperature rise caused by increased levels of greenhouse gases in the atmosphere which absorb energy and raise temperatures. Some proposed techniques include:

**Albedo enhancement:** Increasing the reflectiveness of clouds or the land surface so that more of the Sun's heat is reflected back into space.

**Space reflectors:** Blocking a small proportion of sunlight before it reaches the Earth.

**Stratospheric Aerosol Injection (SAI):** Introducing small, reflective particles into the upper atmosphere to reflect some sunlight before it reaches the surface of the Earth.





Source: harvard.edu

**Cirrus Cloud Thinning:** It focuses on eliminating or thinning cirrus clouds to allow heat to escape into space. These clouds are found at high altitudes, and often absorb more sunlight than they reflect.

### What is Greenhouse Gas Removal (GGR) or Carbon Geoengineering?

GGR techniques aim to remove carbon dioxide or other greenhouse gases from the atmosphere. It directly counters the increased greenhouse effect and ocean acidification. Some proposed techniques include:

**Afforestation:** Engaging in a global-scale tree planting effort.

**Biochar:** 'Charring' biomass and burying it so that its carbon is locked up in the soil.

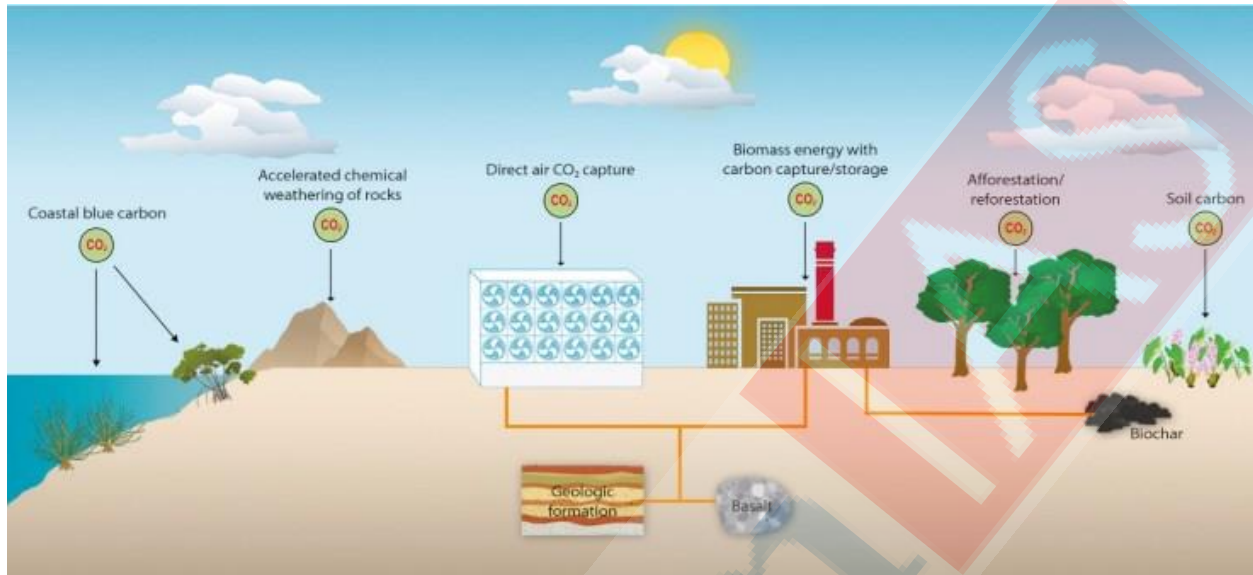
**Bio-energy with carbon capture and sequestration:** Growing biomass, burning it to create energy and capturing and sequestering the carbon dioxide created in the process.

**Ambient Air Capture:** Building large machines that can remove carbon dioxide directly from ambient air and store it elsewhere.

**Ocean Fertilization:** Adding nutrients to the ocean in selected locations to increase primary production which draws down carbon dioxide from the atmosphere.

**Enhanced Weathering:** Exposing large quantities of minerals that will react with carbon dioxide in the atmosphere and storing the resulting compound in the ocean or soil.

**Ocean Alkalinity Enhancement:** Grinding up, dispersing, and dissolving rocks such as limestone, silicates, or calcium hydroxide in the ocean. This will increase the ocean's ability to store carbon and directly ameliorate ocean acidification.



Source: Center for Climate Engagement, University of Cambridge

### What is the need to focus on geoengineering?

**First**, several modeling studies indicate that geoengineering might **reduce some of the worst effects of climate change**, such as lowering the warming and reducing the frequency of heatwaves and high-intensity storms.

**Second**, techniques like the stratospheric aerosol injection (SAI) are so **affordable** that a few dozen countries can easily deploy this technology unilaterally.

**Third**, it is becoming increasingly evident that the present trajectory of emissions cut may not be able to prevent the catastrophic impacts of climate change. Geoengineering technologies may be able to provide a quick solution, thus providing more time to shift away from fossil fuels.

### What are the risks associated with geoengineering?

**First**, many experts fear that it may **impair the self regulation capacity** of natural ecosystems thereby doing more harm in the long run.

**Second**, they may **distract attention from the need for deep cuts** to gross emissions which is achievable with the right political will and resource mobilization. Such measures thus pose pivotal problems of intergenerational justice

**Third**, the impacts will **not be limited to national borders**. For instance, unilateral use of SAI could lead to significant adverse effects in other countries, leading to conflicts. Similarly if governments ever gain control of changing the course of potentially damaging storms, diversions that direct storms toward other countries **may be seen as acts of war**.

**Fourth**, the **unintended consequences** could include an adverse impact on rainfall, crop production and ocean acidification. Large-scale spraying of aerosols into the atmosphere could also deplete the ozone layer, enlarging the ozone hole. Another big risk is that when the aerosol injection is terminated abruptly this will cause rapid warming, disrupting the water cycle and leading to **massive biodiversity loss**. The impacts of such a “termination shock” would be much worse than the effects of climate change such measures aim to avoid.

**Fifth**, there is also an **ethical argument** that ‘do we have the right to manage and manipulate nature?’

The IPCC's 5th Assessment Report observed that, “SRM techniques entail numerous uncertainties, side effects, risks and shortcomings” and “raise questions about costs, risks, governance and ethical implications of development and deployment”.

### What are some of the geoengineering initiatives taken across the globe?

China has been implementing one of the world's largest weather-modification programmes to artificially enhance rain. It plans to expand capacity to cover nearly 60% of the country by 2025. The University of Cambridge created the Centre for Climate Repair last year to develop new methods for SRM and cloud brightening.

The Australian government has been testing marine cloud brightening to cool water temperatures near the Great Barrier Reef.

In India, cloud seeding has been tried in states such as Tamil Nadu, Karnataka and Maharashtra during droughts.

Enhanced Oil Recovery (EOR) and Carbon Capture in India is primarily being deployed for additional oil recovery from aged fields and fields with heavy oil such as in the Cambay and Barmer fields.

### What can be the approach going ahead?

**First**, countries can **focus on technologies that have surpassed the ideation stage** and reached the experimentation stage like Stratospheric aerosols injection (SAI). SAI aims to mimic large volcanic eruptions that have a cooling effect on the globe. For instance, the eruption of Mount Pinatubo in the Philippines in 1991 caused global cooling of 0.6°C for the following two years. However, cautious approach is advisable. There should be numerous short-scale experiments before scaling up the process for a widespread application.

**Second**, a lot **more research** is required to understand the impacts of geoengineering on the broader regional ecosystem. Further, there is a need for international cooperation among educational and research institutes.

**Third**, India needs to play a **major role in framing global governance** around the use of geoengineering technologies. These technologies have global ramifications and must be governed by an international rules-based system.

**Fourth**, geoengineering **cannot be treated as a license to continue emitting more GHGs** with no changes to current consumption and production patterns. Specific technologies that can help us achieve negative emissions need to be publicly funded (most obviously through the diversion of fossil fuel subsidies).

### Conclusion

While geoengineering is highly risky, some experts argue that countries will deploy it if they fear large-scale casualties or economic disruptions due to extreme climatic events. In fact, considering the current trajectory of Earth's warming, countries will have to make these choices within a decade or two. So Governments should start discussions on establishing global governance mechanism to deter the unilateral deployment of these technologies, while supporting further research on the evolving technologies. However, geoengineering can only act as a supplement to scaling back of GHG emissions in all sectors, not a substitute.

Source: [The Times of India](#), [Down to Earth](#), [MIT](#)

Issues in the IBC Resolution Process and Possible Solutions – Explained, pointwise

### Introduction

India's Insolvency and Bankruptcy Code (IBC), 2016, was designed to focus on addressing stress in chronically sick companies through either resolution or liquidation. The code's need was felt by mounting non-performing assets (NPAs) in the banking sector that the prevalent system could

not adequately fix. The IBC law and practice in India over the past 5 years has matured to focus on entire value chains in addressing enterprise sickness and on the resolution of disputes through means other than litigation. However, it still is surrounded with many challenges like delays, big haircuts etc. which makes it imperative to take some corrective steps.

## Key Terminology

- **Insolvency:** It is a situation in which a debtor is unable to pay his/her debts.
- **Bankruptcy:** It is a legal proceeding involving a person or business that is unable to repay their outstanding debts.
- **Liquidation:** It is a process of bringing a business/company to an end. It involves distribution of company's assets among creditors and other claimants.
- **Haircut:** It refers to the reduction in the value of an asset. For example, if haircut is 80%, then 80% of credit owed to its creditors will not get recovered.
- **Moral Hazard:** It is a situation where an economic actor has an incentive to increase its exposure to risk because it does not bear the full costs of that risk.

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### What is the Insolvency and Bankruptcy Code (IBC)?

The IBC was enacted in 2016 and replaced all the existing laws with a uniform procedure to resolve insolvency and bankruptcy disputes. It allows creditors to assess the viability of a debtor as a business decision, and agree upon a plan for its revival or a speedy liquidation.

The Code created a **new institutional framework** to facilitate a formal and time bound insolvency resolution process and liquidation. The framework includes

**Insolvency Professionals:** They **administer** the resolution process, manage the assets of the debtor, and provide information for creditors to assist them in decision making.

**Insolvency Professional Agencies:** The insolvency professionals are registered with insolvency professional agencies. The agencies conduct examinations to certify the insolvency professionals and enforce a code of conduct for their performance.

**Information utilities:** They keep a record of debts given by creditors along with details of repayments/ dishonour of debt.

**Adjudicating authorities:** They give approval to initiate the resolution process, appoint the insolvency professional, and approve the final decision of creditors. Adjudicating authority for companies is National Company Law Tribunal (NCLT) while individuals have to approach debt recovery tribunal.

**Insolvency and Bankruptcy Board:** The Board **regulates** insolvency professionals, insolvency professional agencies and information utilities set up under the Code.

## Objectives of the Insolvency and Bankruptcy Code

- Consolidate and amend all existing insolvency laws in India.
- To simplify and expedite the Insolvency and Bankruptcy Proceedings in India.
- To protect the interest of creditors including stakeholders in a company.
- To revive the company in a time-bound manner.

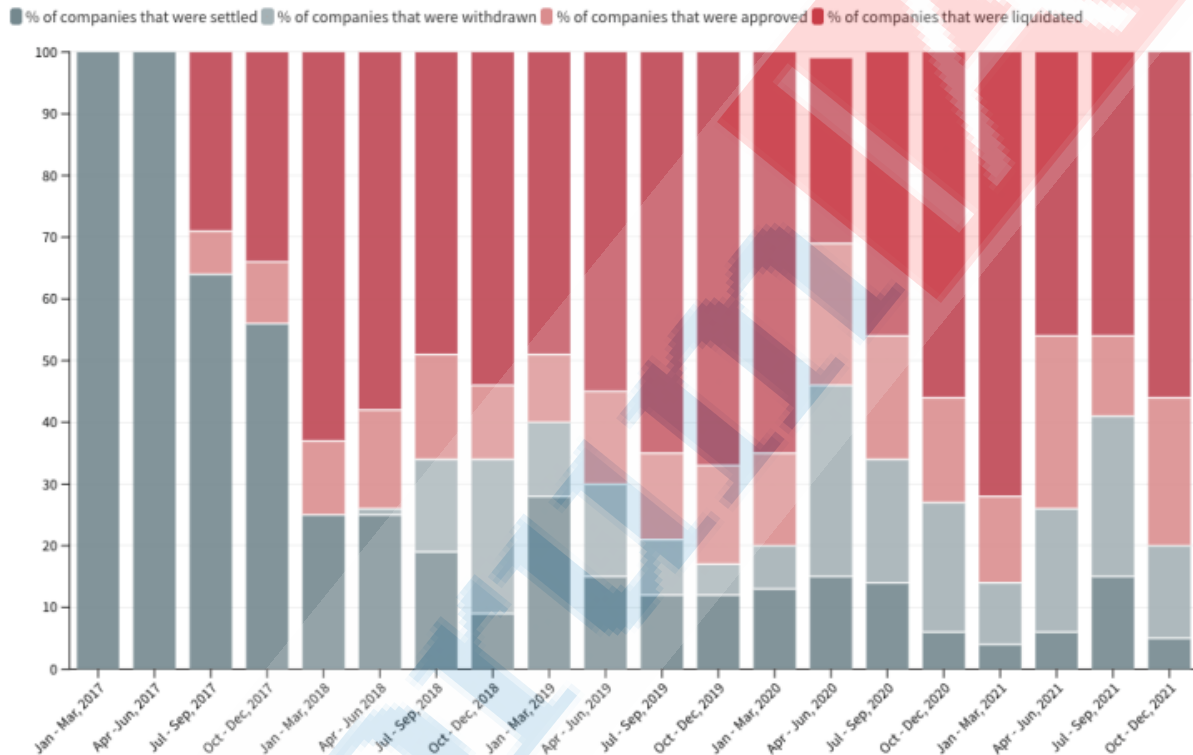
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### How has the IBC performed till now?

According to the Insolvency and Bankruptcy Board of India (IBBI) newsletter for January-March 2022, 64.7% of all the cases admitted for the corporate insolvency resolution process (CIRP) since 2016 have been closed.

Amongst this, 11% have been withdrawn, about 14 % settled, 30% liquidated and 9% resolved (wherein a resolution plan was approved).

Data released by the IBBI shows that the resolution rate of cases under CIRP is rather low and that the **number of cases seeing liquidation are three times more than those being resolved** e.g., of the 2,600 cases that were closed by December 2021, 55% ended in liquidation while only 16% were completed with proper resolution plans approved by the lender.



Source: The Hindu. Cases settled are shown in dark grey. In the initial 6 months (January-June 2017) all 100% cases were settled. However, the percentage of cases settled has progressively come down. It was only 5% in Oct-Dec 2021 period. The cases of liquidation has gone up. 57% cases were liquidated in Oct-Dec 2021.

The amounts recovered from the debtors have also been low. Since the IBC came into force, **only 32.9% of the claim amounts were recovered**. In January-March 2022, this figure stood at only 10.2% of the claim amounts.

### What have been the positive outcomes after the passage of the IBC?

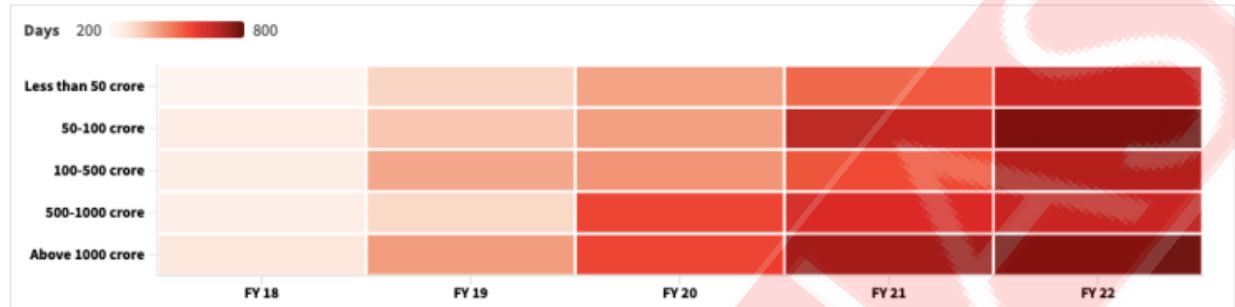
**First**, it has initiated a cultural shift in the dynamics between lender and borrower, promoter and creditor.

**Second**, Before enactment of the IBC, the recovery mechanisms available to lenders were through *Lok Adalat*, Debt Recovery Tribunal and SARFAESI Act. While the earlier mechanisms resulted in a low average recovery of 23%, the recoveries have risen to 43% under the IBC regime.

**Third**, it also helped in improving India's rank in insolvency resolution indicator of World Bank's Ease of Doing Business report. The rank improved to 108 in 2019 from 134 in 2014.

### What are the challenges associated with the IBC?

**Delays in the process:** Resolution, and in some cases liquidation, have taken much longer than the mandated time. And the period of resolution has only worsened with time. e.g., of cases involving more than INR 1,000 Crore, the average resolution time was 274 days in FY2018. This has risen to 772 days in FY2022.



Source: The Hindu. The above chart shows the average number of days to resolve a case. Darker the shade, more the number of days taken for resolution. As can be seen, the number of days to resolve have been progressively increasing e.g., cases involving less than INR 50 crore were resolved in 230 days (average) in FY 2018. It is 667 days in FY22. The resolution period of cases of INR 50-100 Crore has increased from 260 days (FY18) to 783 days (FY22). The trend is similar for higher amounts.

The main reason for delay is litigation on the decisions. According to a study undertaken by Indian Institute of Insolvency Professionals, every corporate insolvency resolution process on average takes 3 litigation suits. The National Company Law Tribunal (NCLT) benches are bound to adjudicate on every application filed by any stakeholder, even if later found to be frivolous in nature.

Such an adjudication process, coupled with litigation, counter-litigation and multiple appeals, renders IBC timelines meaningless.

**Big Haircuts:** Longer delays result in larger haircuts, as the value of sick companies tends to diminish at an increasing pace over time. For instance, the lenders have had to take a haircut of 83% in the case of Alok Industries, a little less than 90% in the case of Reliance Infratel and **96% in the recent Videocon Group case.**

**Less Focus on alternatives:** Globally, a mechanism like the IBC's corporate insolvency resolution process (CIRP) has been a last-resort measure. It is used after all other alternatives like mediation, settlement and arbitration have been exhausted. However in India, there are no specific provisions for mediation under the IBC.

**Regulatory Fear:** Banks, especially those in the public sector, are unable to take pragmatic decisions due to regulatory fear. They feel any risk-taking that could potentially yield a low rate of dues recovery in the short term may **subject them to vigilance inquiries and audits.**

**Resource Deficit:** The Government had proposed to set up 25 additional single and division benches of NCLT in July 2019. They were established at various places including Delhi, Jaipur, Kochi, Chandigarh, and Amravati. However most of these remain non-operational or partly operational on account of lack of proper infrastructure or adequate support staff.

**Exclusion of promoters:** Promoters are excluded from bidding despite them not being wilful defaulters. Banks think that allowing promoters to bid for assets after they have defaulted creates a moral hazard. But there are many cases where default occurs for reasons beyond the control of the promoter.

**What should be done?**

**First**, there is a need to **increase the number of NCLT benches and appoint more competent professionals** who have better understanding of the financial system. This will ensure that the IBC platform is **not used as a recovery but more as a resolution tool**.

**Second**, there is a need to promote **mediation for out-of-court proceedings**, with legislative recognition for speedier dispute resolution. The success of mediation has been observed in the U.S where over half the bankruptcy courts explicitly authorizing mediation. It gained momentum in 1998 with the enactment of America's Alternative Dispute Resolution Act.

The Mediation Bill of 2021 is a step in the right direction. It requires disputants to try and settle civil or commercial disputes through mediation before approaching any court, within a mandated period.

**Third**, bankers should be protected for bona fide decision-making during the resolution process. A **similar provision like the 'business judgment' rule** that is available for board directors in many countries, should be introduced for them. It protects companies from frivolous lawsuits by assuming that, unless proved otherwise, management is acting in the interests of the corporation and its stakeholders.

**Fourth**, Promoters, who are not wilful defaulters, should be allowed to bid at NCLT. Banks might look into the promoter's track record and if the banks feel that track record does not inspire confidence, they should have the right to reject promoters.

**Conclusion**

The Government should take steps to address the loopholes of the IBC in order to make the resolution process more transparent and effective. It will help recover the maximum amount possible from the defaulters. A quick resolution process will also help address the NPA crisis so the banks can issue fresh credit from the freed capital. This will have long-term positive impact on the economy.

Source: [Mint](#), [Mint](#), [The Hindu](#), [Financial Express](#)

**Rare Earth Elements: Strategic Importance and Reducing Import Dependence – Explained, pointwise****Introduction**

India's growth trajectory is witnessing an inflection point. As the economy moves ahead on path of recovery, the foundations of a new economy are emerging. India has been witnessing a massive solar energy push, an Electric Vehicle (EV) ecosystem, and a speciality chemicals sector that is becoming a global hub. India is moving towards a greener, cleaner, and technologically enhanced economy. However, the transition to this economy is dependent upon a slew of strategic elements as inputs. From EV batteries to Solar Cells, from Nuclear Reactors to high-tech electronics these strategic elements are indispensable. These elements are 17 in number and together known as **Rare Earth Elements**. Controlling the supply chains of rare earth elements is an exercise in consolidating power over critical technologies. India is almost 100% import dependent for most rare earths. However, India has great potential for domestic production as it possesses the 5th highest reserves of rare earths in the world.

**What are Rare Earth Elements?**

Rare earth elements (REEs) are a group of 17 chemically similar metallic elements in the periodic table. It comprises 15 lanthanides elements (lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium), plus scandium and yttrium.

The rare earths are actually not 'rare' in nature; they occur abundantly but are often not concentrated enough to undertake viable extraction.

**Characteristics:** REEs are characterized by high density, high melting point, high conductivity, and high thermal conductance. REEs are classified into Heavy REE and Light REE.

**Sources:** REEs do not occur in a free state. They are found in mineral oxide ores. The principal sources of rare earth elements are bastnaesite, xenotime (commonly found in mineral sand deposits), loparite (occurs in alkaline igneous rocks) and monazite.

## SEVENTEEN RARE EARTH ELEMENTS

Rare earth name	Discovery year	Atomic name & number	Light/heavy REE	Critical/Uncritical
Yttrium	1788	Y-39	Heavy	Critical
Cerium	1803	Ce-58	Light	Excessive
Lanthanum	1839	La-57	Light	Uncritical
Erbium	1842	Er-68	Heavy	Critical
Terbium	1843	Tb-65	Heavy	Critical
Ytterbium	1878	Yb-70	Heavy	Excessive
Holmium	1878	Ho-67	Heavy	Excessive
Scandium	1879	Sc-21	Heavy	Critical
Samarium	1879	Sm-62	Light	Uncritical
Thulium	1879	Tm-69	Heavy	Excessive
Praseodymium	1885	Pr-59	Light	Uncritical
Neodymium	1885	Nd-60	Light	Critical
Dysprosium	1886	Dy-66	Heavy	Critical
Europium	1886	Eu-63	Heavy	Critical
Gadolinium	1886	Gd-64	Heavy	Uncritical
Lutetium	1907	Lu-71	Heavy	Excessive
Promethium	1947	Pm-61		

Source: The Print

### What is the utility of Rare Earth Elements?

Rare earths are used in small quantities but have **qualities that make them essential**. Neodymium, for example, is a critical component for permanent magnets and has the ability to carry material 1,300 times its own weight. Neodymium-based permanent magnets are key components in **EV traction motors and wind turbines**. Like neodymium, dysprosium is also an important component of permanent magnets that will be used in EVs and wind turbines.

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Europium is necessary for **LED bulbs and colour television screens**. Samarium is used in **optical lasers**.

Several rare earths also have important uses in emerging hi-tech medical technologies. Further they make the refining of crude oil into gasoline more efficient and are used in many specialty metal alloys. Their sector-wise uses include:

**Aerospace and Defence:** Used in precision-guided munitions in missiles, high-power sonar on ships and submarines, stealth helicopters, etc.

**Health care:** used in medical imaging devices, such as MRIs, modern surgical machines.

**Clean Energy:** Used in wind turbines, electric car batteries and energy-efficient lights (LEDs and CFLs).

**Nuclear Energy:** useful for controlling nuclear reactions and is used in control rods.

**Electronics:** Used as phosphors in cathode ray tubes, fluorescent lamps and X-ray intensifying screens.

**Chemicals, Oil Refining, and manufacturing:** Make the refining of crude oil into gasoline more efficient and are used in many specialty metal alloys.

### **What is the current status with respect to the reserves of Rare Earth Elements?**

#### National

In India, significant rare earth minerals found are ilmenite, sillimanite, garnet, zircon, monazite, and rutile, collectively called Beach Sand Minerals (BSM).

Monazite is the principal source. Monazite is mainly found in Odisha, Andhra Pradesh, Tamil Nadu, Kerala, West Bengal, and Jharkhand. According to the India Minerals Yearbook (2019), India had 12.47 million tonnes of Monazite Resources.

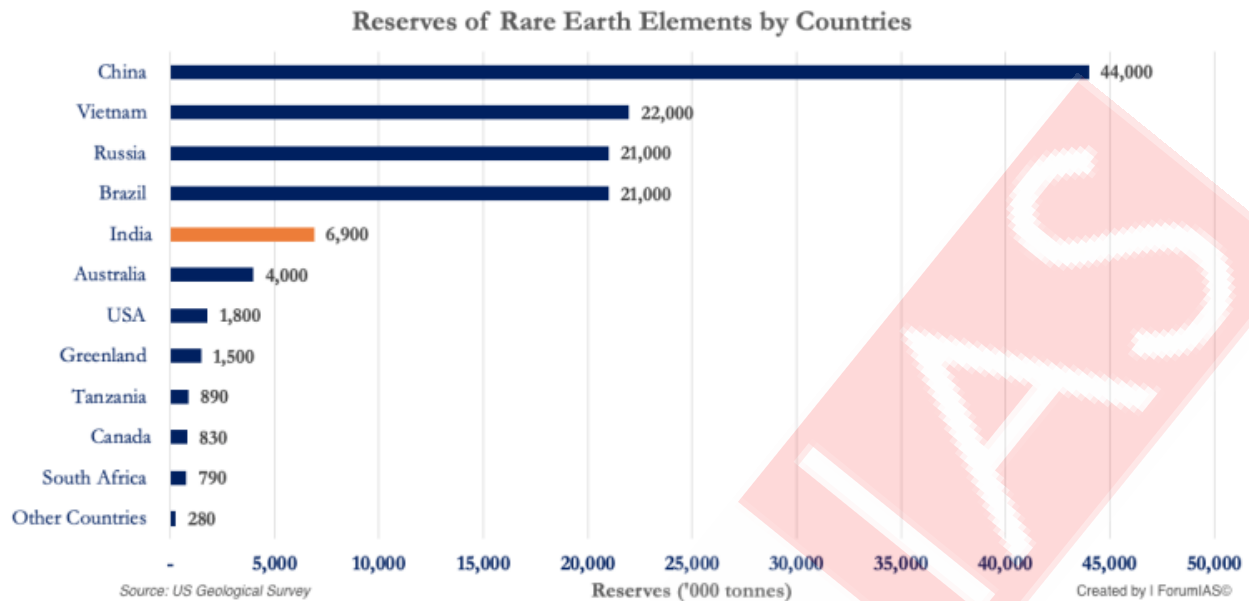
They are classified as atomic minerals and are therefore not at par with other minerals. The reason that they are classified as atomic minerals is because some of these elements occur in the earth's surface along with thorium and uranium which are radioactive minerals.

#### International

The total world reserves are estimated at 120 million tonnes of rare earth oxides equivalent content (REO). Out of this, China alone accounts for 44 million tonnes followed by Vietnam and Russia.

China holds the leading position among producers of rare earth oxides with 140 thousand tonnes. The other major producers are Myanmar, Australia, USA, Russia and Malaysia.

Concentrated/partially-processed intermediate products are further processed at many locations in Europe, USA, Japan and China.



### What is the strategic significance of Rare Earth Elements?

**Multiple Uses:** They are used in multiple hi-tech applications and processes like EVs, Medicinal appliances, LEDs etc. that domestic production of such elements becomes inevitable.

**Rising Demand:** The multifarious uses of rare earth elements in new age technologies shows that their demand is going to rise in future. For instance, the current demand of neodymium in India is small, at around 900 tonnes per annum, because domestic manufacturing of EVs and wind turbines is still limited. However, as manufacturing of EVs and wind turbines picks up, the demand for neodymium is estimated to rise sharply by 6-7 times by 2025 (6,000 tonnes) and by 18-20 times by 2030 (20,000 tonnes).

**Reducing Import Bill:** India is almost 100% import dependent for most rare earths which creates a huge pressure on foreign exchange. Further, prices of rare elements are consistently rising due to the rising demand. For instance, the global price of neodymium has risen sharply from under US\$ 100 per kg in 2018 to over US\$ 200 per kg at present.

**Highly Concentrated Supply Chain:** The global supply scenario for rare earths is highly concentrated, much more than oil and hydrocarbons, which poses a strategic challenge. Until a few years ago, China controlled 90% of the supply of rare earths. Now, after aggressive production by the US, Australia and Canada, China's share is down to 60% but still dominant. In 2010, following dispute with Japan over Senkaku Islands in the East China Sea; **China shut down exports of Rare Earth Elements to Japan.** Given India's border dispute, China might resort to similar tactics in future.

**Huge potential:** India has greater reserves than the US and Australia, only behind China, Vietnam, Russia, and Brazil. With Russia embroiled in conflict, the onus is on India to emerge as a supplier not just for domestic use but for international consumption.

### What are the reasons behind the limited production of Rare Earth Elements in India?

**First**, rare earth materials are not concentrated enough in many geographical locations with respect to **commercial viability**. It is expensive to commercially produce them.

**Second**, at present they are classified as atomic minerals. The **mining for rare earths is reserved exclusively for government companies**. Currently, there are only two companies – Indian Rare Earths Ltd (IREL, owned by GoI) and Kerala Minerals and Metals Ltd (owned by Kerala government) that can mine them. Further, their production capacities and technological capabilities are limited which is why India is import dependent.

**Third, IREL's primary source of revenues is not rare earths.** Most of its income comes from the production and marketing of other minerals contained in beach sands. Since its revenue does not depend upon rare earth elements, **IREL has little need to produce and research.** IREL has poor incentives to refocus itself as a globally competitive rare earth extraction and processing firm. This has restricted India to be a low-cost exporter of rare earth oxides instead of higher value-added products.

**Fourth,** the present system (clubbing rare earth elements with atomic minerals) ends up **separating the rare earths ecosystem from other R&D ecosystems** like electronics or metallurgy. This severely impacts the overall umbrella of strategic research, undercutting the interdisciplinary nature of modern research work. R&D is dominated by DAE and the Bhabha Atomic Research Centre (BARC), with negligible participation by the Academia and private sector. The situation is similarly disintegrated with regards to exploration. The Geological Survey of India (GSI), Mineral Exploration Corporation Limited (MECL) and Atomic Minerals Directorate for Exploration and Research (AMD) operate in overlapping spheres while working in siloes.

**Fifth, Beach sand mining** was permitted until a few years ago but was **banned in 2016** in an attempt to conserve strategic minerals including rare earths and thorium.

#### **What steps can be taken to boost domestic production?**

**First,** the **Ministry of Mines has recently proposed moving the 17 rare earths** elements outside the ambit of atomic minerals so that commercial mining by private entities and other PSUs can take place. Further, Private players can be mandated not to extract thorium and uranium from monazite rock or beach sands and restrict themselves to rare earths.

**Second,** Based on availability and criticality of rare earths, the **Ministry of Mining has conducted an analysis for prioritising efforts in both exploration and foreign acquisition.** India has an established relative abundance of Light Rare Earths: elements from Lanthanum to Samarium. The initial focus can be on extraction of these elements. Efforts are already on to discover Lithium deposits as well. A joint venture of 3 PSUs, named Khanij India Bidesh Limited (KABIL), has been entering into long-term contracts for India's critical mineral needs.

**Third,** the government **can create a new Department for Rare Earths (DRE)** under the Ministry of Mines. This DRE should oversee policy formulation and focus on attracting investment and promoting R&D. It could coordinate with other agencies to **partner directly with groupings such as the Quad.** This will help in building up a strategic reserve as a buffer against global supply crises.

**Fourth,** the government should also create an autonomous regulator, **the Rare Earths Regulatory Authority of India (RRAI).** It would resolve disputes between companies in this space and check compliance.

**Fifth,** IREL can be de-merged into two different entities with appropriate amendments to the Atomic Energy Act. One entity can focus exclusively on Thorium extraction and can be retained under the Department of Atomic Energy. The other entity can specialise in other available rare earth processing and can be under the control of the proposed DRE.

**Sixth,** a **consolidation in the exploration of rare earths is necessary.** The National Mineral Exploration Policy, 2016 had a proposal to set up the **National Centre for Mineral Targeting (NCMT)** to replace the present system of having committees within the Geological Programming Board of the Geological Survey of India. NCMT has not been created yet.

**Seventh, Private industry must be incentivised** and enabled to set up processing capabilities beyond the extraction phase. Such a move will be crucial for higher value added products having robust domestic supply chains. Private Industry linkage is necessary to promote R&D Ecosystem as well.

**Eighth**, the Government should have **Rare Earth Strategic Reserves**, similar to the Strategic Petroleum Reserves. Having Rare Earth Strategic Reserves can help provide a **consistent demand environment**, as well as a **fallback at times of any unfavourable action** by the Chinese Government.

### Conclusion

The time is right to focus on boosting the indigenous supply of rare earth metals that currently contribute a total value of nearly US\$ 200 billion to the Indian economy. A sustained supply is also essential to reduce its dependence on Chinese imports and truly realize the vision of *Atmanirbhar Bharat*.

Source: [The Times of India](#), [Business Insider](#), [Indian Minerals Yearbook](#), [Firstpost](#)

## Pre-Legislative Consultation Framework in India – Explained, pointwise

### Introduction

Pre-legislative Consultation is a process where a Bill is properly scrutinized by all stakeholders prior to its enactment, to assess its Constitutionality and rights-compliance. The purpose is to enhance accountability of the Government leading to better policy formulation. The 17th Lok Sabha has passed about 150 Bills in less than 3 years of its existence. On an average, 15 Bills have been passed in each session. In contrast, the 16th Lok Sabha had passed 133 Bills in its entire 5-year duration. While the productivity of the Lok Sabha can be applauded, the speed has come at the cost of debate and deliberation; the two core ideas of democracy that the Parliament stands for. This suggests that the current the Pre-legislative Consultation framework in India requires a relook.

### What is the current Pre-legislative Consultation Framework in India?

**Consultation:** In 2014, the Ministry of Law and Justice issued a **Pre-Legislative Consultation Policy (PLCP)**.

Under the Policy, the Union Government is required to place legislative proposals (Bills, Rules, Regulations etc.) in the public domain for a period of at least 30 days before they were submitted to the Cabinet for consideration.

Each such draft proposal must be accompanied by a brief note: **(a)** Justifying its necessity; **(b)** Financial implications; **(c)** Impact on the environment; **(d)** Impact on the Fundamental Rights of the people; **(e)** The social and financial costs of the Bill.

Comments received from the public need to be summarized and placed on the website of the Department or the Ministry concerned. These also need to be included in a note to the Cabinet along with the draft proposal.

**Scrutiny by Parliament:** Bills go through varying levels of discussions and scrutiny in the Legislature. When a Bill is introduced in a House of the Parliament the Presiding Officer can refer it to the appropriate Parliamentary Committee. The Parliamentary Committee deliberates the Bill in detail e.g., the Parliament took 5 years to examine the Bill to regulate surrogacy before passing it in 2021. However, the process is by-passed many times because the scrutiny is not mandatory e.g., the Constitution Amendment Bill to enable 10% reservation in education and employment for Economically Weaker Sections was passed by the Parliament in just 2 days. The Presiding Officers of either House didn't send it for scrutiny.

In the 16th Lok Sabha (2014-19), only 25% of the Bills introduced were referred to Committees. In contrast, 71% and 60% of the Bills were examined by Committees during 15th (2009-14) and 14th (2004-09) Lok Sabhas, respectively.

## Post-Legislative Scrutiny in India

The lacunae is not just in the Pre-Legislative process. In India, there is **no framework for post-legislative scrutiny** to understand how the legislation has worked on the ground.

- Usually, the concerned Ministry appoints an expert committee to evaluate the working of the law. However, this is not mandatory.
- The **Comptroller and Auditor General (CAG)** occasionally conduct **performance audits** e.g., the performance audit of the implementation of the Food Security Act (2013). However, due to heavy workload, CAG can't audit the working of every law. In the last decade, the **CAG audited fewer than five non-financial laws**.
- **Law Commission of India** also scrutinizes some laws. It is constituted by the Government for 3 years with **specific terms of reference**. The scrutiny is more focused on the legal aspects of laws. Likewise, it reviews very limited number of legislations.
- Most developed countries have specialized mechanisms for reviewing laws. Some countries in Europe have **provisions related to review mechanisms within the law**. These provisions mandate periodic Reviews with specified timeframe and manner.

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### What is the need to strengthen the Pre-Legislative Consultation Framework?

**Non Obligatory Nature of the Current System:** It is not obligatory for the Government to adhere to the established procedures. In the current Lok Sabha (17th), less than 20% of the introduced Bills have been referred to Parliamentary Committees (till September 2020). Since the introduction of the 2014 Pre-Legislative Consultation Policy, 227 of the 301 Bills (75%) introduced in Parliament have been presented **without any prior consultation**. Of the 74 placed in the public domain for comments, at least 40 did not adhere to the 30-day deadline.

Further, the Government is under no obligation to justify why a given suggestion was excluded from the final draft.

**Improving efficiency of legislations:** An effective Pre-Legislative Consultation Framework will ensure that any law or scheme must be based on the principle that its benefits outweigh the costs. It will also ensure that among the various alternatives available, the chosen one confers maximum net benefits.

**Better Policy Formulation:** People engagement would get enhanced if the Pre-Legislative Consultation Framework is strengthened. People engagement will result in greater acceptability and better policy formulation. Direct consultation with general public democratizes access to Constitutional Rights and values. For instance, **the Right to Information Act** is seen as a landmark legislation when highlighting the role of civil society actors in the drafting of a Bill.

**Augmenting Trust in the Legislature:** A robust framework will result in improving the transparency and accountability in the legislative process thereby enhancing trust of the masses in legislature.

**Prevent Dominance of the Executive:** The Executive is an integral part of the Legislature, and when coupled with the anti-defection law, it assumes unfettered control over the Legislature. In such a scenario an effective Pre-Legislative Consultation Framework is desired to control its dominance and ensure accountability to the Legislature.

**Overcoming the limitations of the Judiciary:** Pre-Legislative Consultation will help in better formulation of laws and address concerns of all stakeholders. This will reduce litigation post the passage of laws. The Chief Justice of India recently remarked that poorly drafted laws result in lot of ambiguities leading to litigation and undue burden on the Judiciary.

This will also address the concerns regarding Judicial over-reach to an extent. The expansion of the scope of review by an unelected Judiciary raises concerns regarding Constitutional and democratic legitimacy.

### **What is the proposed Legislation and Expenditure Accountability Bill, 2022?**

The Bill has been introduced as a Private Member's Bill in April 2022 in the Rajya Sabha. It is based on the **Organization for Economic Cooperation and Development (OECD) recommendations on policy-making practices**. The Bill goes two steps further than the 2014 Pre-legislative Consultation Policy.

**First**, it is a Bill, which means that if it becomes an Act, it will be **legally binding** on the Government.

**Second**, it adds the **dimension of a post-legislative check** with fail-safe mechanisms.

The specifics of the bill revolve around two technical assessments: a **Legislation Impact Analysis** or LIA (and correspondingly, a scheme impact analysis for public schemes) and a **Post-Implementation Assessment (PIA) report**.

The LIA report must offer an assessment of potential costs and benefits to society, the objectives of the intervention with clear measurable outcomes, and the experience of other countries, among other things.

The **PIA has three aspects: (a) Performance measurement**, which evaluates schemes and laws against the objectives defined in the LIA; **(b) Impact assessment**, which evaluates qualitative aspects like social, environmental and legal effects and spillovers; **(c) Perception surveys** that measure people's satisfaction.

The Bill requires laws and schemes to have **expiry dates (sunset clauses)**. Such a provision would grant the Legislature an opportunity to re-make laws and schemes, thus ensuring that the nation stays up to date on the evolving dynamics of the world. Moreover, if a law or scheme fails its PIA test in three consecutive reviews, it would automatically be repealed.

## Recommendations of the Council on Regulatory Policy and Governance

- The policy should have clear objectives and frameworks for implementation.
- Adhere to **Principles of Open Government**, including **transparency** and **participation in the regulatory process** to ensure that regulation serves the public interest.
- Establish mechanisms and institutions to **actively provide oversight of regulatory policy**.
- **Integrate Regulatory Impact Assessment (RIA)** into the early stages of the policy process for the formulation of new regulatory proposals.
- **Conduct systematic programme reviews** of the stock of significant regulation against clearly defined policy goals.
- **Regularly publish reports** on the performance of regulatory policy and reform programmes.
- Develop a consistent policy covering the role and functions of regulatory agencies in order to provide greater confidence that regulatory decisions are made on an objective and impartial.
- Ensure the effectiveness of systems for the review of the legality and procedural fairness of regulations.
- Apply **risk assessment, risk management, and risk communication strategies** to the design and implementation of regulations to ensure that regulation is targeted and effective.
- **Promote regulatory coherence** through co-ordination mechanisms between the supranational, the national and sub-national levels of government.
- Foster the development of regulatory management capacity and performance at sub-national levels of government.
- Give consideration to all relevant international standards and frameworks.

Source: OECD

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### Recommendations of OECD's Council on Regulatory Policy and Governance, 2012

#### What can be done going ahead?

**First**, the proposed 2022 Bill demands considerable effort by the Executive to undertake proper evaluations of schemes and legislative moves. It can **lay the groundwork for a new institutional mechanism** to ensure self-probity in public expenditure and law-making.

**Second**, the media **should do constructive reporting of legislative functioning** and enlighten the masses about the probable impacts of a proposed legislation on their rights and interests. Along with this, **civil society groups** can support the stakeholders for raising their voice in a structured and impactful way.

**Third**, the **impacted stakeholders of any legislative Bill need to sideline their rigid opinions** and ideologies in order to build consensus with fellow stakeholders and the Government. They need to realize that policy-making is an exercise in compromise and that nobody can expect to get their way every time.

**Fourth**, the Government (Executive) has to be mindful of the established procedures and practices. **Proper scrutiny by Parliamentary Committees** can address loopholes in the proposed legislations and reduce the possibility of subsequent backlash (as happened with the Farm Laws). So the process should not be by-passed. **Pre-legislative Consultation can be made mandatory for all Bills**, along with exceptions in case the Government feels that urgent legislation is required to address a particular issue.

**Fifth**, **The Rules of Procedure and Conduct of Business in the Lok Sabha/Rajya Sabha** can be amended. If the Government does not accept the recommendations of a Standing/Select Committee, then the Minister in charge of the Bill must submit a memorandum to Parliament explaining the reasons for rejecting such recommendations.

#### Conclusion

The Government needs to strengthen the Pre-Legislative Consultation Framework in order to improve transparency and accountability of the legislative process. This is needed to enhance

the Constitutional culture in India under which masses believe that the exercise of State power is limited by the Constitution.

Source: [Mint](#), [Mint](#), [Indian Express](#), [The Hindu](#), [The Leaflet](#)

## Gig Economy in India and the Issues faced by Gig Workers – Explained, pointwise

### Introduction

The rapidly burgeoning gig workforce is ushering in a new economic revolution globally. India is at the frontier of this revolution with its demographic dividend of half-a-billion labour force and the world's youngest population, rapid urbanisation, widespread adoption of smartphones and associated technology. The gig economy is poised to undergo rapid expansion in the coming decade. While the gig economy sector has several upsides with respect to growth and livelihood opportunities, there are some serious concerns that need regulation. NITI Aayog has released a report with comprehensive perspective and recommendations on the gig-platform economy in India. The recommendations can help address the concerns of gig workers in India.

### What is Gig Economy and Gig Worker?

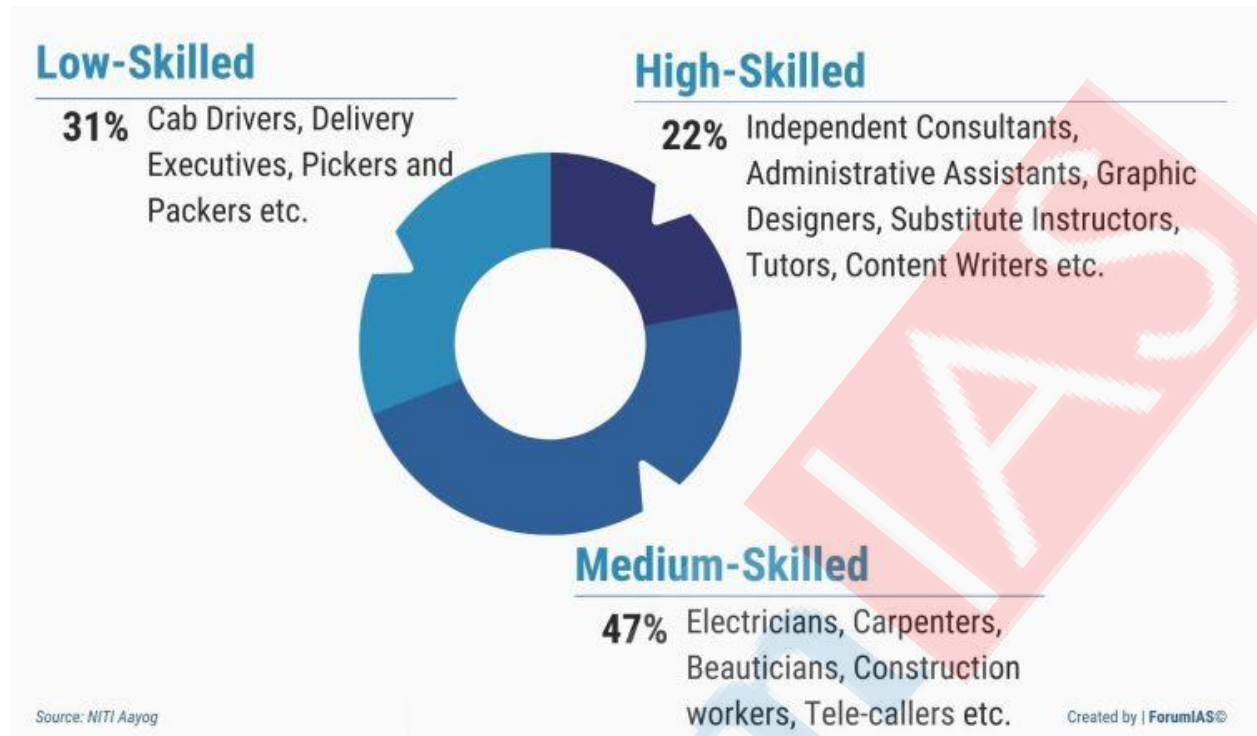
Gig Economy is the evolving economic model wherein the **firms hire workers on a part-time flexible basis rather than as full time employees**. The Code on Social Security, 2020 defines gig workers as those engaged in livelihoods outside traditional employer-employee relationship. The workers work as **freelancers or independent contractors**. They generally have flexible and adaptable working hours based on individual preferences.

The jobs in gig economy **typically require interacting with the users through online platforms** e.g., the drivers engaged with cab hailing platforms (Uber, Ola etc.), delivery workers engaged with restaurant aggregators (Zomato, Swiggy etc.), or tutors delivering lectures over online platforms. The workers engaged in such jobs are called Gig Workers.

Gig Workers can be broadly classified into two categories — **platform** and **non-platform-based workers**. **(a)** Platform workers are those whose work is based on **online software apps or digital platforms**. **(b)** Non-platform gig workers are generally **casual wage workers** and **own-account workers** in the conventional sectors, working part-time or full time.

The Gig workers can also be classified on the basis of skills. These are high-skilled, medium-skilled and low-skilled workers. According to the NITI Aayog Report, at present, about 47% of the gig work is in medium-skilled jobs, about 22% in high-skilled jobs, and about 31% in low-skilled jobs. Trends show that the **concentration of workers in medium skills is gradually declining** and that in low skills and high skills is increasing.





According to a recent survey by a private firm, Quick Commerce, Healthtech, Fintech, and e-Commerce are the top sectors in the Indian gig economy. Within the gig workforce, work-from-home jobs account for 33% of the roles and 67% were on-field roles.

#### What is the size of Gig Economy in India?

According to NITI Aayog Report, India's gig workforce currently stands at 77 lakh (2020-21). It is expected to rise to 2.35 crore by 2029-30. By 2029-30, gig workers will form 4.1% of India's total workforce, rising from 1.5% in 2020-21. Currently 27 lakh gig workers (35% of gig workers) are engaged in retail trade and sale, while 13 lakh (17%) are engaged in transportation sector. There are 6 lakh workers (8%) in manufacturing and another 6 lakh (8%) in finance and insurance. However, a report by the Boston Consulting Group expects India's gig economy to rise to 90 million jobs (9 crore) in the next 8-10 years. Another industry report indicates that by 2024, more than 75% of the services industry will be staffed by gig workers. A report by Ernst and Young observed that Indian Freelancers hold a **24% share of the global online gig economy**. According to a report by ASSOCHAM (Associated Chambers of Commerce and Industry of India), the gig sector has the potential to **grow to US\$ 455 billion** by 2024.

#### What are the advantages of Gig Economy?

**Benefits to Gig Workers:** Gig workers have the **flexibility to work according to their convenience and availability**. There are less restrictions related to fixed work-hours, attendance etc. Workers have some flexibility in choosing their work hours. Some workers take gig jobs on a part-time basis to **supplement their income** from regular jobs.

**Cost Efficiencies for Companies:** The **companies are able to save costs** on hiring full time employees. They are able to provide services more economically to the users.

**Jobs for Low-skilled workers:** Gig economy **provides jobs to many low and semi-skilled workforce** with minimum conditions.

**Gain Experience:** It enables the young undergraduates to gather valuable work-experience before joining formal employment.

**Economical:** Many gig workers work remotely and save costs (e.g., on office commute).

**What are the disadvantages of Gig Economy?**

**Job Security:** Most gig workers work on a day-to-day basis, and can be **terminated from their jobs without any notice**. Many gig workers were laid off during the pandemic.

**Lack of Benefits:** Gig workers have **no social security benefits** like ESI, PF or insurance. They have no paid leaves so **failure to work means loss of wage**. **Gig/Platform workers are not covered in all the labour codes**, specifically the 'Code on Wages, 2019' which prescribes minimum wages for various jobs. **There is no wage regulation** and the workers are at the mercy of aggregators.

**Work Conditions:** Most workers have to **put in long hours of work in order to make the job viable**. A large components of workers' wages consists of **incentive which coerces workers to work for long hours**. This reduces the advantage of 'flexible work' in gig economy. There is **lack of transparency on incentive structures**.

**Hidden Charges:** Many aggregators/platforms are burning cash by giving large discounts to users in order to capture larger market share. Companies try to sustain this by **charging high commissions on gig workers**.

**Low Bargaining Power:** Platform workers have little or no voice. Technology has tilted the **power and bargaining scales strongly in favour of the platform companies**.

Platforms have multiple other issues like **(a)** Frequent and random changes to the commission structure, **(b)** Delays in payments, **(c)** Deliberate miscommunication of earnings potential to attract gig workers; **(d)** Lack of access to basic amenities.

**What are the recommendations of the NITI Aayog Report?**

The NITI Aayog Report, '**India's Booming Gig and Platform Economy**' has analysed the gig economy from gig workers' perspective and has made several recommendations.

**Accelerating Access to Finance for Workers:** Access to institutional credit may be enhanced through financial products specifically designed for platform workers and those interested to set-up their own platforms. FinTech and platform businesses may be leveraged to provide cash flow-based loans to workers.

**Skill Development for Workers:** Platform-led models of skilling and job creation need to be promoted for the gig and platform sector. Platforms can collaborate with the Ministry of Skill Development and Entrepreneurship, and the National Skill Development Corporation (NSDC) to nurture skilled workers and micro-entrepreneurship.

Transformational upskilling for workers presently engaged in the informal sector in trades such as construction, driving and other services can be undertaken. This will create avenues for horizontal and vertical mobility for workers to take up jobs in the gig and platform sector, empowering them to augment their earnings.

**Platformization:** A **Platform India** Initiative can be launched on the lines of Start-up India. The purpose would be to increase access to the platforms. This can be achieved by simplification and handholding, funding support and incentives, skill development, and social financial inclusion. The horizon of platforms can be broadened e.g., Self-employed individuals engaged in the business of selling regional and rural cuisine, street food, etc. may be linked to platforms.

**Enhancing Social Inclusion:** Gender Sensitisation and Accessibility Awareness Programmes for workers and their families should be undertaken. Platform businesses can undertake partnerships with Civil Society Organizations (CSOs) to enable different sections of workers such as women workers and PwDs to take up employment opportunities in the platform sector through skill development, access to finance and assets.

Platform businesses can **create a more enabling environment for women and PwD workers** through changes in the work-design and workplace facilities.

**Extending Social Security:** Platforms can offer paid leaves, and access to insurance along with pension and retirement benefits. Gig and platform firms may consider providing income support to workers. This will help in providing assured minimum earnings and social security from income loss in the wake of uncertainty or irregularity in work.

NITI Aayog has proposed **RAISE Approach for operationalizing the Code on Social Security (CoSS), 2020.**

## RAISE Framework

NITI Aayog has proposed a five-pronged RAISE approach to ensure realisation of full access to social security for all gig and platform workers.

**Recognise** the varied nature of platform work to design equitable schemes.

**Allow** augmentation of social security through innovative financing mechanisms.

**Ensure** benefits are readily accessible to workers.

**Incorporate**, while designing schemes, the specific interests of platforms, factoring the impact on job creation, platform businesses and workers.

**Support** workers to subscribe to government schemes and welfare programmes through widespread awareness campaigns.

Source: NITI Aayog

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### What are the provisions for Gig Workers in the Code on Social Security 2020?

The Code on Social Security, 2020, gives a legal identity to the term 'gig worker'. The Code defines gig worker as a **person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-employee relationship.**

Chapter IX of the Code deals with Unorganized, Gig and Platform workers. Section 114 of the Code mentions that the **Central Government may frame and notify suitable security schemes for the gig and platform workers.**

The matters covered in the section 114 of the code are; **(a)** Life and Disability Cover; **(b)** Accident Insurance; **(c)** Health and maternity benefits; **(d)** Old age protection; **(e)** Creche; **(f)** Any other benefit determined by the Government.

The Code recommends that schemes may be funded through a combination of contributions from Union and State governments, as well as gig platform aggregators.

The **National Social Security Board** will have **oversight of the welfare of gig economy workers**, and will include representatives of both aggregator companies and gig workers.

The Code also mandates that the **Union government establish a Social Security Fund for gig economy workers.**

### What are the issues to be addressed in the Code?

The code should **define the employee-gig worker relationship.** The EU law determines this relationship in terms of levels of aggregator supervision. This could be a tricky exercise in India

since there are many categories of self-employed workers who typically **divide their time between multiple employers** e.g., food delivery agents or cab aggregators.

There is a need to **balance the benefits to gig workers against the cost advantages** that platforms and aggregators derive from their low-cost business models.

There is no clarity on **how the costs of social security will be distributed among stakeholders**; the workers, the aggregators, Union and State Governments. The law lists various possibilities — Government contribution, a mix of Government and private sector money, Corporate Social Responsibility funds or even a 1 – 2% cess on revenues of these companies. The implementation process must be clarified and codified.

Another concern is the **absence of redress** for gig workers in the Code. Labour Courts exist, but they are expensive for ordinary workers to access. Instead, a **responsive appeal institution** needs to be created.

## Status of Gig Workers Globally

The status of gig workers is also undergoing transition in major global economies.

- In November 2020, the **US State of California** in a ballot **allowed platforms to classify gig workers as 'independent contractors'**. With this classification, they were kept out of obligatory benefits. The ballot was **termed unconstitutional** by a County Superior Court in California in August 2021.
- The **Supreme Court of the UK** ruled that **Uber must treat its drivers as workers** and not self-employed.
- The **European Commission** is considering proposals that could lead to **classification of gig workers as employees**. This will entitle them to **security and legal protections** that include minimum wage, collective bargaining, paid leave, unemployment and sickness benefits, and pensions. The Commission also wants to **increase transparency** around the management of employees via algorithms, including the right for workers to contest automated decisions.
- The **Supreme Court of Spain** in May 2021 gave 90 days to food delivery companies to **convert their workers to 'staff'**. The Court also asked the companies to provide **greater transparency** on the **working of their Apps**.

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### Why are platform companies reluctant to assign employee status to Gig workers?

If gig workers are classified as employees, platforms/aggregators will have **higher operating costs and lower utilization of the workforce**. To rectify, the platforms will have to cut down the number of employees, which will impact the customer experience by increasing service delivery time. The power of the platform model lies in the ability to deliver a great customer experience along with high operating efficiency by relying on gig workers. The **whole business model will fail in absence of these cost efficiencies**.

### What is the way forward?

**First**, Platform companies should explore ways to ensure that every gig worker, irrespective of the number of hours put in every month, will be paid an equivalent living/minimum wages.

**Second**, Uber UK has committed to provide the national living wage, paid holiday time equivalent to about 12% of driver's earnings along with a pension plan to its driver. Other companies can replicate this model.

**Third**, the provisions of Code on Social Security should be put into effect. However, the implementation should be undertaken in a gradual manner. Platform companies should be

provided time to adjust their business to the new conditions that will increase their costs. NITI Aayog's RAISE Approach can be adopted.

**Conclusion**

Gig Economy has the potential to create jobs for India's large workforce, especially the low-skilled workers. The Government must take appropriate steps to support the expansion of gig economy and platforms. At the same time, the interests of the gig workers must be protected to provide them with just work conditions as well as social security benefits. Achieving the balance will need some effort from all stakeholders.

Source: [The Hindu](#), [Mint](#), [Business Standard](#), [NITI Aayog](#)