

## 7 PM COMPILATION

**1<sup>st</sup> to 15<sup>th</sup> October, 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
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United Nations Security Council (UNSC) Reforms – Explained, pointwise

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

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## United Nations Security Council (UNSC) Reforms – Explained, pointwise

### Introduction

India's External Affairs Minister (EAM) visited the United Nations (UN) for the 77th session of the United Nations General Assembly (UNGA) in September 2022. The United Nations Security Council (UNSC) Reform was the main agenda of India's EAM. In his address to the UNGA, the EAM said that the need to reform the UN Security Council cannot be denied forever. The Minister met his counterparts from Germany, Brazil and Japan under The Group of Four (G4) banner. The group is primarily focused on UNSC reform, and permanent membership of the body for G4 members. There is a near consensus among all UN members that the UNSC need to be reformed. However, the manner of the reform has remained contentious. This has stalled the reforms for long.

### About the Structure and Functioning of the UNSC

The Security Council has 15 members. 5 members are permanent, China, France, Russia, the United Kingdom, and the United States. They are collectively known as the P5. The 10 non-permanent members are elected for 2-year term by the UNGA. To be elected, a Member State must receive at least two-thirds of all votes cast. The members are chosen according to the region; **African Group** (3), **Latin America and the Caribbean** (2), **Asia-Pacific** (2), **Western Europe and Others** (2), and the **Eastern Europe** (1).

The 5 permanent members have the **power of veto**. Under Article 27 of the UN Charter, Security Council decisions on all **substantive matters** require the affirmative votes of three-fifths (i.e. 9) of the members. A negative vote or a "veto" by a permanent member **prevents adoption of a proposal**, even if it has received the required votes. Abstention is not regarded as a veto in most cases, though all five permanent members must vote for adopting any **amendment of the UN Charter** or any **recommendation of the admission of a new UN member state**. The decisions of the UNSC (known as resolutions) are binding on all members.

### Functions of the UNSC

Under the United Nations Charter, the functions of the Security Council are:

- **Maintain international peace** and security in accordance with the principles and purposes of the UN.
- **Investigate any dispute** or situation which might lead to **international friction**.
- **Recommend methods** of adjusting such disputes or the **terms of settlement**.
- **Formulate plans** for the establishment of a system to **regulate armaments**.
- **Determine the existence of a threat to the peace or act of aggression** and to recommend what action should be taken;
- Call on Members to **apply economic sanctions** and other measures not involving the use of force to prevent or stop aggression.
- **Take military action** against an **aggressor**.
- **Recommend** the admission of **new Members**.
- **Recommend** to the General Assembly (GA) the **appointment of the Secretary-General** and, together with the GA, to elect the **Judges of the International Court of Justice**.

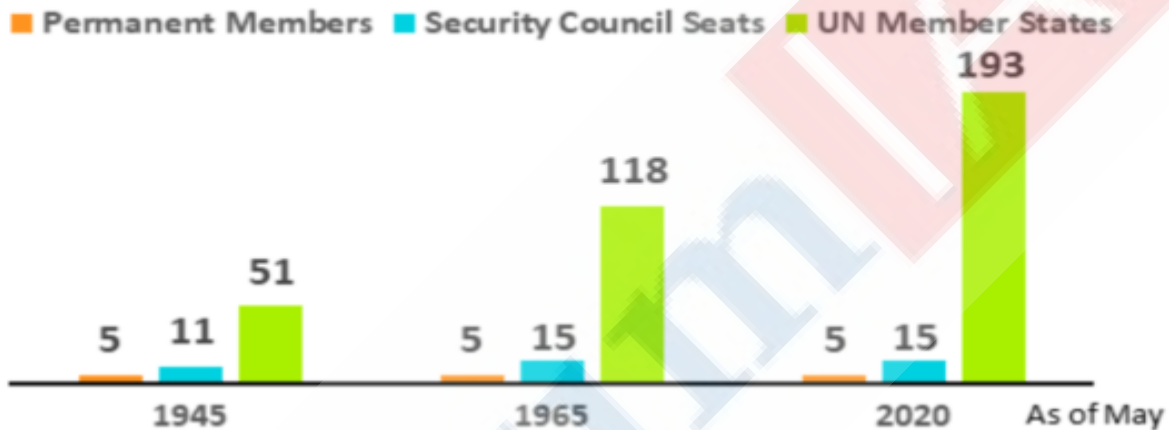
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### What is the need for UNSC Reforms?

**First**, the current composition of the UNSC reflects the geopolitical situation of 1945. The scenario has changed a lot since then. New economic and military powers have risen since then,

**Second**, the UNSC had 11 members in 1945 (5 Permanent and 6 non-permanent). The UN member states stood at 51. The UNSC was expanded to the present strength in 1965 by adding 4 new non-permanent members. Since then, the membership of the UN has expanded to 193. The membership of the UNSC has remained stagnant. The Council's present composition is no longer representative of a world. Africa in particular does not have the representation on the Council that its current importance require.

### Number of UN Member States



**Source:** [Ministry of Foreign Affairs, Japan](#)

**Third**, Alongside stipulating a geographically balanced distribution of seats, the Charter of the United Nations also expressly states that countries that make considerable contributions to the UN should be members of the Security Council.

**Fourth**, The issues that the Security Council deals with have diversified over the past 75 years including: peace-building, conflict prevention, non-proliferation, counter-terrorism and protection of civilians. Hence there is a need for a more broad-based Council.

**Fifth**, In recent years, members' clashing interests have frequently hampered the Council's capacity to respond to significant conflicts and emergencies, such as Syria's civil war, Russia's Ukraine War, and the COVID-19 pandemic.

**Sixth**, In the absence of reform, there is a danger that decision-making processes could be shifted to other forums even though such forums do not have the binding effect and legitimacy of the Security Council. That is not in anyone's interest.

A Council that is more reflective of the contemporary geopolitical realities of the world = A more effective Council

A more representative Council = A more effective Council

A more democratic Council (incorporating inclusive and participatory decision-making) = A more effective Council

A Council with a membership that includes regional powers will be more capable = A more effective Council

*Source: United Nations University. A reformed UNSC that is more representative, democratic and inclusive will be a more effective UNSC.*

In one of the debates on reforms, India's representative to the UN argued that, "... an enlarged Council would **address the democratic deficit**, which prevents **effective multilateralism**, a multilateralism that is based on a **democratically-evolved global consensus**".

### **What are the proposed plans for UNSC Reforms?**

The debate for UNSC Reforms was intensified after the end of the Cold War. However, there are diverse views regarding the reforms' measures and manner. Different groups have been formed, that are pushing for widely different reform measures like expansion of total membership, permanent vs non-permanent seats, status of veto powers etc.

## Membership Reforms

|                     | G4 (Group of Four)<br>(※position presented in the IGN document in 2015)   | AU (African Union)<br>(※position presented in the draft resolution by Africa in 2005)   | CARICOM<br>(Caribbean Community)   | L69  | UFC (Uniting for Consensus)            |
|---------------------|---|---|--|--|--|
| Member              | Brazil, Germany, India and Japan  | 54 African countries  | 14 CARICOM member states   | India, Jamaica, PNG, Saint Vincent, etc.   | Italy, Republic of Korea, Mexico, etc. |
| Permanent Seats     | 11 (+6)<br>Africa(2), Asia-Pacific(2), Latin America and Caribbean(1), Western Europe and other(1)                                      |   |  |  | 5 (status quo)                         |
| Non-Permanent Seats | 14 or 15 (+4 or +5)<br>Africa(1 or 2), Asia-Pacific(1), Eastern Europe(1) Latin America and Caribbean(1)                                | 15 (+5)<br>Africa(2), Asia-Pacific(1), Eastern Europe(1) Latin America and Caribbean(1)   | 16 (+6)<br>Africa(2), Asia-Pacific(1), Eastern Europe(1) Latin America and Caribbean(1), SIDS(Small Island Developing States)(1) | Up to 21 (+11) increase of non-permanent seats and creation of new category of membership based on longer term non-permanent seats |  |
| Veto                | The new permanent members shall not exercise the veto-right until a decision has been taken during a review (15 years after the reform) | The veto should be abolished but so long as it exists, it should be extended to all members including the new permanent members | Same as the left<br>In addition, efforts must be made to limit its use   | Ready to consider formulas on how to best limit its use  |  |

※G4 expressed its support to the Common African Position (CAP) in the G4 Ministerial Joint Press Statement (September 2021).

Issues to be discussed:

- Categories of Membership
- Regional Representation
- Question of the Veto
- Size of an Enlarged Council and Working Methods of the Council
- Relationship between the Council and the General Assembly

Source: United Nations University. Different Groups have proposed different plans for expansion of permanent and non-permanent membership as well as the veto power. The African Bloc (AU) is also called the Ezulwini Consensus.

The creation of the **'Open-ended Working Group on the Question of the Equitable Representation on and Increase in the Membership of the Security Council and Other Matters Related to the Security Council'** (the UN committee with the longest title) has formalized the debate and proposition of various reforms.

### Power to Veto Reforms

The most contentious issue has been the power to veto. The Working Group has been considering a number of propositions in relation to the veto.

**Abolishing the Veto:** This is considered an unlikely scenario. It would require the P5 countries to relinquish it voluntarily as they have the capacity to veto any proposal that it be abolished.

**Two Veto Requirement:** Two vetoes be required to defeat a majority resolution.

**Extension of the Veto:** To create new permanent members without the veto would create two classes of permanent members within the Council. However, some Member States argue that extension of veto rights will further limit the effectiveness of the UNSC.

**Limitation of the use of the veto:** The use of veto powers should be limited only to Chapter VII enforcement decisions. Chapter VII of the UN Charter deals with the *'Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression'*. The P5 want to retain this power especially for important matters like the appointment of the Secretary General. A further suggestion is that veto should be limited to international purposes, not national interests.

**Justification of the use of the veto:** It has been suggested that any use of the veto should require an explanation to the General Assembly.

### Procedural Reforms

Many Member States call for a greater level of transparency, responsibility and accountability in all the procedures of the Security Council. It has been proposed that the decisions by the Security Council to intervene should also be scrutinised and monitored by the General Assembly and the International Court of Justice (ICJ). It is believed that proper accountability for great executive powers, such as deciding on war or peace, required the oversight of a judicial body capable of determining whether an action was within relevant international law.

### What are the challenges to UNSC Reforms?

There is an overwhelming international consensus that the UNSC needs to be reformed. However, there are considerable challenges in effecting these reforms.

**First,** The biggest obstacle to achieving comprehensive Security Council reform is that it will require an **amendment to the UN Charter**. Any enlargement of the Council, removal of permanent membership or official change in voting procedures by removal of the veto, would require an amendment to the Charter. In order to amend the Charter, there needs to be agreement of two-thirds of the General Assembly and two-thirds of the Security Council, including the Permanent Members.

**Second,** the P5 members are not ready to relinquish their power to veto. Nor they are enthusiastic about sharing the power with 'new' members.

**Third,** each permanent seat contender is opposed by some other member e.g., permanent membership of India is opposed by China and Pakistan, Japan is opposed by China, Brazil is opposed by Argentina and Germany is opposed by Italy. In fact, the United for Consensus (Coffee Club) has been instrumental in holding back reforms to the United Nations Security Council. The prime movers of the club include Italy, Spain, Australia, Canada, South Korea, Argentina and Pakistan.

Thus the biggest challenge to UNSC reforms is the lack of consensus on the reform measures.

### What are the arguments in favor of Permanent Membership of India?

**First,** India is soon going to become the most populous nation in the world. India is home to ~18% of the world's population with 1.4 billion people. Such a large population needs permanent representation at the world stage.

**Second,** India recently became the 5th largest economy in terms of GDP (Nominal). India is already the 3rd largest economy in terms of GDP (PPP).

**Third,** India is also a rising military power. India has been ranked 4th in the Global Firepower Index, behind the US, Russia and China, and ahead of the P5 nations, the UK and France. India's capabilities are rapidly expanding in multiple fields like space exploration.

**Fourth,** India has always taken principled stands on international affairs. India led the Non-aligned Movement and supported a multi-polar world. India gave the principle of **Panchsheel** (Mutual respect for sovereignty, non-aggression, non-interference, equality and peaceful coexistence) whose relevance is timeless. **Panchsheel** principles can be highly significant to UN Charter to work towards peace and security in cooperation. Moreover, India has been a champion of Disarmament and elimination of WMDs including Nuclear weapons.



**Fifth**, India has also regularly contributed to the UN-Peacekeeping Missions. As of September 2021, India had ~5500 peacekeepers, though the number has come down from ~8,000 in the 2000s.

#### **What should be the approach going ahead?**

**First**, the Security Council should better reflect on the current global realities and incorporate more geographically diverse perspectives. It must demonstrate flexibility and willingness to compromise in the name of greater credibility and legitimacy.

**Second**, Developing countries vision of development for the South and the role on the UN in promoting and achieving such vision needs to be strongly and consistently articulated.

**Third**, The UN's role as the core global governance institution should not be undermined by the UN reform. Rather, such process should result in a strengthened mandate for the UN as the primary global governance institution to be able to exercise coordinative functions over the work of the major multilateral economic policymaking institutions like the World Bank, the IMF and the WTO.

**Fourth**, India should continue to push hard for UNSC reforms. Foreign Policy experts suggest that a pragmatic approach should be to accept a permanent status without the power to veto.

#### **Conclusion**

The road of UNSC reform is not easy. Despite the consensus on the need reforms, Member States have failed to agree on a number of issues. The role of P5 nations is going to be vital in this regard. If they agree to expansion of the UNSC, including permanent membership, rest of the Member States will follow suit in support. The P5 members should realise that a more democratic and representative Security Council would be better-equipped to address global challenges, and that there are more pressing issues to be tackled at the global level than merely preserving their prerogatives. The reformers—India, Japan, Germany, and Brazil, or the G4—should maintain their multilateral diplomacy in order to build a democratically evolved global consensus on restructuring the UN Security Council.

**Syllabus:** GS II, Important International institutions, agencies and fora their structure, mandate; Effect of policies and politics of developed and developing countries on India's interests; Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

**Source:** [The Hindu](#), [The Hindu](#), [The Times of India](#), [United Nations University](#)

### **Draft Telecommunication Bill, 2022 – Explained, pointwise**

#### **Introduction**

The Department of Telecommunications (DoT), under the Union Ministry of Communications has released the Draft Telecommunication Bill, 2022 for public comments. The Bill seeks to replace the colonial era legislation that regulated the sector, the Indian Telegraph Act, 1885. Experts have praised the Bill for some progressive steps. At the same time concerns have been raised about some provisions that provide excessive powers to the Union Government regarding regulating the sector.

**What is the current regulatory framework for Telecommunication Sector?**

## Legislations and Rules

The telecoms industry is regulated by the following central legislations: **(a)** the Indian Telegraph Act, 1885 (Telegraph Act); **(b)** the Wireless Telegraphy Act, 1933 (WT Act); **(c)** The Telegraph Wires, (Unlawful Protection) Act 1950; **(d)** the Telecom Regulatory Authority of India Act, 1997 (TRAI Act); **(e)** the Information Technology Act, 2000 (IT Act).

Additionally, there are several policies, circulars and notifications which are issued by the Department of Telecommunications (DoT), and the Union Government.

Audio-visual distribution is regulated under: **(a)** the Cable Television networks (Regulation) Act, 1995; **(b)** the Cinematograph Act, 1952; **(c)** the Sports Broadcasting Signals (Mandatory Sharing with Prasar Bharati) Act, 2007; **(d)** the Press Council Act, 1978; **(e)** the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules 2021). The **Consumer Protection (E-Commerce) Rules, 2020**, have also been notified to regulate e-commerce entities and may also extend to social media platforms.

**Regulatory bodies**

The Department of Telecommunications (DoT), Ministry of Communications, TRAI, and the Ministry of Information and Broadcasting (MIB) regulate the sector.

**Telecommunications Engineering Centre (TEC)** is responsible for drawing up of standards, generic requirements, interface requirements, service requirements and specifications for telecom products, services and networks.

The audio-visual media distribution industry is regulated by the MIB, as well as the **Central Board of Film Certification (CBFC)**.

Self-regulatory bodies, namely, the **Professional News Broadcasters Standards Authority, Internet and Mobile Association of India (IAMAI)**, the **Indian Broadcasting Foundation**, and the **News Broadcasting Standards Authority**, and the **Broadcasting Content Complaints Council** govern the sectors.

Further, the MIB has notified the following bodies for IT Rules, 2021 compliance: **(a)** Confederation of Online Media (India) – Indian Digital Publishers Content Grievance; **(b)** Web Journalists Standards; **(c)** Professional News Broadcasting Standards; **(d)** The Digital Publisher Content Grievances Council (IAMAI).

**What is the need for the Telecommunication Bill?**

The telecommunication ecosystem in India today has **117 crore subscribers** and **employs 4 crore people**. The sector contributes around **8% of India's GDP**.

The existing regulatory framework for the telecommunication sector is primarily based on the Indian Telegraph Act, 1885. The nature of telecommunication, have undergone a massive change since the era of 'telegraph'. The **challenges associated with the communication technologies of present day** like the 5G, Internet of Things are not covered under the existing legislations. Hence there is a **need for a comprehensive legal framework** that reflects the nature and need of telecommunication technology of 21st century.

Moreover, Telecom **Spectrum** has become a **vital and strategic resource** in the present times. There is a lack of comprehensive legal framework regarding the Spectrum like auction of spectrum. The draft Telecommunication Bill seeks to address this gap.

Through the Indian Telecommunication Bill, 2022, the Union Government aims to **consolidate and amend the existing laws** governing the provision, development, expansion and operation of telecommunication services, telecom networks and infrastructure, in addition to assignment of spectrum.

The draft Telecommunication Bill, consolidates three separate acts that govern the telecommunications sector — Indian Telegraph Act 1885, Indian Wireless Telegraphy Act 1933, and The Telegraph Wires, (Unlawful Protection) Act 1950.

### **What are the salient provisions of Draft Telecommunication Bill?**

**First**, The draft Bill incorporates some major expansions to the existing definitions of telecommunication services. ‘Over-The-Top’ (OTT) communication services have been included in the telecommunication services. This expands the definition widely to include all instant messaging, video, call applications like WhatsApp, Zoom, Telegram, Signal that run as services over the internet using data.

**Second**, The draft Bill deals with Licensing and Registration. It grants the Union Government the ‘exclusive privilege’ to ‘provide telecommunication services’, operate networks and issue licences to telecom service providers. As OTT platforms have been covered under Telecommunication Services, they may also have to seek licences to operate in India.

**Third**, the draft Telecommunication Bill provides for messages or communication over any telecommunication services to be intercepted and disclosed in the event of a public emergency.

**Fourth**, the Bill also covers issues related to Spectrum allocation. The Bill states that the Union Government shall assign spectrum to best serve the common good and **ensure widespread access to telecommunication services**. It may notify a National Frequency Allocation Plan (NFAP) for the use and allocation of spectrum.’

**Fifth**, The Draft Telecommunication Bill has provided a framework governing payment defaults by licensees, registered entities, or assignees, and allows the government to write-off of such amounts or part thereof. The Bill intends to **reduce the burden on telecom companies** by reducing the penalties levied. It seeks to make most of the offences cognisable.

**Sixth**, The draft Bill also accords the Union Government with powers to defer, convert into equity, write off or grant relief to any licensee under extraordinary circumstances, including financial stress, consumer interest, and maintaining competition, among other things. It also proposes to **replace the Universal Service Obligation Fund (USOF) with the Telecommunication Development Fund (TDF)**. USOF is the pool of funds generated by the 5% **Universal Service Levy** that is charged upon all telecom fund operators on their Adjusted Gross Revenue. The USOF has largely been used to aid rural connectivity.

**Seventh, Right of Way (ROW):** The Bill tries to achieve through law, a ‘right of way’ (ROW) enforceable at the State and at the Municipal Corporation level. It lays down a framework in which a public entity that owns the land has to grant ‘right of way’ permission expeditiously unless it gives a substantive ground for refusal.

### **What are the concerns with the Draft Telecommunication Bill?**

According to the Industry and Privacy experts, there are three broader aspects of the new proposed framework that stand out as major concerns and threaten the fundamental rights of Indian citizens: (a) Widely expanded definitions of telecommunication and licence requirements

for internet-based applications; **(b)** Threats to online privacy and the undermining of strong encryption and surveillance concerns; **(c)** The provisions to suspend the internet at a time when India already suffers the highest number of internet shutdowns in the world.

**First**, the **licence regime for OTT services** is likely to have two consequences; **(a)** The cumbersome KYC process where users will have to register for usage as they do for SIM cards and phone connections. This is a deep concern from a surveillance and freedom of speech aspect as well; **(b)** This may also spur data localisation demands, one that has been a controversial provision in the now withdrawn Personal Data Protection Bill, 2019.

**Second**, Given that OTTs have also been defined as telecom services, industry stakeholders have raised the concern of end-to-end encryptions being weakened or possibly broken in order to intercept the communications. Thus, the draft Telecommunication Bill appears to have ignored appeals for surveillance reforms including the landmark ruling in 2017 by the Supreme Court, affirming the right to privacy as a fundamental right enshrined in Article 21 of the Constitution of India.

**Third**, On the occurrence of any public emergency or in the interest of the public safety, the Union or State Governments can **order the suspension of communication services** on any telecommunication network. Internet shutdowns are a **threat to an open and free internet** and also cause immense economic losses amounting to billions of dollars.

**Fourth, Bankruptcy provisions:** Though the intent of the bankruptcy provisions in the draft Telecommunication Bill is noble, the Union Government might face huge difficulties in executing them. The Bill also **overrides provisions of the Insolvency & Bankruptcy Code (IBC)**, which might complicate resolution proceedings.

**Fifth**, The draft Bill plans to **confine TRAI's powers to making recommendations only if requested by the DoT**. At present, TRAI has no powers of enforcement of its directives and can't levy penalties on telecom companies. If this Bill is passed, TRAI can't even make suo moto recommendations, and will become defunct.

**Sixth**, experts argue that regulatory framework should regulate aspects related to infrastructure and hardware of telecommunication network. It should interfere with 'layers of software' that ride over the hardware. This can lead to **stifling of innovation in telecommunication technologies**.

#### **What should be the approach going ahead?**

The Draft Telecommunication Bill is open for comments by public till October 20, 2022. After that the Government will review the suggestions and may make changes to the provisions of the Bill, before introducing the Bill in the Parliament.

The Government must address the concerns related to privacy of the users. In addition, the provisions in conflict with the IBC can also be reviewed and rectified in order to remove any confusion and delay in proceedings.

#### **Conclusion**

The draft Telecommunication Bill in its present form, while vague on certain provisions, points towards the general direction in which the Union Government wants to take telecom sector and its regulation. As India embarks on its *Amritkaal* phase, there have been calls for liberation from

the colonial mindset. Hence, the Government must remove the provisions which are similar to the colonial-era legislations.

**Syllabus:** GS II, Government policies and interventions for development in various sectors and issues arising out of their design and implementation; GS III, Infrastructure.

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

### CDS, Chief of Defence Staff: Benefits and Challenges – Explained, pointwise

#### Introduction

The Government has appointed Lt. General Anil Chauhan as the next Chief of Defence Staff (CDS) of India. The post has been vacant since the death of the country's first CDS Gen. Bipin Rawat in a helicopter crash in December 2021. The appointment has been welcomed by defence experts. It is expected that the new CDS would carry on the reforms process in defence forces initiated by the Gen. Rawat. Indian defence forces face considerable challenges, including the possibility of two-front war with hostile neighbours. Making the forces future-ready would be one of the top priorities of the CDS.

#### About the Chief of Defence Staff (CDS)

The Chief of Defence Staff (CDS) is the **highest-ranked officer** of India's armed forces. The CDS is the Chairperson of the Chief of Staff Committee (CoSC). He is the single-point military adviser to the Union Government and brings synergy in the matters of the tri-services i.e. the Army, Navy and Air force. A CDS is a 3- or 4-Star General belonging to any of the three sectors of the Indian armed forces.

The post of the CDS was first officially recommended by the Group of Ministers (GoM) in 2001 based on the recommendations of the **K Subrahmanyam Committee** (Kargil Review Committee (KRC)) in 2000. However, there was no significant movement in this regard. Subsequently, similar recommendations were given by the **Naresh Chandra Task Force** (2012) and the **Lieutenant General D. B. Shekatkar Committee** in 2016.

The decision to create the post of CDS was taken by the Cabinet Committee on Security in December 2019. Gen Bipin Rawat took charge as the first CDS on January 01, 2020. The post of the CDS has been aimed to enhance the quality of Military Advice to Political Leadership through integration of Service inputs and to develop and foster expertise in defence matters for better and more informed decision making.

Simultaneously, the **Department of Military Affairs (DMA)** was created in the Ministry of Defence (MoD) on January 01, 2020. The DMA has been created with the purpose of promoting jointness of tri-services in various areas such as procurement, training and staffing.

Together, these two reforms have been termed as the most important reforms in the defence organization.

#### What are the recent amendments in relation to the post of CDS?

The Union Government had recently amended defence laws to allow any serving or retired 3-star officer under the age of 62 to be eligible for the post of Chief of Defence Staff (CDS). The amendment has **expanded the pool of officers** that are eligible to the post of CDS to include

the Lieutenant Generals, Air Marshals, and Vice Admirals. Earlier only 4-star Generals, (the Service Chiefs, Generals, Air Chief Marshals, Admirals) were eligible.

The Amendment has also allowed the Union Government to extend the tenure of the CDS as per requirements subjected to a maximum age of 65 years. Service chiefs have a tenure of 3 years or until the age of 62, whichever is earlier.

### What are the roles of the CDS?

**First**, The CDS **heads the Department of Military Affairs** and acts as its ex-officio Secretary. The mandate of the Department of Military Affairs includes **facilitation of restructuring of military commands** for optimal utilisation of resources by bringing about jointness in operations, including through **establishment of joint/theatre commands**.

**Second**, The CDS is the **Permanent Chairperson of the Chiefs of Staff Committee** and a member of the **Defence Acquisition Council** and the **Defence Planning Committee**.

**Third**, the CDS acts the **principal military advisor to the Defence Minister** on all matters related to the tri-services and military advisor to the **Nuclear Command Authority**.

**Fourth**, the CDS has a responsibility for **coordination among the three services** in equipment and arms procurement, training and staffing.

**Fifth**, the CDS assigns **inter-services prioritisation to capital acquisition proposals** (i.e., procuring new equipment) based on the anticipated budget.

**Sixth**, the CDS is also charged with **bringing about reforms in the functioning of the three services** with the aim to **augment combat capabilities** of the Armed Forces by reducing wasteful expenditure.

### Why are the benefits of the CDS?

Several initiatives have been undertaken since the creation of the CDS.

**First**, It is necessary to have a professional body to render **single-point military advice** to the Government on matters of national security. The Department of Military Affairs (DMA), by virtue of being a truly integrated department, will achieve better results at all levels through effective coordination between the Armed Forces and the Civil leadership. This will help **facilitate inter-service integration** and **better civilian-military coordination** in the Nation's Higher Defence Organisation.

**Second**, It will also strengthen the **process of Joint Planning, Operations and Procurement**, thereby making Armed Forces more effective. Under this new Department, the Logistics structure is being fully revamped to make it more efficient. In this regard, three **Joint Services Study Groups** (JSSG) are developing common logistic policies for Services that will enhance all supply chain functions such as planning, procurement, inventory-maintenance, distribution, disposal and documentation. A pilot project based on the establishment of three Joint Logistic Nodes (JLN) at Mumbai, Guwahati and Port Blair has already been rolled off.

**Third**, A concerted effort is being made to move forward from a **Single Service approach to integrated planning and execution**. Towards this, three **Joint Doctrines** have been formulated in the last one year, while four new joint doctrines namely Capstone, Space, Cyber and Intelligence Surveillance and Reconnaissance (ISR) are at an advanced stage.

**Fourth**, in order to enhance Combat Capability and balance defence expenditure, more than 270 logistic installations of the Indian Army have been closed or scaled down, resulting in substantial savings to the exchequer. It will also help in increasing the 'Teeth to Tail' ratio.

#### Teeth to Tail Ratio

The **teeth-to-tail ratio** (T3R) is the amount of military personnel required to supply and support ('tail') each combat soldier ('tooth'). Teeth-to-tail ratio is often inversely related to its technological capabilities. A force with a high teeth-to-tail ratio will have more personnel devoted to combat, but these soldiers will lack the support provided by the tail. Such support includes the logistics and communication infrastructure on which modern forces depend. A force with a higher teeth-to-tail ratio may have more combat troops, but each will be less effective.

**Fifth**, A holistic review of the training methodology is also underway to modernise, integrate and rationalise training, as also to ensure optimal utilisation of infrastructure and resources.

**Sixth**, A 'Tri-Services Joint Working Group' has also been setup to study and work out the nuances of **integrating Communication Networks** between the Services.

#### What are the challenges?

**First**, bringing **jointness in operations** including through establishment of **integrated theatre commands** is a complex task. This may invariably encroach upon the domain of the services chiefs and will face resistance during conception and implementation.

*Proposed Integrated Theatre Commands*

**Read More:** [Integrated Theatre commands in India – Explained, pointwise](#)

**Second**, Another hurdle will be to **prioritize the budget allocation** and acquisition of latest technologies in order to meet the requirements of the tri-services. The 3 services have competing claims (e.g., to build new aircraft carrier for the Navy or more fighter jets for the Air Force), and it will be difficult to establish balance. The CDS will have to ensure efficient logistics resource management and avoiding duplicity of effort. This can be carried out by streamlining the current policies and preparing a Joint Logistics Doctrine.

**Third**, In the operational realm, the biggest challenge will be aligning operational preparedness to meet a **2-front threat**. Combined with the threat of proxy war, makes it a **two and a half front war**.

**Fourth**, the biggest and foremost challenge is to prepare the military for **next-generation warfare**. This includes Non-Contact Operations (Like cyber/information warfare), Low Intensity Conflict, Asymmetric Warfare and Network Centric Warfare. There are also challenges related to **raising the technology threshold** and dealing with nuances of multi domain warfare. In fact, the nation has to be prepared, as some of these threats cut across all boundaries, extending beyond the military domain.

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

**First**, The CDS has to make an integrated capability development plan to ensure a synchronised modernisation among the services. A **National Security Strategy** will be of great help in laying down the pathways to achieving security, thus assisting in inter-services prioritisation.

**Second**, the integration between the DMA and MoD needs to be enhanced with time and more cross postings at higher levels will help in achieving the desired civil-military balance.

**Third**, There is need to incentivise the entry of private sector in defence industry and hand holding of the defence industry by respective service in trying to develop weapons and equipment. The services need to take ownership but the CDS/DMA can drive the initiatives..

**Fourth**, Greater synergy is also required with economic and diplomatic/foreign affairs. **Military to military cooperation can assist in improving bilateral relations.** It will be beneficial to grouping of nations like the QUAD and SCO.

### Conclusion

The Indian armed forces are in midst of a transition. New age technologies are changing the nature of warfare. Non-contact warfare is gaining primacy and more lethality. China intends to replace the US as the global superpower. It has reflected in China's aggression in Ladakh. It is in this backdrop that the transformation of the armed forces and the integration of the services must take place. The role played by the CDS assumes criticality in this regard.

**Syllabus:** GS III, Various Security forces and agencies and their mandate.

**Source:** [Indian Express](#), [Indian Express](#), [The Times of India](#), [IDSA](#), [PIB](#)

## Services Sector in India – Explained, pointwise

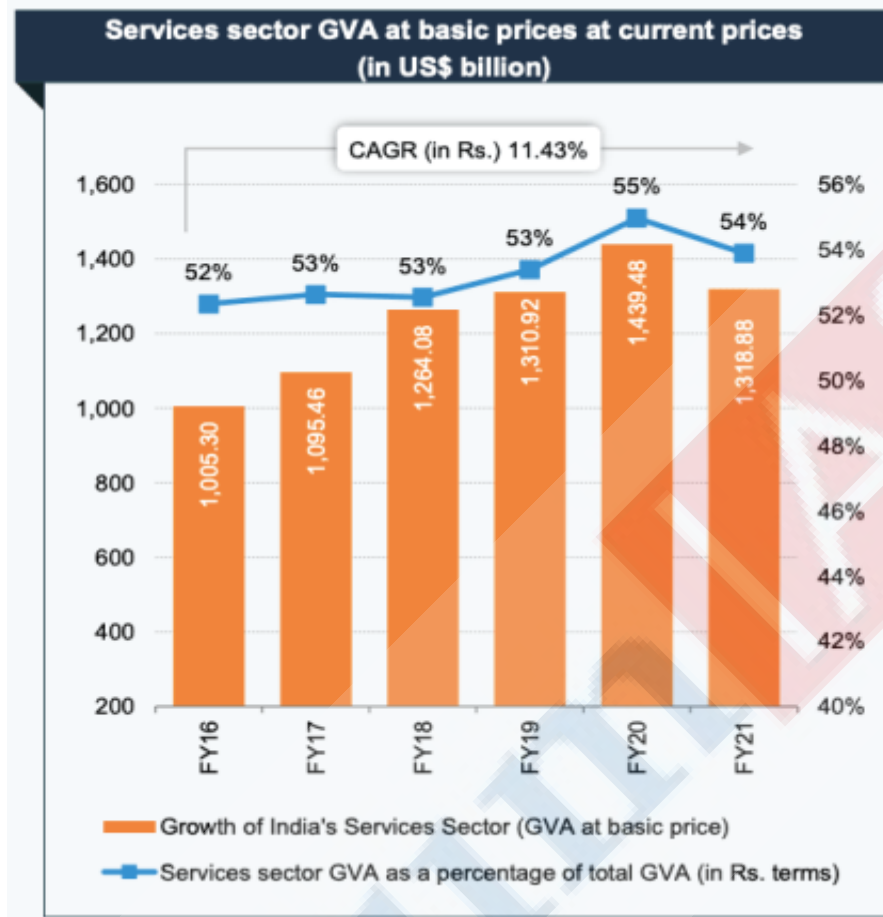
### Introduction

The services sector is the most dominant sector of Indian economy in terms of the GDP. It has also attracted significant foreign investment, and is major contributor to India's exports. It also provides employment to ~30% of India's workforce. Services sector in India covers a wide variety of activities such as trade, hotel and restaurants, transport, storage and communication, financing, insurance, real estate, business services, community, social and personal services, and services associated with construction. Services Sector is poised to play a vital role in achieving the goals of US\$ 5 trillion economy in the medium term and a developed economy status in the long term.

### What is the importance of Services Sector to India's Economy?

**Contribution in GVA:** The services sector of India remains the engine of growth for India's economy and contributed 53% to India's Gross Value Added at current prices in FY21-22.





Source: IBEF

The sector has consistently grown at the annual rate of ~7% in the last few year (barring 2020-21 due to pandemic).



Source: mygov.in

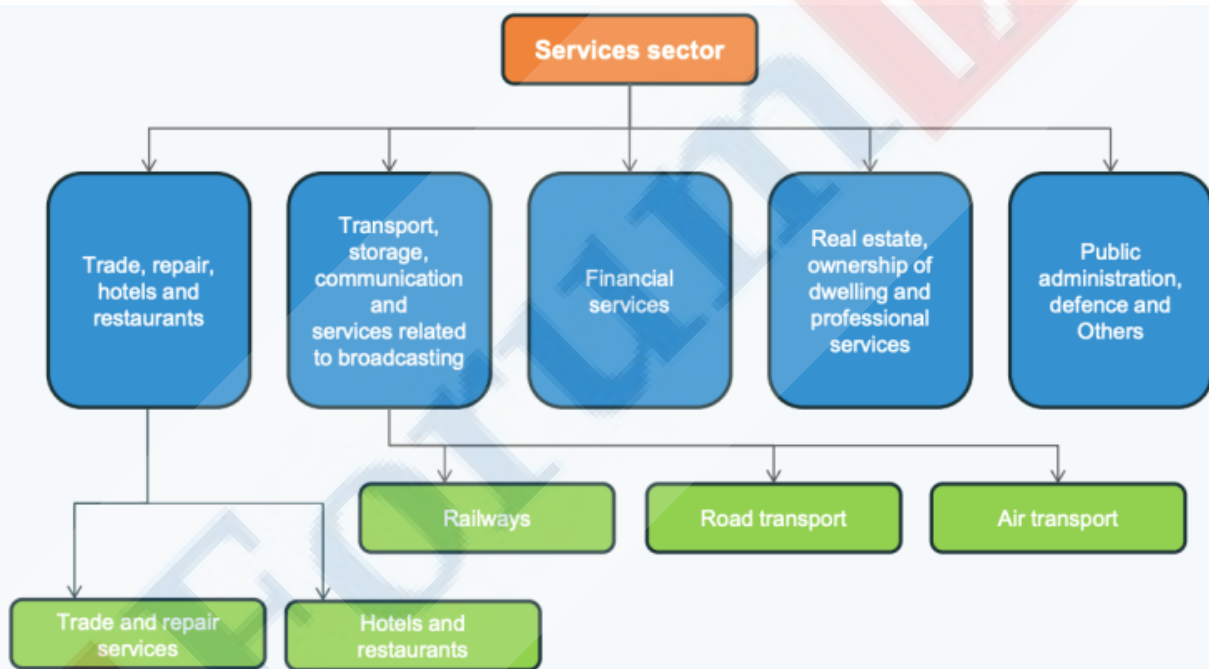
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Overall, the Services Sector grew by 10.8% Year on Year (YoY) in first half (H1) 2021-22. The overall Services sector GVA is expected to grow by 8.2 per cent in 2021-22,

**Contribution to Exports:** According to the WTO, India's services export market share improved from 3% in 2010 to 3.5% in 2019 and 4% in 2020 and 2021. Despite the impact of COVID-19, there was an increase of ~25% in net exports of services in 2021-22. The Government has set a target of services export of US\$ 350 billion in FY2022-23, 37% higher than ~US\$ 255 billion exports in 2021-22.

**Helpful in FDI inflows:** The Services Sector in India was the largest recipient of FDI inflows worth US\$ 94.19 billion between April 2000-March 2022. The services category ranked 1st in FDI inflow as per data released by the Department for Promotion of Industry and Internal Trade (DPIIT).

**Contribution in Start-ups and Patents:** Start-ups in India have grown remarkably over the last six years, most of which belonged to Services Sector. More than 61,400 start-ups have been recognized in India as of January 2022.



Source: IBEF. Sub-sectors of Services Sector in India

### What are the future prospects of the Services Sector in India?

Upcoming sectors are expected to contribute to rapid expansion of services sector in India: **(a)** By 2025, healthcare industry is expected to reach US\$ 372 billion; **(b)** India's digital economy is estimated to reach US\$ 1 trillion by 2025; **(c)** By end of 2023, India's IT and business services sector is expected to reach US\$ 14.3 billion with 8% growth; **(d)** Artificial Intelligence (AI) is expected to boost India's annual growth rate by 1.3% by 2035, according to a discussion paper by Niti Aayog

The implementation of the Goods and Services Tax (GST) has created a common national market and reduced the overall tax burden on goods. It is expected to reduce costs in the long run-on

account of availability of GST input credit, which will result in the reduction in prices of services. India's software service industry is expected to reach US\$ 1 trillion by 2030.

### What factors have contributed to growth of Services Sector in India?

**Rise in demand:** The service sector bloomed when businesses were outsourced from foreign countries (especially the developed countries) to India for communication, advertisement, computer service, and banking. Because of this high demand, there was high growth in the service sector. Rise in domestic population increased demand for services. The necessity for basic services like hospitals, educational institutions, post and telegraph services, police stations, courts, transportation and banking services have increased with increase in population.

**Technology and Structural Changes:** The Indian economy has undergone several technological and structural changes. It comprises a change in economic reliance from primary to tertiary industries. Technical advancements have also led in a shift in outsourcing, leading in the expansion of the service industry. Technology also aided growth in primary and secondary sectors. The development in agriculture and industrial sector has increased the need of services such as transportation, storage and trade.

**Economic Reforms in 1991:** The growth in the service sector in India has been linked to the reforms of the 1990s. The service sector started to grow in the mid-1980s, but growth accelerated after the economic reforms in 1991. Reforms in the service sector led to privatisation, the removal of FDI restrictions, and streamlining of approval procedures among others. With economic growth and the rise in per capita income, demand changed from necessary to discretionary consumption and propelled the growth of services. Elasticity of demand for services at high incomes has contributed to the growth of the sector. As per income of the people increased the demand for services like tourism, retailing, catering and elite education also increased.

**Attractive ecosystem:** The Government's move to launch 'Start-up India' aims to create an inclusive ecosystem for entrepreneurs and push for innovation. Services are a big part of this system. The technology infrastructure required for such an ecosystem has increased the potential for the sector in India. Low setup cost make this sector an attractive investment destination. India also has a reasonably well-developed financial market.

**Skilled Manpower:** A large pool of skilled IT manpower has made India into a global outsourcing hub. It now commands a 55% share in the global sourcing market.

**Improved Productivity:** An other factor behind development of service sector is increase in productivity of labour. Due to better technology and improved labour productivity there is a increase in output of manufacturing goods and agriculture with less labour.

**Global Technology Hub:** India is the digital capabilities hub of the world, with the presence of 75% of global digital talent. In the next five years, the Ministry of Electronics and Information Technology is working to increase the contribution of the digital economy to 20% of GDP. The government is working to build cloud-based infrastructure for collaborative networks that can be used for the creation of innovative solutions by entrepreneurs and startups. In the past five years (until July 2021), India filed >4000 artificial intelligence (AI) patents.

### What are the challenges faced by the Services Sector in India?

**Lack of Government Incentives:** Many experts feel that Government have not provided incentives to the services sector on the same lines as the manufacturing sector e.g., under the export promotion scheme for manufacturing, MEIS (Merchandise Exports Incentive Scheme),

merchandise exporters benefited to the extent of over INR 40,000 crore in 2018-19. The corresponding benefit for service exporters under SEIS (Services Exports Incentive Scheme) was ~INR 4,000 (10% of merchandise exporters).

Similarly, the Government provides incentives like tax exemptions for green-field manufacturing projects. Such incentives are missing for creating infrastructure for services sectors like tourism, building of hotels, hospitals and universities etc. There is lack of PLI schemes for services sector.

**Trade Restrictions:** Services sector is hampered by restrictions placed by foreign governments like restrictions on movement of service professionals, domestic certification requirements for foreign service providers tax on offshore income of Indian service firms etc. These restrictions limit the export potential of India's Services Sector. Similarly, India also performs poorly on OECD's Services Trade Restrictiveness Index (STRI) e.g., out of 50 sample countries, only Thailand and Indonesia were more restrictive than India.

**Skilled Manpower:** While there is a large pool of talented professional, it is not enough to support the growth of the sector. Industry experts lament that many graduates lack employable skills and considerable effort is required to train them.

**Infrastructure:** Lack of infrastructure (like transportation, connectivity, communication) limit the potential of services sectors like tourism and hospitality etc.

**Access to Finance:** Many small services firms lack access to affordable finance to scale up their operations. Lack of finance hampers access to technology, up-skilling of people, up-gradation of systems and processes that impacts their competitiveness.

#### How can the challenges be addressed?

**First**, the Services Sector in India requires structured policy interventions by the Government. The Government should launch a 'Services from India' initiative on the lines of Make in India. Government should consider greater tax incentives, and PLI like scheme for Services Sector to support an increase in services exports.

**Second**, Services need to be accorded a greater priority in trade negotiations. Focus of India's FTAs has been on merchandise trade. Although the trend is changing, the India-Australia ECTA has several measures to facilitate India's service exports (like mutual recognition of professional services, avoiding double taxation on offshore income of Indian service firms in Australia etc.). This should be ensured in India's upcoming FTAs.

**Third**, India should also push for setting standards for global data governance. Resolving data and privacy barriers will provide a big impetus to outsourcing of consultation services. India's services sector can be the biggest beneficiary.

**Fourth**, IT Sector contributes ~55% of total services sector. The Government should make a comprehensive roadmap for further diversification of the services sector. Sub-Sectors like Healthcare, Tourism (including medical tourism), Banking/Financial Services, Telecommunication need to be supported for further expansion.

#### Conclusion

The service sector is India's largest and fastest expanding industry. It has the highest labour productivity and is expected to increase rapidly in the future. The proportion of services in overall commerce in India is greater than the worldwide average. By increasing investment, creating jobs and human capital, and improving infrastructure, the service sector will be able to contribute to

inclusive growth. It is critical for a developing country like India, which has a huge, young population, to create quality jobs and climb up the value chain. The Government must provide a stable and transparent policy environment along with incentives on the lines of manufacturing sector to further enhance the contribution of services sector in India.

**Syllabus:** GS III, Indian Economy and issues related to growth and development,

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

### **Circular Economy: Meaning, Benefits and Opportunities – Explained, pointwise**

#### **Introduction**

Technology has fundamentally altered the ways of working and living in the modern civilisation. The economic growth models are extremely resource intensive. The ecological footprint has risen sharply in the last few decades. The pace of consumption of resources has exceeded the earth's bio-capacity to regenerate the resources. Environmentalists are calling for a fundamental readjustment in the production and consumption models. In this context, Circular Economy can ensure a sustainable utilization of resources. Adoption of Circular Economy is even more crucial for India. With a very high population base, and a significant proportion of population with low living standard, sustainable growth is imperative based on optimal resource utilization. With a growing population, rapid urbanization, climate change and environmental pollution, India must move towards a circular economy.

#### **What is the meaning of Circular Economy?**

The circular economy is a model of production and consumption, which involves **sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible**. In this way, the life cycle of products is extended. This is a departure from the traditional, **linear economic** model, which is based on a **take-make-consume-waste pattern**. This model relies on large quantities of cheap, easily accessible materials and energy.

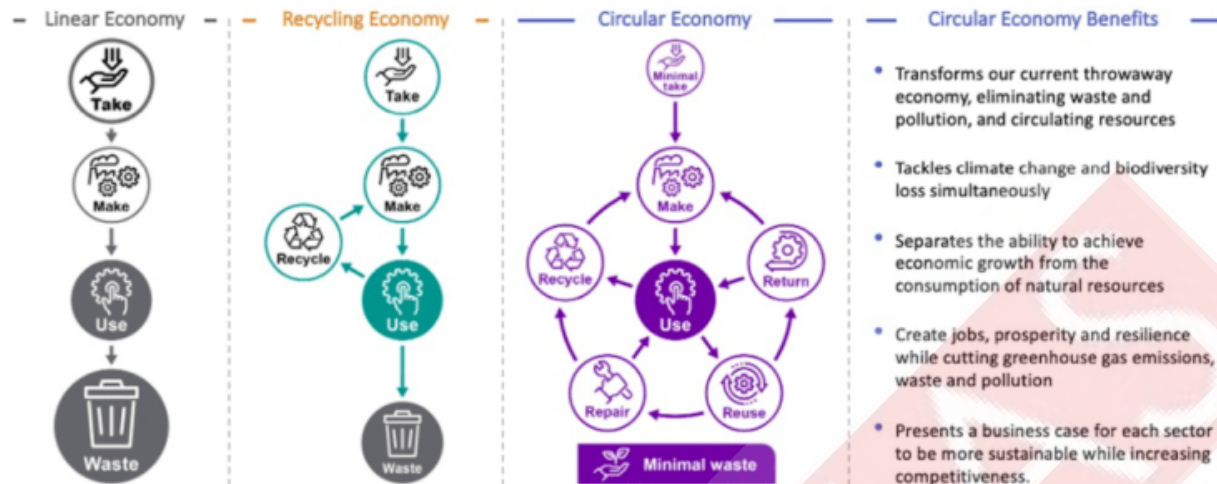


Source: European Parliament

Circular Economy is based on three principles, driven by design: **(a)** Eliminate waste and pollution; **(b)** Circulate products and materials (at their highest value); **(c)** Regenerate nature.

In a circular economy, waste is minimized. Products and raw materials are **designed to be reused** as long and intensive as possible over and over again. Waste is the new raw material.

Circular Economy is not just about recycling waste materials. Recycling begins at the end of the product's lifecycle, when it is thrown away. The circular economy goes right back to the beginning to **prevent waste and pollution from being created in the first place**. It is based on the premises that the environmental challenges have already reached a stage where even recycling alone won't be enough to address them. Hence, **Circular Economy is distinct from Recycling Economy model**. One example of Circular Economy is the use of microbial biodegradable polymers produced from agro-food waste residues for packaging of food items. This will **eliminate use of plastics** and the need of recycling. Waste generation is minimal in Circular Economy.



Source: World Economic Forum

According to the Circularity Gap Report 2020, the global economy is only 8.6% circular. This means that over 90% of the resources that enter the economy (100 billion tonnes per year) are wasted.

### What are the benefits of Circular Economy?

**Protection of the environment:** Circular economy benefits the environment by consuming fewer natural resources, and thus reduces ecological footprint. It helps lower the emissions and produces less polluting waste. It helps in preservation of biodiversity, as there is less pressure on natural resources like forests.

**Benefits for the local economy:** There is emphasis on promoting production models that rely on reuse of nearby waste as raw material.

**Drives employment growth:** Circular Economy fosters the development of a new, more inventive, and competitive industrial model, resulting in higher economic growth and more employment opportunities.

**Promotes resource independence:** Reusing local resources can reduce reliance on imported raw materials. It can help in achieving self-sufficiency.

### What are the needs and opportunities for Circular Economy in India?

Need

**Pressure of Population:** India will be most populous nation soon. According to a World Bank Report, there are more than 190 million people in India living on less than US\$ 2.15 per day (poverty line). Lifting them out of poverty will put a massive strain on natural resources.

**Limited Resources:** India's resource base is limited with only 2% of world's landmass and 4% of freshwater resources, while accounting for ~18% world's population. Linear Economy model will constrain India's manufacturing.

**Environmental Concerns:** According to the Global Footprint Network, India's Ecological Footprint has been rising consistently. Consequently India's Biocapacity deficit has increased from -0.1 gha in 1961 to -0.8 gha in 2018. Moreover, as resource intensity of India's economy increases, the emissions are also rising.

## INDIA (2018)

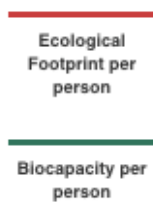
GDP PER PERSON  
\$2086

POPULATION  
1,352,640,000

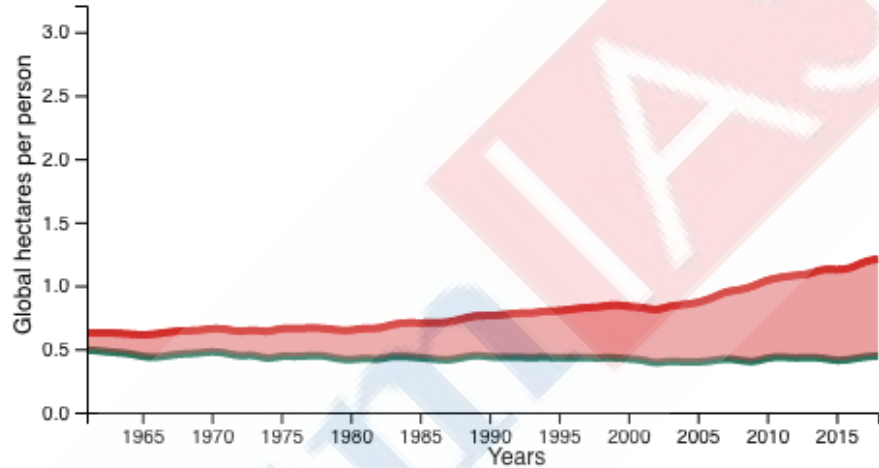
$$\begin{array}{rcl}
 \text{Biocapacity per person} & - & \text{Ecological Footprint per person} & = & \text{BIOCAPACITY RESERVE(+)/DEFICIT(-)} \\
 0.4 \text{ gha} & & 1.2 \text{ gha} & & -0.8 \text{ gha}
 \end{array}$$

Ecological Footprint and Biocapacity

From 1961 to 2018



[Learn More](#)

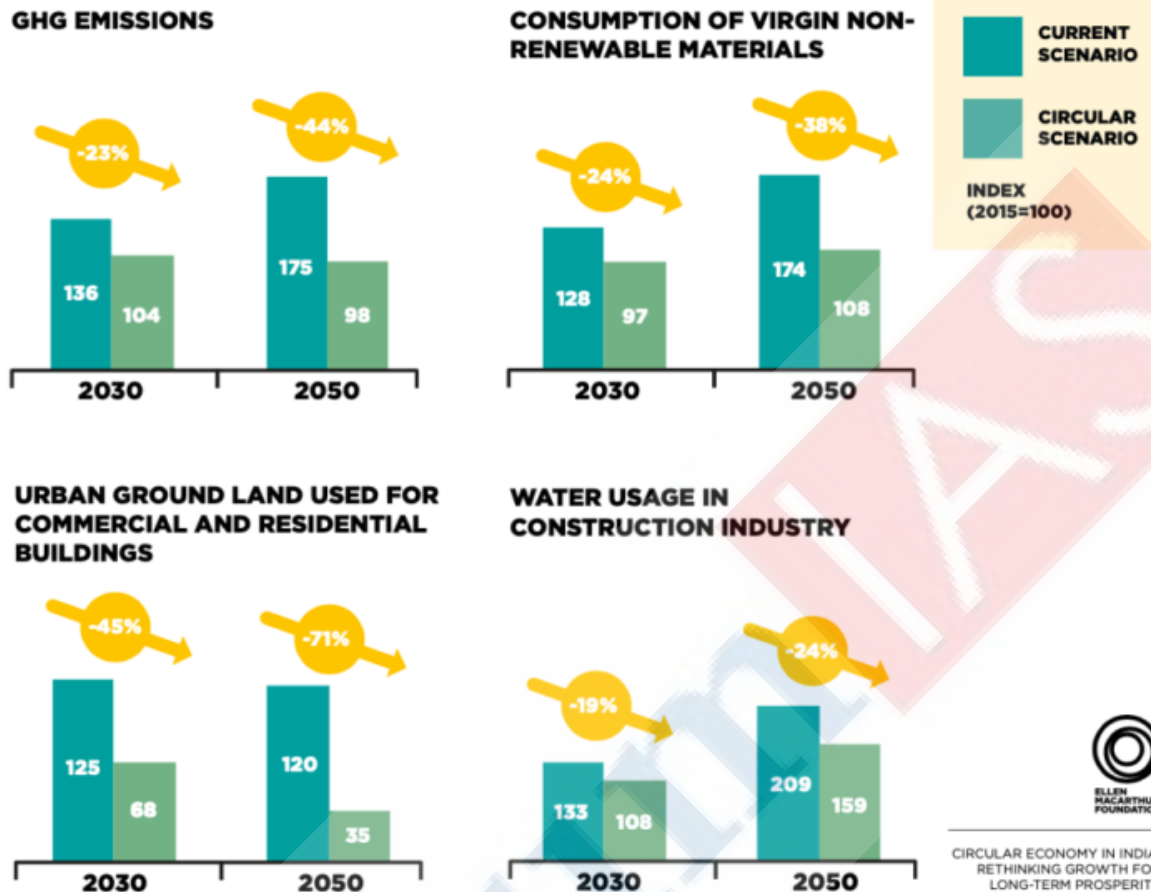


Data Sources: [National Footprint and Biocapacity Accounts 2022 edition \(Data Year 2018\)](#); GDP, World Development Indicators, The World Bank 2020; Population, U.N. Food and Agriculture Organization.

Source: [Global Footprint Network](#)

A circular economy development path could significantly mitigate negative environmental externalities. For example, greenhouse gas (GHG) emissions could be 23% lower in 2030 and 44% lower in 2050 compared with the current development scenario.





Source: Ellen MacArthur Foundation, *Circular Economy in India: Rethinking Growth for Long-term Prosperity*

**Resource Dependence:** Finite supplies also means India is dependent on other countries for raw materials. Resource dependence increases imports and raises current account deficit. It also puts a strain on Government finances.

**Economic Benefits:** According to EM Foundation, a circular economy development path in India could create annual value of ₹14 lakh crore (US\$ 218 billion) in 2030 and ₹40 lakh crore (US\$ 624 billion) in 2050 compared with the current development scenario. By adopting circular economy approaches, businesses could achieve **material cost savings** and **increase their profits**.

**Technology Hub:** Leveraging digital technology to enable the circular economy could reinforce India's position as a hub for technology and innovation.

### Opportunities

Sectors such as food, agriculture, fashion, construction, mobility, and rare earth materials are expected to provide the biggest opportunities for circular economy in India.

**Construction:** India is urbanising at an unprecedented rate, against a backdrop of resource constraints. An estimated 700-900 million square metres of new commercial and residential space a year needs to be built to cope with the increasing demand. Circular Economy Principles

can be incorporated into design of the infrastructure (like buildings, water, sanitation, waste treatment infrastructure) to create more effective material cycles. More systemic planning of city spaces, integrated with circular mobility solutions, can contribute to higher air quality, lower congestion, and reduced urban sprawl.

**Food and Agriculture:** (a) Combining **local knowledge** and **traditional methods** (like working with a large variety of species) with **modern technology** (like precision farming, and digitally enabled asset- and knowledge-sharing systems) could **increase yield** while significantly **decreasing requirements for resources** such as water, synthetic fertilisers, and pesticides; (b) Reducing food waste across the supply chain could make the Indian food system even more effective. This would require **optimising production** and **digitising food supply chains** to match supply and demand more easily; (c) **Urban and peri-urban farming** can bring food production closer to consumption, reducing food waste and transportation requirements.

**Mobility:** Demand for personal mobility in India is expected to double or even triple by 2030. Circular economy principles can contribute to a mobility system that would meet the growing needs of the Indian population, especially in cities, while limiting negative externalities, such as GHG emissions, congestion, and pollution. (a) An **on-demand mobility system**, embracing **vehicle-sharing trends** (like bike, car sharing) and **leveraging digital innovation** (App similar to cab-hailing Apps that can link users for car sharing), could provide efficient and effective transportation with **high vehicle usage and occupancy rates**; (b) **Vehicle as a service model** can provide convenient last-mile connectivity and can create convenient door-to-door journeys; (c) Taking reparability, remanufacturing, and recycling into account in vehicle design can reduce the need for materials and energy. Building vehicles that rely on zero-emission propulsion technology could reduce negative externalities.

### **What steps have been taken by the Government to promote Circular Economy?**

The Government of India has been actively formulating policies and promoting projects to drive the country towards a circular economy.

**First**, The Government has notified various rules, such as the Plastic Waste Management Rules, e-Waste Management Rules, Construction and Demolition Waste Management Rules, Metals Recycling Policy, etc. The Rules are geared towards reducing waste generation and maximizing recycling of waste.

**Second**, NITI Aayog has undertaken several initiatives to address the challenges in the **utilization of waste as resource** and to evolve a perspective on the recycling industry in India. Progress has been made in promoting the **usage of fly ash and slag produced in the steel industry in other sectors**.

**Third**, NITI Aayog has organized international conference on 'Sustainable Growth through National Recycling' and has prepared strategy papers for resources efficiency in sectors like Steel, Aluminium, Construction and Demolition and e-waste.

**Fourth**, To expedite the transition of the country from a linear to a circular economy, 11 committees have been formed for 11 focus areas. The committees will prepare comprehensive action plans for transitioning from a linear to a circular economy and monitor their effective implementation.

| Focus Area                             | Concerned Line Ministry                                 |
|--|---|
| Municipal Solid Waste and Liquid Waste | Ministry of Housing and Urban Affairs                   |
| Scrap Metal (Ferrous and Non-Ferrous)  | Ministry of Steel                                       |
| Electronic Waste                       | Ministry of Electronics and Information Technology      |
| Lithium Ion (Li-ion) Batteries         | NITI Aayog  |
| Solar Panels                           | MNRE  |
| Gypsum                                 | Department for Promotion of Industry and Internal Trade |
| Toxic and Hazardous Industrial Waste   | Department of Chemicals and Petrochemicals              |
| Used Oil Waste                         | Ministry of Petroleum and Natural Gas                   |
| Agriculture Waste                      | Ministry of Agriculture and Farmers' Welfare            |
| Tyre and Rubber Recycling              | Department for Promotion of Industry and Internal Trade |
| End-of-life Vehicles (ELVs)            | Ministry of Road Transport and Highways                 |

### What can be the approach going ahead?

**First**, The Government can incentivize India's production systems to adopt practices around the principles of circular economy so that they not only reduce resource dependency but also gain competitiveness. This requires a close collaboration between the Government and industry.

**Second**, Businesses can integrate circular economy principles into their strategy and processes. They can train current and prospective employees on circular product design and new business models. They can also collaborate with other businesses, policymakers, and the informal economy to drive the change.

**Third**, Circular and local models have proven to be more resilient and efficient in addressing the needs of the masses. The Government should encourage local alternatives to enable local supply chains.

**Fourth**, so far the focus of Government's effort has been more on recycling. Now the focus should shift up the value chain to include principles of circular economy in the design and manufacturing stages. The effort should be geared towards creating enabling regulatory frameworks and removing policy barriers.

**Fifth**, The Government can also support circular models through public procurement and infrastructure. This could help kick-start those models to stimulate their wider adoption in the market.

**Sixth**, Circular economy principles should be embedded into education. Bringing circular economy principles into education, from school through to professional development, can equip learners with the right systems thinking skills and mindsets to become active shapers of a circular economy.

### Conclusion

As India embarks on its path to become a developed economy, adopting a Circular Economy model will ensure that this growth is sustainable with minimal impact on environment.

**Syllabus:** GS III, Conservation, Environment Pollution and Degradation.

**Source:** [Economic Times](#), [Mint](#), [PIB](#), [EM Foundation](#)

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## India's Overseas Development Cooperation – Explained, pointwise

### Introduction

As India is developing and modernising, the Government of India is improving its efforts to help the poorer nations across the world, both towards ending poverty and improving living standards. India's role in international overseas development cooperation and partnership has undergone significant transformation over the past years. India is now becoming a net donor of development cooperation/assistance from being a chronic beneficiary. However, India's overseas development assistance and cooperation suffer from various challenges, which must be rectified to enhance its effectiveness.

### How has India's Overseas Development Cooperation evolved over time?

India's overseas development cooperation began right after the independence. India found its development partnership approach through the ethos of the national movement. Colonization, Apartheid and underdevelopment were among the major challenges in the 1950s. Despite its resource constraints, India offered its development experience to countries which wished to engage.

In 1949, India began with cooperative efforts for Burma and Indonesia, through technical cooperation. This was successful, and became the basis for expansion to several initiatives in Asia and Africa. India's overseas development cooperation remained **unconditional** and **responsive to partner priorities**. It emphasised capacity-building, particularly the development of human resources e.g., India established the **Imperial Military Academy in Harar, Ethiopia in 1958**. It trained the military officers of several African countries, and showed an early regional approach.

To undertake capacity-building programmes, India launched the **Indian Technical and Economic Cooperation (ITEC) Programme in 1964**. ITEC offered India's institutions and experience for sharing. It covered both civilian and military aspects. ITEC initially covered Asian countries, then expanded to Africa and now covers over 150 countries, including in Central Asia, Latin America, the Caribbean, and the South Pacific. The ITEC programme has annual budget of ~INR 200 crores.

Over the years, India has contributed to plurilateral funds for achieving these development goals including through the **India-Brazil-South Africa, (IBSA) Fund** and **India-UN Development Partnership**.

With the faster pace of development post 1991-reforms, India's overseas development assistance (ODA) has also picked up pace.

### What is the current status of India's Overseas Development Cooperation/Partnerships?

#### Funds

According to the [dashboard](#) provided by the Ministry of External Affairs (MEA), between 2008-2022 (till July) India has allocated funds worth **INR 85,059 Crore** as **grants and loans**. Of this, INR 70,221 Crore has been disbursed. India's Grants and Loans are **mostly limited to neighbourhood nations**: Afghanistan, Bangladesh, Bhutan, Nepal, Maldives, Mauritius, Mongolia, Myanmar, Seychelles and Sri Lanka. Bhutan has been by far the biggest recipient of India's overseas development assistance (ODA) through loans and grants, receiving ~54% (INR 46,196 Crore) of the allocated funds.

In addition, the Government has also provided **Lines of Credit (LoCs)** worth **US\$ 22.8 billion** between 2014-2022 (till September), with record US\$ 7.2 billion worth of LoCs extended in 2016-17. In contrast to grants/loans, India's overseas development assistance (ODA) through LoCs is **more diverse with countries in Africa and Caribbean as the major recipients**. According to information available in MEA's dashboard, India has extended LoCs to 66 nations between 2014-22. According to data available with EXIM Bank, India has provided LoCs worth US\$ 28 billion between 2002-03 and 2018-19.

### Instruments

India's overseas development assistance (ODA) is based on a framework with 4 broad elements: **(a) Lines of Credit (LOCs)** under the **Indian Development and Economic Assistance Scheme (IDEAS)**; **(b) Grants and Loans**; **(c) Capacity-building training programmes** especially under the **Indian Technical and Economic Cooperation (ITEC)** programme; **(d) Bilateral grant assistance projects**. All overseas partnerships contain some combination of the above, e.g., In Mozambique, support for solar panel production was through three elements: capacity building of scientists through training at Central Electronics, a line of credit for infrastructure support and a grant element.

Besides bilateral projects, the Government has recently taken steps toward **triangular cooperation** with few developed nations and the UN agencies. Agreements/Memorandums of Understanding (MoUs) have been signed with the **United States, the European Union, Japan, World Food Programme, the UNDP**, etc. Some triangular projects are already being implemented in Afghanistan and Africa.

Depending on the priorities of partner countries, India's development cooperation ranges from commerce to culture, energy to engineering, health to housing, IT to infrastructure, sports to science, disaster relief and humanitarian assistance to restoration and preservation of cultural and heritage assets.

### Institutional Arrangement

India launched the **India Aid Mission (IAM)** in Nepal in 1952, before the US had established the US Agency for International Development (USAID, 1961). It was later rechristened as the Indian Cooperation Mission (ICM).

**India Development Initiative (IDI)** was launched in 2003. Subsequently, the **Indian Development and Economic Assistance Scheme (IDEAS)** was launched in 2005 for managing credit lines. In 2007, the IDI was suspended. A new India International Development Cooperation Agency (IIDCA) was announced to be set up but it was never established.

A **Development Partnership Administration (DPA)** was established within the Ministry of External Affairs in 2012. It has various divisions that handle different projects and regions.

## Divisions of the DPA

The DPA has three Divisions: DPA – I, DPA – II and DPA – III. They handle different projects.

### DPA-I

- All Lines of Credit (LoC), grant projects in the East, South and West African regions.
- Grant assistance projects in Bangladesh and the Sri Lanka Housing project.

### DPA-II

- Over 8500 civilian and 1500 defence training slots allocated under **Indian Technical and Economic Cooperation Programme** and **Special Commonwealth Assistance for Africa Programme** to 161 partner countries. 47 empanelled institutions conduct around 280 courses annually.
- Grant assistance projects in Southeast Asia, Central Asia, West Asia and in Latin American countries.
- Humanitarian and disaster relief.

### DPA – III

- Implementation of grant assistance projects in Afghanistan, Maldives, Myanmar, Nepal and Sri Lanka

Source: Ministry of External Affairs

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## What are the issues in India's Overseas Development Cooperation?

**Institutional Arrangement:** India's overseas development assistance (ODA) programme lacks proper institutional arrangement. The divisions of DPA lack proper structure with overlapping regional and functional jurisdictions. Ideally, divisions could have been made on a regional basis (like Africa, East Asia, Latin America etc.) or functional basis (handling LoCs, Grants, Capacity building programmes).

**Institutional Capabilities:** The DPA also struggles with lack of capabilities to implement the projects. Project implementation in foreign nations faces several challenges like statutory approvals and clearances. There is a **need for constant monitoring and coordination** with agencies of foreign countries. Similarly, there are internal constraints like ensuring the adequacy and predictability of budget allocations, approval/appraisal procedures with Ministry of Finance, selecting competitive firms from India to undertake projects abroad etc. Addressing these challenges require specialised skills. DPA is lacking in such capacity when compared to other agencies like the USAID.

**Transparency:** There is lack of transparency and visibility in terms of allocations and outcomes. There is no central database that can provide a comprehensive visibility on all the grants/LoCs extended, projects undertaken or the capabilities developed abroad. The lack of information in public domain limits review and establishing efficacy of the India's cooperation efforts. This, in turn, undermines the accountability of the Government's initiatives.

**Approach:** There is no stated policy on India's overseas development cooperation. This leads to lack of consistency in methods of assistance/cooperation, selection of projects, or allocation of funds. This is in contrast to Japan's ODA or China's BRI.

## What should be the approach going ahead?

**Policy and Vision:** Foreign Policy experts suggest that the Government must bring out a policy on India's Overseas Development Cooperation, stating its vision, objectives, principles and goals. This will replace the current ad-hoc approach and make India's cooperation more objective. Some experts even suggest enacting an **India Overseas Development Cooperation Act**, to enable

Parliament's oversight over the cooperation programme. This is similar to **UK's International Development Act (2002)** which detailed the country's objective to contribute towards global poverty reduction. The UK was one of the first countries to provide aid without being tied to any domestic policy considerations, making the 2002 Act an effective and successful framework.

## Policy Framework for India's Overseas Development Cooperation

### Vision for India's Development Cooperation

- **Non-Conditionality:** The development partnerships must be based on mutually agreed terms
- **Promoting a 'Partnership among Equals':** All development partnerships must be on an equal footing, without domination or undue influence.
- **Mutual Accountability:** Both India and development partners must be accountable to each other.

### Operating Principles

- Mutual Benefit.
- Transparency and Fiscal Integrity.
- Accountability.
- Sustainability.
- Inclusiveness.

### Goals and Development Priorities

- Capacity Development and Technology Transfer.
- Gender Empowerment and SDGs.

Source: Towards a White Paper on Policy: Jindal Journal of Public Policy

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**Autonomous Body:** There is a need to establish an autonomous agency to undertake the cooperation activities abroad. DPA in its current form lacks adequate authoritative powers. The **US AID is an independent agency** of the US Federal Government established under the the **Foreign Assistance Act** (1961). The DPA can be made a more autonomous entity empowered to address long-term and short-term strategies. The Brazilian Cooperation Agency, affiliated to the country's foreign ministry, has a mandate to **negotiate, coordinate, implement and monitor technical cooperation projects and programmes**. Similar powers should be accorded to the DPA.

**Enhance Visibility:** There is a need to enhance visibility on the all the projects undertaken with the corresponding spending. A comprehensive database should be developed. The present dashboard only lists year-wise allocation/disbursal of funds, but provides no details of projects. Proper visibility will enable analysis, periodic review and revision of India's international development cooperation policy.

**Widen Cooperation:** The Government can also move beyond government-to-government negotiations and agreements to include more plural and diverse stakeholders like representatives from the private sector, academia, philanthropic institutions and civil society. Collaborations with the private sector and civil society can be achieved by engaging with existing platforms such as the **Forum for Indian Development Cooperation (FIDC)** (an initiative by the DPA, academia and civil society organisations, and launched in 2013) that has been working to raise awareness on various dimensions of development cooperation policies through public engagement at the domestic level.

**Sharing Domestic Capabilities:** Going forward, India should actively promote learnings from its domestic initiatives like Aadhar, JAM Trinity, Ayushman Bharat, CoWin, UPI etc. in other developing countries and help them achieve development outcomes.

### Conclusion

India's overseas development cooperation and assistance initiatives have enabled India to win goodwill, especially among developing countries. India's programmes have been successful because of the equal involvement of the partners as well as non-conditionality of India's cooperation. Now the Government must focus on reforms to make the programme more structured. This will enable India to play a more constructive role in reshaping the global order which is going through a phase of uncertainty.

**Syllabus:** GS II, India and its neighbourhood relations.

**Source:** [Indian Express](#), [ORF](#), [Money Control](#), [Ministry of External Affairs](#), [Indian Council on Global Relations](#)

## India's Approach to Multilateralism – Explained, pointwise

### Introduction

The External Affairs Minister (EAM) of India visited the United Nations (UN) for the 77th session of the United Nations General Assembly (UNGA) in September 2022. At the session, the EAM reiterated the need for '**reformed multilateralism**' through which the United Nations Security Council should reform itself into a more inclusive organisation. In 2020, The Prime Minister had first called for 'reformed multilateralism' that "...reflects today's realities, addresses contemporary challenges...". The international geopolitics is in a state of flux. The role of global multilateral institutions amidst the US-China struggle for global supremacy, Russia-Ukraine conflict, COVID-19 pandemic among others has led to a crisis of legitimacy. India's approach to multilateralism has been to call for reforms of these institutions as well as to engage with all stakeholders to secure India's economic and geopolitical interests.

### What is the meaning of Multilateralism?

According to the UN, it is difficult to capture the nature of multilateralism through a single definition. Multilateralism means a **form of cooperation between at least three States**. It is often defined in opposition to bilateralism and unilateralism.

However, Multilateralism is not simply a question of the number of actors involved. It involves adherence to a common goal based on the respect of a shared system of norms and values. It is based on founding principles such as consultation, inclusion and solidarity. Multilateralism is determined by **collectively developed rules** that ensure sustainable and effective cooperation. It guarantees all States the same rights and obligations. Multilateralism is therefore both a method of cooperation and a form of organization of the international system.

### What has been historic evolution of India's approach to Multilateralism?

Cold War Era

India's approach to multilateralism is characterised by the **Policy of Non-alignment** from the Cold-War era. At the time of Independence, the world was caught in Cold-war between the West and the Soviet-bloc. India saw merit in joining a number of multilateral groups like the G77, Non-Aligned Movement (NAM), Bandung Asian-African Conference of 1955 etc. India understood



the strength of numbers. This method (as collective like NAM) would allow the voice of poor nations to be heard at the international forum. India's approach to multilateralism was a way of magnifying its influence in international affairs until it could exert influence more materially. India didn't join ASEAN (when offered membership) because India considered that ASEAN was created under American control.

### Post Cold-War

After the Cold War and post-globalization, regional groupings expanded because nations, including India, **needed interdependencies for prosperity and security**. With the opening of India's economy, India realized the necessity of regional and multilateral organizations for its growth and stability. India actively pursued memberships and engagements with the forums that were considered crucial to secure India's interests. India has joined diverse groupings like **G20, Quad, SCO, BRICS, RIC** (Russia-India-China), **BIMSTEC** etc. India actively pursued for memberships of security related groups like **Missile Technology Control Regime** (MTCR, got membership in 2016) and the Nuclear Suppliers Group (NSG). According to an estimate, India is a member of more than 2000 international organizations out of 6000 organizations in the world active today.

### What are the perceptions about India's Approach to Multilateralism?

Many nations, especially in the West, consider as a 'Naysayer' when it comes to negotiating international rules and working together on issues like climate change, nuclear proliferation, trade, and other similar issues. For instance, **India has been blamed for breakdown of Doha Round of trade negotiations at the WTO in 2008**. India is also blamed for lack of consensus on public stockholding of food grains and the subsidies at the WTO. India's withdrawal from the Regional Comprehensive Economic Partnership (RCEP) in 2019 further crystallized its image of preferring bilateral arrangements over multilateral mechanisms when it comes to trade. More recently, India was blamed at the Glasgow Climate Summit (CoP 26) for **diluting the global pledge to reduce use of coal by replacing 'phase out' of coal with 'phase down'**.

However, many foreign policy experts argue that India's efforts to secure its national interests shouldn't be seen as its opposition to rules and principles of multilateralism. Multilateralism prioritises cooperation and mutual respect over the interests of individual states. But all the nations act to protect their own interests while negotiating, and give concessions on cooperation as long as their interests are secured. India's follows the same approach.

### What are the present day challenges to global order and Multilateralism?

Recent geopolitical developments have put the global order in a phase of uncertainty.

**First**, the COVID-19 epidemic revealed the institutional limitation of the bodies like United Nations/WHO/WTO. Countries shut down their borders and the supply networks collapsed. There was a severe shortage of vaccines. India's efforts for TRIPS waiver for vaccines were shot down by the US and the EU.

**Second**, the UN has proved to be ineffective in reigning-in the Russia-Ukraine war. Many UN resolutions have been blocked by Russia's veto. Nor has the UN been able to limit Russia's actions in Ukraine.

**Third**, The growth of China and its belligerence and aggressiveness in the South China Sea, the Indo-Pacific, and increasingly across the world have highlighted the limitations of United

Nations-style multilateralism. China has been using its strength to create its own global structure, and is focused on reducing the influence of the West in a new global order.

### What has been India's approach to Multilateralism?

India's multilateral actions have been based on pragmatism since the 1980s. It has worked to **advance and protect its core interests through multilateral engagement**, to resist or ignore international rules when necessary, and to be open and willing to shape and ratify such rules where national and global interests align.

India has taken principled stands on various issues like nuclear proliferation and weapons control, international trade, climate change, and the United Nations Security Council.

**Read More:** [United Nations Security Council \(UNSC\) Reforms – Explained, pointwise](#)

India's engagement with multilateral institutions and its interventions have evolved with changing interests e.g., during the initial years after independence, India's focus was more on **decolonization and the desire for autonomy in foreign policy** and development. But over the years, these ideas have given way to positions that are influenced by rational considerations. **Economic interests** came into play and become more salient as India's engagement with the international economy grew. India **actively pushed GATT/World Trade Organization** to liberalize tariffs in industries like services and agriculture where Indian firms have a competitive advantage. At the World Health Organization, India endorsed a strong set of rules to curb rising tobacco use worldwide, having seen the raging effects of tobacco consumption at home.

India's trade approach marries a healthy mix of **pursuing regional and multilateral arrangements**. India has actively participated in both the WTO and the regional trade agreements. For example, after the failure of the Doha Round in 2008, India turned to regional trade deals to help its economy grow. India's free trade agreements with the Association of Southeast Asian Nations (ASEAN) and the signing of the South Asian Free Trade Agreement (SAFTA) indicate a firm commitment to regional frameworks. Hence, a significant characteristic of India's trade policy is following a multi-track approach that **favours both regionalism and multilateralism**.

In its efforts to secure its interests, India has continued to engage with countries in the opposing blocs, for instance, India is member of both Quad (with Australia, Japan and the US) and the SCO (with Russia and China). India uses SCO to secure its strategic interests in Central Asia.

**Read More:** [Shanghai Cooperation Organization \(SCO\) – Explained, pointwise](#)

The Quadrilateral Security Dialogue (Quad) is based on common political principles as democracies and a shared interest of a belligerent China. Moreover, India has used bilateral and trilateral frameworks, especially joint naval exercises, with countries like the US, Australia, Singapore, and France to send strategic messages. With these drills, India has shown readiness to respond to China's coercive actions in the maritime domain. India will likely rely on bilateral defence relationships with the West (US, France etc.) to pursue its key security objectives in the maritime governance across the Indian ocean.

### Conclusion

India's present day diplomacy is driven by actively pursuing India's economic and security interests. India's multilateral approach is neither obstructionist nor motivated by a desire to hamper global initiatives. With continued economic progress, India's interests and stakes in the

international system will expand. Realizing this India is calling for a rules based global order with reforms of the multilateral institutions.

**Syllabus:** GS II, India and its neighbourhood relations.

**Source:** [The Hindu](#), [Mint](#), [United Nations Office](#), [ORF](#)

## CSR, Corporate Social Responsibility in India: Provisions, Status and Challenges – Explained, pointwise

### Introduction

India is one of the first country in the world to impose a statutory obligation of Corporate Social Responsibility (CSR) for corporations through the Companies Act, 2013. India is perhaps the only country that makes both the spending and reporting of CSR obligations mandatory. The Government has also made it clear that CSR spending is not mere charity or donations without any benefits. The Government has also made a conscious attempt to keep the CSR legislation aligned with India's commitment to the Sustainable Development Goals (SDGs). The CSR landscape in India has expanded significantly; more and more corporations are now engaging constructively realizing their social obligations. Yet, there are several challenges which need to be addressed, to further enhance the efficacy of CSR activities in ensuring sustainable and inclusive development.

### What is the meaning of CSR?

According to the United Nations Industrial Development Organization (UNIDO), Corporate Social Responsibility is a management concept whereby companies **integrate social and environmental concerns in their business operations** and interactions with their stakeholders. CSR is a way of running the businesses by which corporate houses **contribute towards social good**. CSR is based on **sense of responsibility** of the companies towards the community and the environment in which they operate.

It is **closely linked to sustainability** (creating economic, social, and environmental value) and ESG (Environmental, Social, and Governance). CSR is generally understood as being the way through which a company achieves a **balance of economic, environmental and social imperatives** ('Triple-Bottom-Line- Approach'), while at the same time addressing the expectations of shareholders and stakeholders.

### Evolution of CSR

In the 1950s, CSR was understood to be an obligation toward society. By the 1960s, the concept shifted to being viewed as a connection between corporate houses and society. During the decades spanning from the 1970s to the 1990s, definitions of CSR expanded to encompass a number of other aspects, including stakeholders, ethics, voluntariness, philanthropy, environmental stewardship, and the **Triple Bottom Line i.e. people, planet and profit**. The dimensions of corporate social responsibility in the 21st century have a much broader scope; it also includes the improvement of the quality of life of citizens; human and labour rights; environmental concerns; issues relating to corruption; issues relating to transparency and accountability.

| Phases of Development of CSR  |   |  |
|---|---|--|
| Phase-1   | Phase-2   | Phase-3  |
| Social Responsibility is considered as Corporate obligation.  | Social Responsibility is connected to the core business.                      | Social Responsibility is not only connected to core business but it is also proactive in nature. |
| Organization acknowledges responsibility in certain areas towards legal and traditional stakeholders. | Organization acknowledges responsibility towards all the direct stakeholders. | Organization acknowledges responsibility towards all the stakeholders.                           |
| Emphasis is on generating policy statement.   | Policies are well written and documented.                                     | Policies are well written, embedded and translated across the organizations.                     |
| As the level of commitment is very low social activities are limited and ad-hoc in nature.            | Social activities are well planned and strategic in nature.                   | Social activities are undertaken on an ongoing basis.  |
| Organizations in this phase have high concern for profits and low concern for society.                | Organizations concern for profits as well as society is high.                 | High concern for profits as well as society.   |

### What is the CSR framework in India?

**Legal Basis:** The Corporate Social Responsibility concept in India is governed by **Section 135 and Schedule VII of the Companies Act, 2013** and **Companies (CSR Policy) Rules, 2014**. The Rules provide the criteria for assessing the CSR eligibility of a company, Implementation and Reporting of their CSR Policies etc. The Act and the Rules have created one of the most elaborate CSR mechanism and implementation strategy.

**Criteria:** The Companies Act has made it mandatory for certain corporations to undertake CSR activities. The Act requires companies with: **(a)** a net worth of INR 5 billion (500 crore) or more or; **(b)** An annual turnover of INR 10 billion (1000 crore) or more or; **(c)** Net profit of INR 50 million (5 crore) or more, to **spend 2% of their average net profits of 3 years on CSR**. Prior to that, the CSR clause was voluntary for companies, though it was mandatory to disclose their CSR spending to shareholders.

Every company to which CSR criteria are applicable shall constitute a **Corporate Social Responsibility Committee**. The CSR Committee should consist of 3 or more directors, with at least 1 independent director. The activities to be undertaken under CSR are prescribed by the Government in Schedule VII of the Companies Act.

**Penal Provisions:** In case a company fails to comply with the provisions relating to CSR spending, transferring and utilising the unspent amount, the company will be punishable with a fine ranging from INR 50,000 to INR 25 lakh. The officers responsible for CSR are liable for imprisonment up to 3 years or a fine between INR 50,000-5 lakh or both.

**Amendment in 2019:** Before the amendment, if a company was unable to fully spend its CSR funds in a given year, it could carry the amount forward and spend it in the next fiscal, in addition to the money allotted for that year.

The amended Act requires companies to deposit the unspent CSR funds into a fund prescribed under Schedule VII of the Act within the end of the fiscal year. This amount must be utilized within three years from the date of transfer, failing which the fund must be deposited in to one of the specified funds.

## Initiatives included under CSR (Schedule VII, Companies Act, 2013)

- **Eradicating hunger**, poverty and malnutrition, promoting health care and sanitation.
- **Promoting education**, employment enhancing vocation skills and livelihood enhancement projects.
- Promoting **gender equality**, empowering women, setting up homes/hostels for women and orphans; setting up old age homes, measures for reducing inequalities faced by socially/economically backward groups.
- Ensuring **environmental sustainability**, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources including contribution to the Clean Ganga Fund.
- Protection of **national heritage, art and culture**; setting up public libraries; promotion and development of traditional art and handicrafts.
- Measures for the benefit of **Armed Forces**, CAPF veterans, their dependents and widows.
- Training to **promote sports** (rural, paralympic and olympic sports).
- Contribution to the **PM's National Relief Fund/PM CARES Fund** or any other fund set up by the Union Govt.
- Contribution to **incubators** or **R&D projects** in the field of **science, technology, engineering and medicine**, funded by the Union/State Governments or PSUs; Contributions to public funded Universities;
- **Rural development projects** and Slum area development.
- **Disaster management**, including relief, rehabilitation and reconstruction activities.

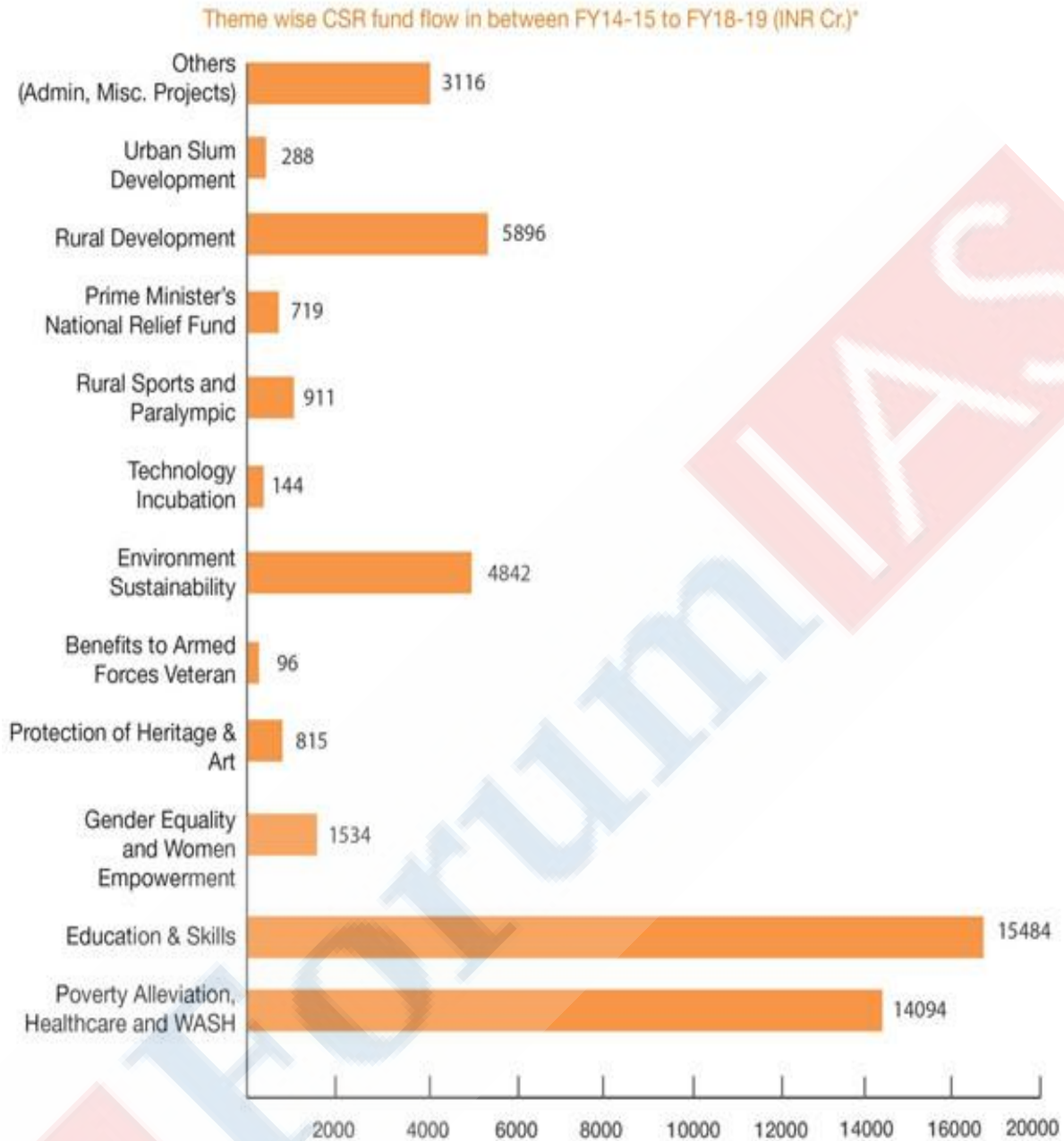
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### What is the current status of CSR in India?

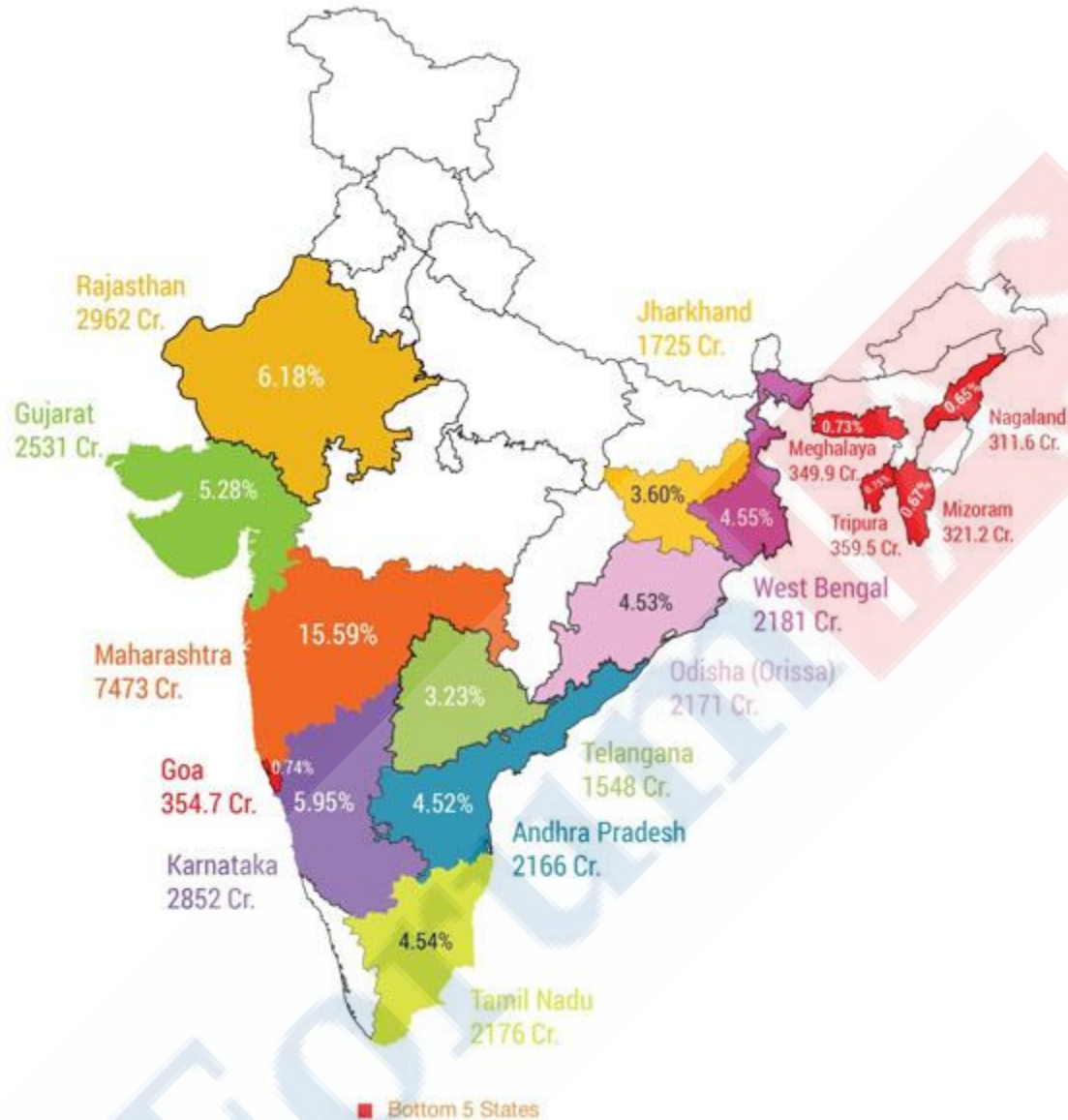
CSR spending in India has risen from INR 10,065 crore in 2014-15 to INR 24,865 crore in 2020-21.

| <b>CSR Spent: Development Sector-Wise (Financial Year 2020-21)</b> |                                 |
|--|---------------------------------|
| <b>Sector</b>  | <b>CSR Expenditure in Total</b> |
| Rural Development  | 1818.38 Cr.                     |
| Environment, Animal Welfare, Conservation of Resources             | 1273.38 Cr.                     |
| Prime Ministers National Relief Fund                               | 1656.4 Cr.                      |
| Clean Ganga Fund   | 13.36Cr.                        |
| Encouraging Sports   | 240.9 Cr.                       |
| Others   | 282.65 Cr.                      |

According to the Ministry of corporate affairs, pan India CSR spending in financial year 2020-21 was INR 7490.84 cr.



Source: [csr.org](https://www.csr.org/). Sector-wise spending on CSR between 2014-2019.



**Source:** [csr.org](https://www.csr.org/). *State-wise distribution of CSR spending in India between 2014-19.*

There were 2,926 companies in 2020-21 with zero spend on CSR while companies spending less than the prescribed limit of 2% rose from 3,078 in 2015-16 to 3,290 in 2020-21. There was also a decline in the number of companies participating in CSR — 25,103 in FY2019 to 17,007 in FY2021.

### What are the benefits of CSR?

**Sustainable Development Goals:** Corporates are seen as the key drivers of SDGs as they can apply their creativity and innovation to achieve sustainable development. CSR and SDGs together have tremendous potential to develop an interconnected model for sustainable growth. Many companies are aligning their CSR focus areas according to SDGs to meet their CSR mandate for example enhancing livelihoods through skill development of women contributes to SDGs like ending poverty and promoting gender equality.

**CSR for Technology Incubators:** In September 2019, the Government expanded the scope of CSR to spur the R&D and innovation ecosystem in India. Contribution to incubators funded by Governments/PSUs or to research and academic institutions has been included under the CSR.

**Responsible Business Reputation/Customer Loyalty:** Corporate social investment can help to build a reputation as a responsible business, which can, in turn, lead to competitive advantage. Companies often favour suppliers who have responsible policies, since this can reflect on how their customers see them. It has been demonstrated that enhancing a company's image through CSR may increase consumer loyalty and public trust, which in turn enables firms to profit from these factors.

**Costs Savings:** By reducing resource use, waste and emissions, will help the environment and save money as well. With a few simple steps, company may be able to lower their utility bills and achieve savings for their business.

**Employee Retention:** Employees stay in their jobs because of several reasons: job satisfaction, the environment of the company, and good prospects etc. Being a responsible, sustainable business may make it easier to recruit new employees or retain existing ones. Employees may be motivated to stay longer, thus reducing the costs and disruption of recruitment and retraining.

**Attracting Responsible Investors:** Socially responsible investors (SRIs) seek out businesses that have shared values. The number of SRIs is rising rapidly. Shareholder engagement is also seen to be more prominent in companies with SRIs, as they are more willing to push CSR to the forefront of business strategy.

**Read More:** [ESG Framework In India – Explained, pointwise](#)

#### **What are the challenges to CSR in India?**

**Regional Disparity:** Most of the CSR spending is concentrated in States like Maharashtra, Tamil Nadu, Gujarat, Karnataka etc. Between 2014-19, these States accounted for ~32% of total spending. A more recent report by Ashoka University's Centre for Social Impact and Philanthropy has observed the spending in these 4 States to be ~54%. Populous Uttar Pradesh and Madhya Pradesh with poor resources and poor population receive much less.

**Sectoral Disparity:** An analysis of CSR spending (2014-18) reveals that while most CSR spending is in education (37%) and health and sanitation (29%), only 9% was spent on the environment even as extractive industries such as mining function in an environmentally detrimental manner in several States.

**Lack of Transparency and Information:** Many corporates do not make adequate efforts to disclose relevant information. This becomes a hurdle in trust-building among corporate houses and communities. Transparency is crucial for the success of any CSR initiative. The Standing Committee on Finance has observed that the information regarding CSR spending by companies is insufficient and difficult to access.

**Greenwashing:** Many companies still view CSR as a statutory obligation only. They engage in superfluous activities not having a direct measurable impact on communities or the environment. However, they offer misleading communication and then try to influence the perceptions of their stakeholders and the general public. This has been termed as 'greenwashing'. In the absence of coercive enforcement mechanisms, such phenomena is becoming common.



**Lack of Consensus and Cooperation:** There is a lack of consensus among different local agencies and corporate entities which results in duplication of efforts by the firms in terms of CSR. This leads to unnecessary competitive spirit among the firms which go against the main objective of building value for the society.

**Lack of Community Participation:** Many companies are driving the CSR projects from top with little involvement of the locals who are the intended beneficiaries. This leads to a disconnect. Companies end up taking initiatives which they consider as important, rather than what is beneficial to the communities.

**Lack of Strategic Planning:** Due to a lack of strategic planning, proper experimentation, innovation, and engagement, companies aren't able to make a meaningful impact on their CSR. They are not able to identify ideal investment projects and therefore cannot provide high impact results. Corporate houses must understand the challenges faced by its citizens and then invest properly.

#### What steps can be taken to address the challenges?

**Centralized Platform:** The Ministry of Corporate Affairs (MCA) can curate a centralized national-level platform. All States can list their potential CSR-admissible projects on the platform. With this, companies can assess where their CSR funds would be most impactful across India. Invest India's 'Corporate Social Responsibility Projects Repository' on the India Investment Grid (IIG) can serve as a guide for such efforts. This model would be very useful for **supporting deserving projects in the 112 aspirational districts** and projects identified by MPs under the Government's *Sansad Adarsh Gram Yojana*.

**Read More:** [Aspirational Districts Programme: Features, Issues and Outcomes – Explained, pointwise](#)

**Sectoral Balance:** Companies need to prioritise environment restoration in the area where they operate, earmarking at least 25% for environment regeneration. This gains importance as impact of climate change are becoming evident in regions across India.

**Community Participation:** All CSR projects should be selected and implemented with the active involvement of communities, district administration and public representatives.

**Enhanced Monitoring:** The high-level committee's recommendations from 2018 should be added to the current CSR framework to **improve the monitoring and evaluating system**. Some of the recommendations are: **(a)** Making CSR part of statutory financial audits by including details about CSR spending in a company's financial statement; **(b)** Making independent third-party impact assessment audits mandatory. It is important to take steps to stop duplication and fraud.

The MCA and the line departments need to **exercise greater direct monitoring and supervision** over the spending by companies.

**Coordination with NGOs:** There is a need for pooling of resources and building of synergies by both Companies and Non-Governmental Organizations for more efficient and effective implementation of CSR activities.

#### Conclusion

More proactive participation by the private sector through Corporate Social Responsibility can have a transformative impact on the challenges facing India today. The contribution has

increased manifold since the passage of Companies Act, 2013. Addressing the gaps in the implementation can enhance the efficacy of the spending by the corporates. This can act as a major lever in ensuring that India's growth story becomes more sustainable and inclusive.

**Syllabus:** GS II, Government policies and interventions for development in various Sectors and issues arising out of their design and implementation; GS III, Inclusive Growth and issues arising from it.

**Source:** [The Hindu](#), [Ministry of Corporate Affairs](#)

### [Kurukshehra October Summary] Artificial Intelligence in Agripreneurship (AI in Agriculture) – Explained, pointwise

#### Introduction

The need to increase agriculture production has become immense as the population is rising at a fast pace. Technology has made significant inroads in the field of agriculture. The growth of start-ups in the field is helping to increase the production and efficiency even for small landholdings. Artificial Intelligence as a field is still developing. There is great potential for the use of AI in agriculture in future especially in reducing the harmful side-effects of agriculture and making it more sustainable. Therefore the need is to strengthen the technology and make it more affordable for the farmers, including for marginal farmers with small landholdings.

#### Need for AI in Agriculture

Agriculture is one of the oldest human activities. It has been an important factor in the growth of the civilizations. It was a vital factor in permanent settlement of nomadic communities leading to creation of cities and new economies. However, the progress and use of technology in agriculture has been slow. Rising population has put pressure on agriculture production. Increase in population leads to inequitable access to food. Moreover, population is rising in regions where food scarcity is already acute. Finding innovative ways to **sustainably improve agricultural productivity**, enhance the worldwide food supply chain, reduce food waste, and feed every hungry or malnourished has become a key priority. To make the agriculture and food systems more **sustainable, resilient, and inclusive**, technological interventions have become imperative. These agricultural improvements allow countries to **generate higher yields of better quality food with fewer chemicals**. AI in agriculture can help reduce need for physical labour and plug the gap between food demand and supply.

Agriculture has been bedrock of India's economy. It contributes 18–20% of India's GDP, 11% of exports and supports ~50% of the workforce. India has the second-largest arable land base and the gross irrigated area. Over 60% of the country's population, several million small farming households, rely on **agriculture as a primary income source**. Land remains the important asset for livelihood stability. Agriculture creates jobs and boosts the economy. Agriculture's growth has boosted rural per capita income. Enhancing growth in Agriculture through deployment of technology will **spur rural development**, leading to rural transformation.

**Read More:** [\[Yojana June Summary\] Artificial Intelligence and Machine Learning – Explained, pointwise](#)

### Applications of AI in Agriculture

NITI Aayog has called AI solutions vital for agriculture. In agriculture, AI technology can be used in decision making e.g., it can tell farmers when to plant, where to use herbicide, and where to expect pest outbreaks.

In recent years, numerous agri-tech businesses have created business models based on AI technologies including machine learning, robotics, and computer vision. Applications of AI, such as alternative credit scoring or “smart” farm equipment, can reduce the cost of serving smallholder farmers across the agriculture ecosystem.

AI in agriculture can help in **efficient and sustainable use of resources**, and **overcome market asymmetries** that prevent farmers from accessing regional and global value chains.

AI's cross-disciplinary uses might revolutionise farming. AI will help farmers do more in less time while improving product quality and crop delivery. AI-supported digital solutions provide companies and entrepreneurs an opportunity to provide **smart farms as a service**.

AI Technology has also enabled the **implementation of precision farming**. The utilization of precise amount of inputs at targeted locations at appropriate time reduces the amount of inputs required. It helps in cutting down on waste and save money on labour expenses thus reducing cost of production.

**Read More:** [Precision Farming: Technologies, Benefits and Challenges – Explained, pointwise](#)

AI technologies are particularly useful in soil management and weed management. **Internet of Things (IoT)**, a valuable data processing and storage technology that has extensive use in agriculture as well. The amount of data (organized and unstructured) like weather data, soil reports, rainfall, pest infestations, drone and camera photographs etc. continue to rise rapidly. The data can be analysed by cognitive IoT to provide sustainable solutions to agriculture problems e.g., the data can help classify soils of particular field. Then appropriate amount of nutrient input can be suggested by the software and applied precisely through the help of robots.

AI has application in allied-activities like dairy farming as well. AI tools are helping in **enhancing the genetics of farm animals**. Its most prevalent use is in dairy cow breeding. It has the **potential to improve the dairy yields** while reducing the susceptibility to diseases.

### Challenges to AI in Agriculture

There are significant difficulties associated with the application of AI in agricultural settings/

**First**, the distribution of modern technology is uneven because of certain geographical, social, or political reasons. This acts as a barrier in adoption of AI in agriculture certain regions.

**Second**, a lot of improvements have been made over the past few years in the AI systems. However, considerable more work is required to transfer AI-based machines and algorithms from controlled experiments to real agricultural environment. It also requires enhanced ability to handle large sets of data and to interpret them.

**Third**, there are concerns over the security of devices used to collect the data and the privacy of the data collected.

### Agri Tech Startups

At present, India ranks 2nd internationally in 'agritech' start-ups. According to the World Economic Forum, India has 3,116 registered food and agriculture start-ups, and this number has grown 25-30% year-over-year. Since 2014, US\$ 500 million have been invested in this field.

Breakthroughs in big-data analytics, computer power, and cloud-based storage, together with cost reductions in satellite images, remote sensors, and other technologies, have allowed agri-tech businesses to deploy AI technologies commercially.

#### DeHaat

DeHaat is an online platform that provides comprehensive agricultural services to farmers. It addresses some of the challenges faced by the farmers through the implementation of AI-enabled solutions. It has helped **improve the supply chain efficiency** in the agricultural sector. It has brought together **buyers, institutional lenders, and agri-input product companies** on a single platform. It collaborates with more than 3,000 micro entrepreneurs to provide **last-mile delivery and aggregation services**. It is operational in the states of Bihar, UP, Odisha, and West Bengal and the network is comprised of more than one million beneficiary farmers from those regions.

#### See Tree

See Tree was launched in 2017 to provide farmers with vital data for managing and optimising the health of their trees. The firm has created AI systems that **track the health of each tree**, finding failing trees and groups of healthy trees. It evaluates the impact of various farming approaches and provides actionable data on their effectiveness. It optimises the number of fruits per tree and **provides estimates just before harvest**. It uses digital farm management to oversee each individual tree and continuously collect data from them. Technology advancements in aerial, ground, and boots-on-the-ground data gathering make it possible to acquire the highest quality information for use in developing the most effective strategies.

### Cropln

Cropln is an Agri-Tech Start-up, that provides agribusinesses with **decision-making tools** that **promote consistency, reliability, and sustainability**. Cropln is digitising every farm and data-managing the whole ecosystem by providing capabilities for live reporting, analysis, interpretation, and insights that span continents. Their smarter farming solutions are powered in real-time, allowing users to **record patterns, forecast trends, and create a business plan for the future**. It ensures **effective operations, lower expenses, and improved visibility** for farmers. It enables companies to profit from actionable information and helps farmers with farm advice and alerts. The predictability of yield quantity and quality, coupled with reduced operational costs, increases business productivity.

### Stellapps

Stellapps, is the first company of its kind to concentrate on **digitising the dairy supply chain** as its primary business objective. Since its founding in 2011, it has been actively promoting the use of technology interventions in the production of milk, especially in developing nations where output per animal is low, traceability is poor, and quality is not up to standards. They have created the **SmartMoo platform**, which is a full-stack Internet of Things solution, in order to **digitalise and optimise milk production, milk procurement and cold chain management**. Stellapps' SmartMoo IoT platform receives data from sensors that are installed into milking machines, animal wearables, milk chilling equipment, and milk procurement peripherals. The SmartMoo platform and suite of apps are now responsible for interacting with more than two billion litres of milk each and every year.

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Improve the productivity of cattle and maximize the herd performance with mooON wearable and herd management application

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Preventive health care & reduced health expenses

Reduced farm manpower

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Scale up your business profits by improving the efficiency of the milk procurement operation with smartAMC

Cold Chain Management

Enhanced milk quality

Rate chart management

Increased farmer loyalty

Efficient milk procurement operations

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Regulate the cold chain to achieve better shelf life of milk at the collection centres with ConTrak, a web-based monitoring system

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Automated operations

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Source: Stellapps. Benefits of AI in cattle monitoring, milk procurement and cold chain management.

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**Conclusion**

The use of AI in Agriculture offers exciting opportunities and has the potential to revolutionize the agriculture sector. However, the biggest challenge in adoption of AI in agriculture is small landholdings and lack of access to technology. Another hurdle is scaling up the deployment of AI solutions at mass level (rather than at individual farm levels). The challenges can be addressed by the Agri-tech start-ups with active support from the Union and State Governments. This can help in addressing the challenge of food security as well as making the agriculture sustainable.

**Syllabus:** GS III, Science and Technology – Developments and their applications and effects in everyday life.

**Source:** Kurukshetra October 2022

**Mainstreaming Biodiversity in Forestry: FAO Report – Explained, pointwise****Introduction**

Forests are host to most of Earth's terrestrial biodiversity. Tropical rainforests alone account for 50% of the terrestrial species. The conservation of the world's biodiversity is therefore crucially dependent on the way the forests are utilized. The role of forests in maintaining biodiversity is explicitly recognized by the **United Nations Strategic Plan for Forests 2017– 2030**. It is also the focus of the ongoing discussions around the forthcoming post-2020 global biodiversity framework under the Convention on Biological Diversity (CBD). In December 2019, the Food and Agricultural Organization (FAO) adopted the **Strategy on Mainstreaming Biodiversity across Agricultural Sectors**. Protected areas play a central role in biodiversity conservation covering 18% of the world's forests. Often, protected areas are established in remote and inaccessible places, leaving critical habitats in more accessible areas vulnerable to pressures from competing land uses. **Weak governance and law enforcement undermine biodiversity conservation** even in protected areas. For these reasons, mainstreaming biodiversity in production forests is of paramount importance to stem biodiversity loss. The FAO, in partnership with the **Center for International Forestry Research (CIFOR)**, has conducted a review of **Mainstreaming Biodiversity in Forestry** and has shared good practices on solutions that balance conservation and sustainable use of forest biodiversity.

**Mainstreaming Biodiversity in Policies/Programmes**

Forest biodiversity continues to be lost at an alarming rate, primarily due to deforestation. Approximately 10 million ha of forest are cleared for other land uses every year (mostly driven by agricultural conversion). Forest biodiversity is being eroded over enormous areas through forest degradation, due to over-harvesting of timber species, other valuable plants and wildlife, as well as from invasive species, fires, pests and diseases. Biodiversity loss compromises the ecological functioning and stability of forests. It undermines the provision of ecosystem services to humanity. **Sustainable Forest Management (SFM)** can help stem biodiversity losses and secure sustainable benefits.

According to the FAO Report, Mainstreaming biodiversity is **“the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors to promote conservation and sustainable use of natural resources”**. It involves prioritizing forest policies, plans, programmes, projects and investments that have a

positive impact on biodiversity at the ecosystem, species and genetic levels. It is about integrating biodiversity concerns into everyday forest management practice.

**National Biodiversity Strategies and Action Plans** (NBSAPs) are an important tool for mainstreaming biodiversity and form the basis for developing specific sectoral policies to support the sustainable use and conservation of biodiversity.

The **Paris Agreement** noted the importance of biodiversity and called for encouraging synergies between climate action and biodiversity protection. **Nationally Determined Contributions** (NDCs) also offer an opportunity to mainstream biodiversity in climate policies, as Forests are critical for mitigation and adaptation to climate change.

### Approaches to Mainstreaming Biodiversity

Mainstreaming biodiversity requires both regulation and steering. There is a wide variety of approaches and instruments for mainstreaming biodiversity in forestry.

### Spatial Planning-based Approaches

There are trade-offs in different land uses (forest, agricultural, industrial etc.) and outcomes. Multiple objectives can be met through a well-considered spatial plan. Large-scale spatial planning should consider the effects of other sectors, especially agriculture and infrastructure, on forest biodiversity. Approaches like designation of multiple-use protected areas, protecting threatened habitats, and increasing forest cover through restoration and forest plantation establishment can be adopted.

### Species-based Approaches

Species management, with active partnerships with NGOs, enables Governments to harmonize efforts across sectors to manage species that interact strongly with human activities: **(a)** Species threatened by human activities; **(b)** Migratory species; **(c)** Species causing human-wildlife conflict; **(d)** Invasive species; **(e)** Overabundant native species; **(f)** Harvested species.

### Regulatory Instruments

Forest regulations ensure that forest management contributes to successful implementation of **National Biodiversity Management Strategies**. Regulatory instruments include quotas/permits/licenses designed to **regulate the exploitation of forest resources** and **legal provisions for environmental governance**, including environmental impact assessments. They help enforce species management requirements, ensure incorporation of biodiversity considerations in spatial planning, and establish a mechanism for participatory forest management. Regulatory approaches work well when the process is transparent, and well-monitored.

### Economic Instruments

Economic instruments like taxes, subsidies and grants, can be used to incentivize forest owners and managers to advance SFM and improve biodiversity outcomes. Governments should check subsidies on agriculture inputs or forest conversion. **Biodiversity offsetting** can provide cash for extending and strengthening protected area management and funding forest restoration.

### Biodiversity Offsets

Biodiversity offsets are actions designed to compensate for biodiversity loss from development projects. They are based on the premise that impacts from development can be compensated for if sufficient habitat can be protected, enhanced or established elsewhere.

**Market-based Instruments**

**Payments for Ecosystem Services (PES)** schemes generate income that can support SFM and biodiversity conservation. High transaction costs, limited resources and insecure land tenure are the main barriers impeding participation in PES schemes. **REDD+** and other carbon-based PES schemes offer tremendous potential for supporting SFM and biodiversity conservation.

**Forest Certification** has become an important tool for promoting and ensuring SFM. However, it has made negligible progress in tropical low-income countries. Governments can encourage certification by providing incentives (e.g. reduced license fees) and through purchasing policies that require the use of certified timber.

**Participatory Forest Management**

**Recognizing the rights of Indigenous Peoples** and local communities, **ensuring their participation** and **integrating their traditional knowledge** in forest management is critical to achieve SFM. Equitable sharing of the benefits of biodiversity is one of the central pillars of the United Nations Convention on Biological Diversity (CBD).

**Community-based Forest Management** can fulfil above objectives. It benefits biodiversity conservation by reducing illegal activities and empowering the community to defend their forests against external threats. Lands traditionally owned, and managed by Indigenous Peoples perform better in **resisting deforestation** compared to unprotected, or sometimes even protected, areas.

Challenges associated with community-based forest management include potential conflicts among neighbouring communities, the requirements of business acumen and social capital to operate viable community-based forest enterprises, and the need for quality monitoring.

**Knowledge and Capacity Development**

High quality biodiversity management requires knowledge and capacity among a wide range of actors (Government agencies, local communities, civil society organizations, forest owners etc.). Governments can support research and training on biodiversity and forest management, provision of information on biodiversity, and the production of guidelines and standards.

**Barriers to Mainstreaming Biodiversity**

**Deforestation:** Deforestation continues at an alarming rate of 10 million ha per year especially in lower income tropical countries, primarily driven by agricultural expansion.

**Illegal Forest Activities and Corruption:** Illegal timber harvesting is estimated to account for 15–30% of global timber production and 50–90% of forest harvesting in many tropical countries. These activities directly impact forest biodiversity through forest degradation and undermine efforts towards SFM.

**Poor Conservation outside Protected Areas:** Biodiversity conservation often receives little attention outside protected areas. It is critical to stem biodiversity losses given the limited and uneven coverage of protected areas.

**Insufficient Capacity, Financing and Regulatory Oversight:** Many developing countries struggle to enforce forest and biodiversity regulations because of insufficient capacity and resources. Monitoring biodiversity management requires financial investment which is often inadequate.

**Lack of Indigenous Peoples and Local Community Participation:** The interests of local communities are often not given sufficient consideration in national forest policy and forest



management plans. This undermines social justice objectives, prevents equitable sharing of the benefits derived from biodiversity, and increases the threats to biodiversity.

### **Integrating Biodiversity in Forest Management**

The quality of forest management has a critical role in determining the value of **production forests** for a range of values, including biodiversity. In forest plantations (particularly those under monoculture short-rotation management), the success of biodiversity integration depends mostly on the appropriate identification and protection of vulnerable habitats. Biodiversity conservation in production forest can be enhanced through the multiple measures:

**Managing risks of forest operations to biodiversity:** All forest operations affect biodiversity. Forest Managers should undertake **biodiversity risks assessments**, and implement measures to mitigate identified risks. The High Conservation Value (HCV) approach helps identify and manage the ecological, environmental, and social impacts of forest operations.

**Establishing and managing set-aside areas:** Biodiversity outcomes in production forests can be improved by delineating and preserving judiciously located set-aside areas to **protect old-growth forest and vulnerable habitats**, and **maintain habitat connectivity**. 15% of area can be set-aside within a managed forest.

**Protecting critical biodiversity resources:** The impacts of forest management on biodiversity can be mitigated by protecting **key biodiversity resources within production forests**, such as rare plants, nest sites, large trees, fruit trees and seed sources for the maintenance of tree genetic diversity.

**Sustainable management of timber resources:** Timber harvesting is a major threat affecting a huge number of tree species. Lower harvesting volume combined with a longer rotation period would result in protection of biodiversity.

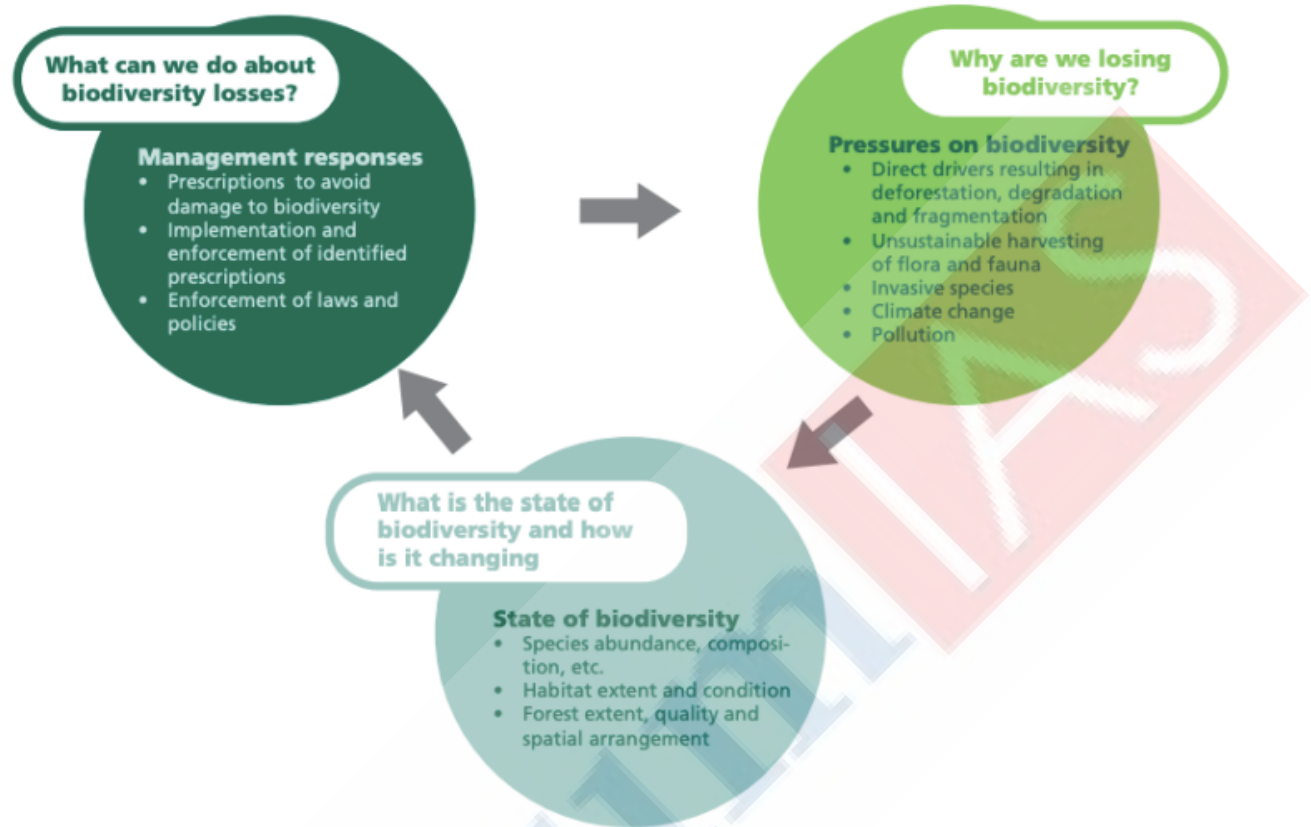
**Regulating non-wood forest product (NWFP) harvest:** Harvesting of NWFPs, including plant resources and animals, has substantial impact on biodiversity. Appropriate regulation of NWFP harvest and sustainable management of these species are required to ensure their sustainability.

**Sustainable management of forest genetic resources:** Conservation of genetic diversity is an overlooked aspect of forest biodiversity conservation. Intraspecific diversity is essential for climate change resilience. Steps that can be taken to maintain and enhance genetic diversity of tree resources include: **(a)** Establishing set-aside areas; **(b)** Reducing damage to residual stands during forest operations; **(c)** Maintaining forest connectivity; **(d)** Integrating genetic diversity considerations in tree planting.

**Managing and controlling invasive species:** Invasive species may arrest natural regeneration, dominate open habitats and increase fire risks. Forest managers should implement an **invasive species management plan**, including the monitoring and eradication of invasive species and controlling already-established invasive species that pose a threat to the forest ecosystem.

**Protecting forests from illegal and unauthorized activities:** Production forests are often susceptible to encroachment and unsustainable harvesting of NWFPs. Forest managers should put in place forest enforcement teams to monitor and prevent illegal activities. Cooperation with local communities, including co-management of NWFP resources, is essential to **building a social fence for forest protection**.

### Pressure–state–response framework



Source: FAO

### Recommendations

There are a number of measures and actions that Governments and development partners can take to facilitate Mainstreaming Biodiversity in Forestry.

**Reversing Deforestation:** Deforestation must be stopped and reversed. Sustainable agricultural intensification, restricting future agricultural development to deforested regions, and increasing deforestation fines are needed.

**Combating illegal and unregulated forest activities:** They happen due to complex laws and regulations. Countries should streamline rules and regulations, focus on their effective implementation, and define institutional duties among key ministries and agencies. Investments are required for implementation and capacity development in law enforcement.

**Recognizing forest tenure of Indigenous Peoples and local communities:** Devolving forest management authority through participatory forestry is an effective strategy in combating illegal forest activities, especially where local communities act as the forest managers.

**Preventing conversion of natural forests into monospecific forest plantations:** Forest policies and regulations should be updated to **limit forest plantation development to degraded lands that have limited biodiversity value**. It will ensure that increasing timber production through plantations does not come at a cost to biodiversity.

**Ensuring sustainable management of harvested species:** Over-harvesting of plants and wildlife is a serious issue. Hunting by Indigenous Peoples and local communities should be managed through a transparent, negotiated process. Highly sought-after wild plants should be identified, and management plans should be put in place. In production forests, commercial species should be sustainably managed to ensure maintenance of genetic diversity.

**Managing invasive and overabundant species:** Invasive species should be managed through nationally coordinated programmes. Information regarding invasive species should be made readily available, standard best practices developed, and forest management plans should include measures to monitor and control invasive species.

**Adopting a multi-sectoral perspective:** As biodiversity is impacted by changes occurring outside of forests, it is important that biodiversity is mainstreamed across other land use sectors. Inclusion of the forest sector in national development strategies, and biodiversity mainstreaming within forestry, are of critical importance.

**Providing economic incentives:** Governments can provide incentives to promote high-quality forest biodiversity management. These incentives include tax breaks for compliance; renewing licenses based on performance (and revoking them in cases of non-compliance); subsidies and investments for achieving biodiversity outcomes; compensation for reduced production to promote biodiversity benefits etc.

**Facilitating market-based instruments:** Governments can facilitate biodiversity mainstreaming in forestry by steering practices through various market-based approaches. These include measures like facilitating PES schemes through government policy, supporting sustainable value chain development through **green purchasing policies** that reduce the environmental footprint of agricultural and forest products etc.

**Supporting knowledge and capacity development:** Governments should support research and training in forest management and biodiversity conservation at higher institutes of learning. National biodiversity databases, and digital tools for incorporating local knowledge should be developed. These technologies should be leveraged to improve forest law enforcement as well.

### Conclusion

At the COP26 (UNFCCC) in Glasgow, nations pledged to halt and reverse forest loss and land degradation by 2030. The **Abidjan Call** adopted at the 15th COP of the UNCCD reaffirmed the commitment of the international community to combat desertification and halt biodiversity loss. Mainstreaming biodiversity in forestry will prove to be vital in achieving these commitments.

**Syllabus:** GS III, Conservation, Environmental Pollution and Degradation

**Source:** [Down to Earth](#), [FAO](#)

## Issues with Local Governance in India – Explained, pointwise

### Introduction

It is almost 30 years since the 73rd and 74th Constitutional Amendment Acts, creating the new Local Governance Framework in India, were made operational in April 1993. The Acts, focused on enabling democratic decentralization, have provisions that devolved a range of powers and responsibilities to local elected bodies and made them accountable to the people for their

implementation. The new system of local governance has proved to be remarkably beneficial in some aspects. Yet, there are some lacunae, especially in the implementation of several provisions, which has limited the effectiveness of these reforms.

### Evolution of Local Governance in India

There is long evolutionary history of local governance in India. Evidence from the Rig-Veda (1700 BC) shows self-governing village organisations called *Sabhas*. In time, these bodies became panchayats (council of five). The decentralization of authority was present in the Mauryan to Gupta dynasties. The British also tried to establish decentralized systems, albeit with very little powers. The **Royal Commission on Decentralization** (1907) under the chairmanship of Sir H. W. Primrose recognized the importance of panchayats at the village level. Under the Government of India Act, 1935 Provincial Governments were responsible for local governance. They enacted legislations but little powers were provided to Panchayats

The framers of the Constitution of India included **Article 40 among the Directive Principles**: “The state shall organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government”. Four committees (between 1957 to 1986) conceptualised local self-government in India; **Balwant Rai Mehta Committee** (1957), the **Ashok Mehta Committee** (1977–1984), **GVK Rao Committee** (1985), and the **LM Singhvi Committee** (1986).

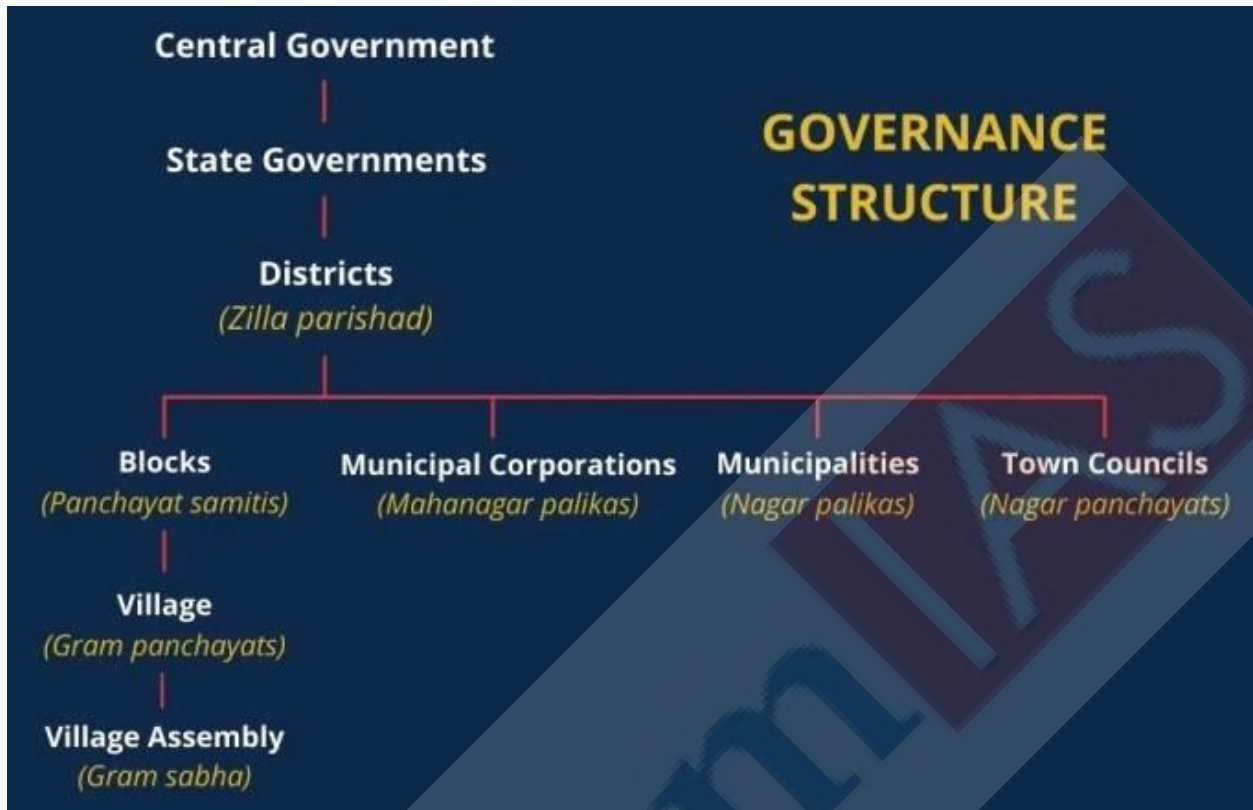
Eventually, the local Governance was given Constitutional Status with the 73rd/74th Constitutional Amendment Acts in 1992. The Amendment Acts of 1992 added two **new parts IX and IX-A** to the Constitution. Two new **Schedules 11 and 12** were also added which contain the lists of functional items of Panchayats and Municipalities.

### What is the structure of Local Governance in India?

The 73rd/74th Amendment Acts established a **three-tier system** of Panchayati Raj in every state – at the village, intermediate and district levels.

For rural areas, there are three nested bodies. At the top is the **District Council** or **Zilla Parishad**, which is made up of a cluster of **Block Councils** or **Panchayat Samitis**, which in turn, are made up of village councils or *Gram Panchayats*. Each village has a village assembly or gram sabha comprising all adults in the village. Gram Sabha has the power to directly elect members of the panchayat. States with a population of less than two million may choose to have a two-tiered structure, without the intermediate block-level institution.

In urban areas, there are three types of local bodies: **Municipal Corporations** (Mahanagar Palikas for areas with a population of more than one million), **Municipal Councils/Municipalities** (Nagar Palikas for areas with less than a million people), and **Town Councils** (Nagar Panchayats for areas transitioning from rural to urban).



Scheduled and Tribal areas are legally exempt from implementing the Panchayati Raj system. The **Panchayat Extension to Scheduled Areas (PESA) Act, 1996** provides for the extension of the 73rd Amendment (with certain modifications and exceptions) to tribal and forested areas across 10 states of India, (excluding tribal areas in the states of Assam, Meghalaya, Tripura, and Mizoram, which are governed by District or Regional Councils). These provisions have been put in place to protect customary law, social and religious practices, and traditional management practices of community resources.

A minimum of one-third of the seats in all local bodies are reserved for women. Seats are also reserved for people belonging to scheduled castes, scheduled tribes, and other backward classes in proportion to their population.

#### What are the roles of Panchayati Raj Institution (PRIs)/Local Governance Bodies?

PRIs play a crucial role in rural development and perform the following roles: **(a) Administrative activities** such as the maintenance of village records, the construction, maintenance, and repair of roads, tanks, wells, and so on; **(b) Improving socio-economic welfare** through the promotion of rural industries, health, education, women and child welfare, among others; **(c) Judicial functions** such as trying petty civil and criminal cases such as minor thefts and money disputes are also performed either by separate *adalati* or *nyaya* panchayats, or by gram panchayats.



### What are the challenges in working of Local Government Bodies?

**Functional Challenges:** The power to devolve functions to local governments rests with the State Government. **Most States have not devolved adequate functions to local government bodies.** This has severely affected the system's efficiency and effectiveness. State Governments have created **parallel structures** for the implementation of projects around agriculture, health, and education, which undermines the status of local bodies. Local bodies lack the support systems necessary to carry out their mandates. The 74th amendment requires a **District Planning Committee** to be set up in each district, so that the development plans prepared by the panchayats and urban local bodies can be consolidated and integrated. According to a study by the India Development Review (IDR, a think tank), **District Planning Committees are non-functional in 9 states**, and failed to prepare integrated plans in 15 states.

**Financial Challenges:** (a) Local government expenditure as a percentage of GDP is only 2%. This is extremely low compared to other major economies like China (11%) and Brazil (7%); (b) Most local bodies, both rural and urban are **unable to generate adequate funds from their internal sources**, and are therefore extremely dependent on external sources for funding. Studies show that around 80-95% of revenue is obtained from external sources, particularly State and Union Government loans and grants; (c) The volume of money set apart for them is **inadequate to meet their basic requirements**. Local Governments are starved of resources. The Union Finance Commissions have made desirable recommendations, but the actual devolution of funds has been very poor. Not more than 5% of the divisible pool of Union taxes is given to local governments; (d) The devolution of funds is **associated with conditionalities that bind them to specific uses**. (i.e., top driven schemes of Union/State Governments, rather than based on local needs). The Government-appointed officers have complete control over spending of funds instead of the elected representatives of local governments; (d) **State Finance Commissions are not established as per Constitutional requirements** (constitute every 5 years). By 2014-15, States should have created 5th State Finance Commission (SFC) in their respective States, but only 13 had created them. By 2019, when 6th State Finance Commission should have been constituted, some States were yet to create 3rd or 4th Commissions. J&K had created only 1

SFC by April 2019; (e) Some experts argue that **Local governments are reluctant to collect property taxes and user charges** because of fear of backlash from public. They are happy to implement top-down programmes because they know that if they collect taxes, their electoral prospects will be hampered.

### Status of Constitution of State Finance Commissions

| States  | State Finance Commissions |                 |                 |                 |                 |
|---|---------------------------|-----------------|-----------------|-----------------|-----------------|
|   | 5 <sup>th</sup>           | 4 <sup>th</sup> | 3 <sup>rd</sup> | 2 <sup>nd</sup> | 1 <sup>st</sup> |
| Assam, Bihar, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh (13) | √                         |                 |                 |                 |                 |
| Andhra Pradesh, Karnataka, Tripura, Uttarakhand, West Bengal (5)  |                           | √               |                 |                 |                 |
| Chhattisgarh, Goa, Gujarat, Manipur (4)   |                           |                 | √               |                 |                 |
| Arunachal Pradesh, Jharkhand, Nagaland (3)  |                           |                 |                 | √               |                 |
| Jammu & Kashmir, Mizoram, Telangana (3)   |                           |                 |                 |                 | √               |

**Notes:** (a) Figures in parenthesis refer to the number of states; (b) As per the 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments Act, 1992 three states, Meghalaya, Mizoram and Nagaland are exempted from constituting SFCs. However, Mizoram and Nagaland have constituted SFCs; (c) Telangana, the newest state of India, was formed out of Andhra Pradesh in June 2014. It constituted its first SFC in December 2017.

Source: NIPFP. Status of Constitution of State Finance Commissions as of April 2019.

**Functionary Challenges:** (a) Every local government needs to have organisational capacity, by way of staff such as office and clerical staff and social mobilisers. Staffing of local governments is scanty. Many panchayats share a single secretary, who is often overburdened; (b) Technology has been used to centralize the delivery of local services which has been detrimental to local decision-making.

**Other Challenges:** (a) Criminal elements and contractors are attracted to local government elections especially in urban areas. They are able to win elections through corrupt means, as local elections do not get same scrutiny as State Assembly or General Elections; (b) Elections to the local bodies are often delayed. For long period of times there are no functional local governments; (c) Despite a relatively higher level of literacy and educational standard, city-dwellers do not take adequate interest in the functioning of the urban government bodies e.g., the turnout in Municipal Elections in Delhi and Mumbai in 2017 was only 53% and 55% respectively; (d) While women have been empowered with representation through reservation of seats, the '**Sarpanch Pati**' syndrome limits the effectiveness. ('Sarpanch Pati' syndrome: Women Sarpanch is only nominal head, the male relative (generally husband) wield actual power).

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

**First**, the provisions of 73<sup>rd</sup>/74<sup>th</sup> Constitutional Amendments should be implemented in true spirit. **State Finance Commissions should be regularly constituted with clearly defined Terms of Reference (ToR)**. ToR should include recommendation to devolve more funds and make the functioning of local bodies more effective. Adequate powers to raise own revenues should be devolved to local governments.

**Second**, the **elections should be held at regular intervals** without any delay. State Governments and State Election Commissions must be held accountable for delays.

**Third, Gram Sabhas and wards committees** (in urban areas) have to be **revitalized**. Consultations with the grama sabha could be organised through smaller discussions where everybody can participate to make them **inclusive**. New media of communication like social media groups could be used for facilitating discussions between members of a grama sabha/ward committees.

**Fourth**, local government **organisational structures have to be strengthened**. Panchayats are burdened with a huge amount of work that other departments thrust on them, without being compensated for the extra administrative costs. Local governments must be enabled to hold State departments accountable and to provide quality, corruption free service to them.

**Fifth**, there is a need to **improve capabilities of human resources** through training, process consultation, action research methods and workshops.

**Sixth, citizen participation and engagement** in local governance can be enhanced with the **help of NGOs and civil society organizations**. Citizens also need to be informed about the functioning and consequences of decisions taken by the local government bodies. The general public also need to be informed about the role of the service providers, the cost of services, the sources of their financing etc.

### Conclusion

Empowering the local bodies for Local Governance has been one of the most progressive reform since Independence. It has envisioned to place the governing power in the hands of the general populace. Just like every other reform, this one has a few loopholes in it. Nevertheless, if these gaps are removed, the present local governance system can truly empower the citizens and support the inclusive growth.

**Syllabus:** GS II, Devolution of powers and finances up to local levels and challenges therein.

**Source:** [The Hindu](#), [The Hindu](#), [The Hindu BusinessLine](#), [Economic Times](#), [NIPFP](#)

## Nobel Prizes 2022 in Sciences – Explained, pointwise

### Introduction

The Nobel Prizes 2022 have been announced. The Prizes have been awarded for pioneering research in various fields in sciences and for efforts in furthering peace.

### About the Nobel Prize

The first Nobel Prizes were awarded in Stockholm, Sweden in 1901 on the 5th death anniversary of Alfred Nobel. Swedish inventor Alfred Nobel invented dynamite and other high explosives.

Originally, the prize was awarded in the fields of Physics, Chemistry, Physiology or Medicine, Literature, and Peace. Later in 1968, a sixth prize was added in the field of economic sciences, but it is not officially called Nobel Prize (Sveriges Riksbank Prize in Economic Sciences).

Prizes may be given only to individuals, except the Peace Prize, which may also be conferred upon an institution. However, maximum of 3 individuals can share a prize.



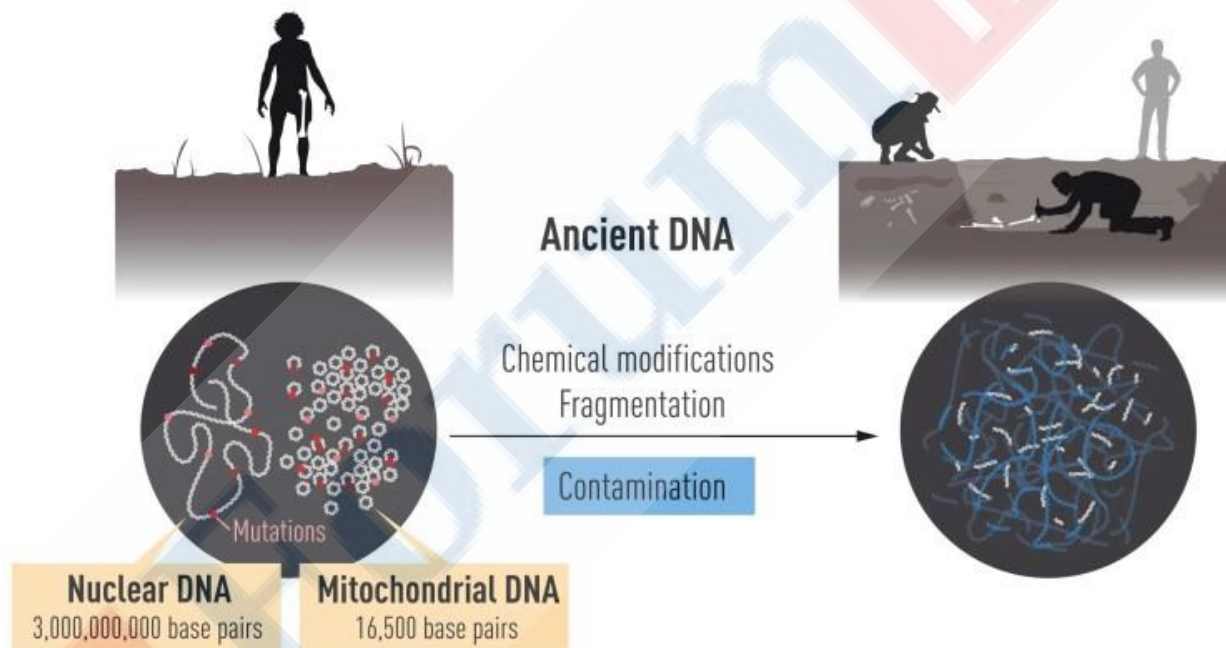
Read More: [What is Nobel Prize?](#)

### Nobel Prize in Medicine or Physiology, 2022

The Nobel Prize in Medicine (Physiology) 2022 has been awarded to Svante Paabo. He has been credited with developing **methodologies to extract 'clean' DNA from thousands of years old human fossils**, and reading the genetic information they contain.

Earlier, scientists were dependent on the genomes of present day human beings and extrapolating the information into the past. This method is called deduction. This is a scientifically valid exercise, but it is indirect and involves uncertainties. Paabo developed methodologies that have eliminated deductions, and **rely on direct observation**. For example, he realised that one particular skull bone, called petrous, preserves DNA better than the rest of the body.

There are extreme technical challenges in his work because with time DNA becomes chemically modified and degrades into short fragments. Only trace amounts of DNA are left after thousands of years. Exposure to the natural environment leads to contamination with DNA from bacteria and contemporary humans. This makes research complex.



Source: [Nobelprize.org](#). DNA is localized in two different compartments in the cell. Nuclear DNA harbors most of the genetic information. After death, DNA is degraded over time and ultimately only small amounts remain. It also becomes contaminated with DNA from bacteria etc.

### Significance

**First**, Svante Pääbo established an entirely new scientific discipline, called **paleogenomics**, that focuses on studying the DNA and genetic information of extinct hominins through reconstruction.

**Second**, Pääbo's discoveries have established a unique method, which is **utilized extensively** by the scientific community to **better understand human evolution and migration**.

**Third**, Pablo's work enabled the revelation and understanding of how **gene transfer had occurred from hominins** (now-extinct species of apes that are believed to be related to modern humans) **to Homo sapiens** following their migration out of Africa around 70,000 years ago. It helped in greater understanding about how ancient gene sequences from past ancestors (apes) have shaped modern human physiology including immune systems.

**Fourth**, his work also led to the sensational **discovery of a previously unknown hominin**, which has been named **Denisova**.

### Nobel Prize in Chem-istry, 2022

The Nobel Prize 2022 in Chemistry has been awarded to three scientists, Carolyn Bertozzi and Barry Sharpless of the United States and Morten Meldal of Denmark.

Barry Sharpless and Morten Meldal have been awarded the Nobel Prize in Chemistry 2022 because they brought chemistry into the era of functionalism and **laid the foundations of Click Chemistry**. Carolyn Bertozzi took click chemistry to a new dimension and began using it to map cells. Her bio-orthogonal reactions have contributed to **more targeted cancer treatments**, among many other applications.

### About Click Chemistry

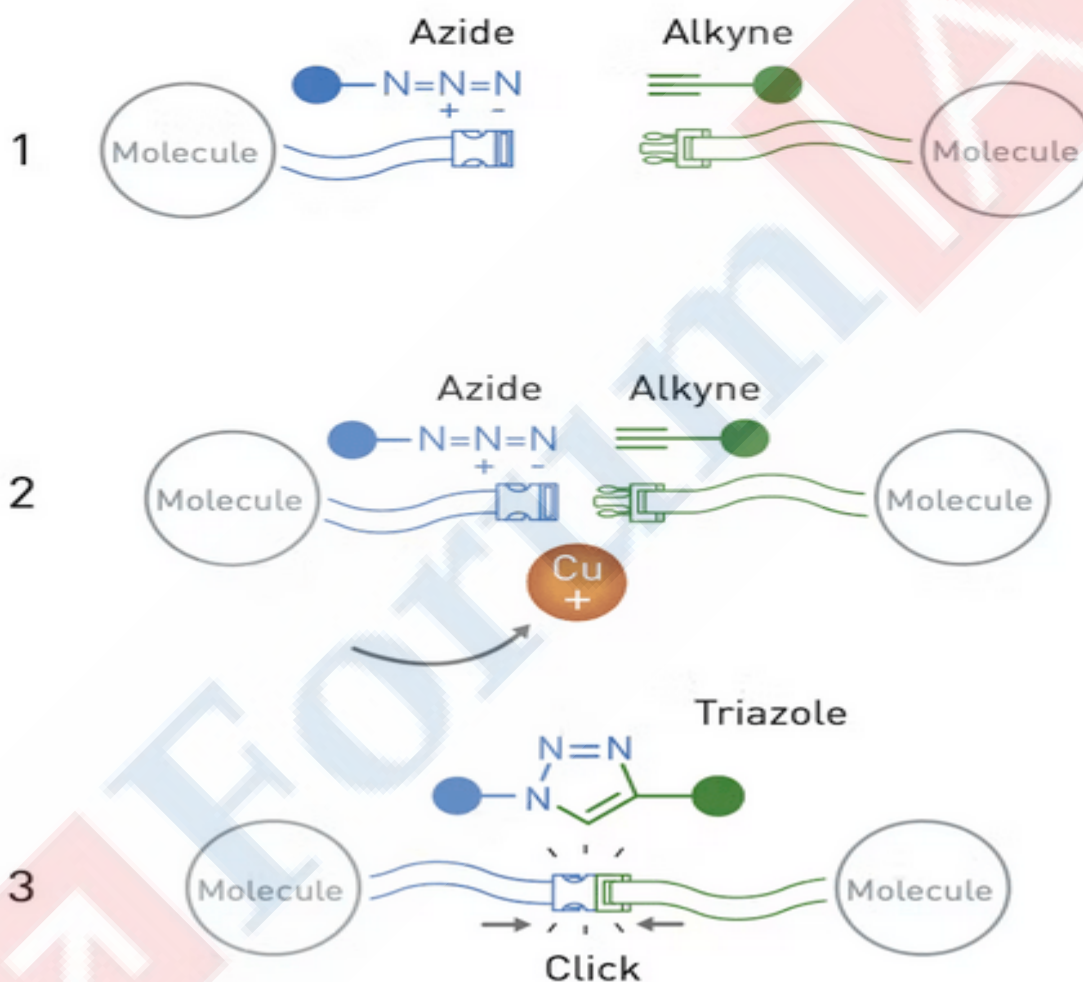
Chemists often try to **recreate complex chemical molecules found in nature**. This has applications in multiple fields including in the field of medicine e.g., to target and block pathogens in cells. However, this process is generally **complicated** and **time-consuming**.

Click Chemistry is a way of generating products that follow examples in nature. It is based on the premises that it is easier to produce complex molecules starting with smaller and simple molecules that have a tendency to bond together or easily react with each other. In other words, scientists should look for molecules that **easily fit into each other, or 'click' with each other**. It makes the resultant chemical reaction more efficient. This approach may **avoid many unnecessary side reactions** with a **minimal loss of material**. The idea is also to not generate the exactly same complex molecule, but to find molecules that fulfil the same functions as complex molecule.

This click approach emphasised the need to **replicate nature's efficiency**, not its processes, or products. The name 'click' has been taken from the click sound that airline seat belts make when they are fastened.

# The click reaction that changed chemistry

Azides and alkynes react very efficiently when copper ions are added. This reaction is now used globally to link molecules together in a simple manner.



Source: The Royal Swedish Academy of Sciences. The image shows that molecules Azide and Alkyne do not readily react with each other. Adding Copper ions, makes them to undergo reaction with each other easily (they 'click') to form the molecule Triazole.

## Significance

**First**, the concept of click chemistry is extremely beneficial to the pharmaceutical industry because it **reduces waste produced during chemical reactions**.

**Second**, Meldal through his experiments came up with the useful chemical structure called triazoles, which are stable and are found in pharmaceuticals, dyes and agricultural chemicals.

**Third**, Bertozzi has continuously improved her approach over the years. Her works **show promise in treating late-stage cancer**. Clinical studies of anti-cancer medicines inspired by her work are now undergoing clinical trials.

### Nobel Prize in Physics, 2022

The Nobel Prize 2022 for Physics has been awarded to three scientists, Alain Aspect, John F Clauser and Anton Zeilinger, for their work on quantum mechanics. They have been awarded for their experiments with **entangled photons**, establishing the violation of Bell inequalities and **pioneering quantum information science**.

### About Quantum Entanglement

Quantum Entanglement has been an intensely debated phenomena in Physics. Albert Einstein had described this as 'Spooky Action at a Distance' (i.e., scary or ghostly). According to the **Special Theory of Relativity, no signal or information can travel faster than the speed of light in vacuum**. However, in the Quantum Entanglement phenomena, **information between 'entangled particles' seems to violate this principle** (travel faster than light). It had been proposed (in 1930s by Einstein among others) that the phenomena of entanglement is not 'real' and there was something missing in the conception of Quantum Mechanics. In 1964, a physicist John Bell showed mathematically what was required to be done by experimentalists to establish the phenomenon of entanglement. He proposed the **Bell's Inequality**, which if maintained in the results of the experiment, would mean that Einstein was right (i.e. Entanglement is not 'real'). If violated, it would prove the predictions of Quantum Theory.

Aspect, Clauser and Zeilinger conducted a series of experiments on **entangled quantum states**, where **two separate particles behave like a single unit**. Clauser and Zeilinger worked on Bell's ideas, and their measurements **supported quantum mechanics by violating a Bell Inequality**. The experiments of three scientists have conclusively established that the **'entanglement' phenomenon observed in quantum particles is real**, and not a result of any 'hidden' or unknown forces. Their work has demonstrated a phenomenon called **quantum teleportation**, which makes it possible to move a quantum state from one particle to one at a distance.

### Significance

**First**, Their works could be utilised to make revolutionary **technological advances in computing**.

**Read More:** [Quantum Computing: Uses, Challenges and India's Initiatives – Explained, pointwise](#)

**Second**, There is potential for secure encrypted quantum communication which is claimed to be 'hack-proof'.

**Read More:** [Quantum Key Distribution](#)

**Syllabus:** GS III, Science and Technology: Developments and their applications and effects in everyday life.

**Source:** [Indian Express](#), [Indian Express](#), [Indian Express](#)