



DAILY CURRENT AFFAIRS

Time: 45 min

Date: 12-10-2021

International Energy Agency (IEA)

Syllabus: GS2/ Important International Institutions, agencies

In News

- Recently, the *International Energy Agency (IEA)* has invited India to become its full-time member.

About

- The proposal if accepted will require India to *raise strategic oil reserves to 90 days requirement* to which the government has immediate access (even if it does not own them directly) and could be used to address disruptions to the global oil supply.
- Also, a member of IEA has to show *a demand restraint programme* to reduce national oil consumption by up to 10%.
- India has *not confirmed* yet if the full-time membership proposal was acceptable to the government or not.

Present Scenario in India

- India is the *world's third-largest energy consumer*.
- India's current strategic oil reserves equal *9.5 days of its requirement*.
- India has the *fastest-growing energy market* in the world.

About International Energy Agency (IEA)

- **Origin:** In 1974 to ensure the security of oil supplies.
- **Objectives:** The IEA was established as the main international forum for energy cooperation on a variety of issues such as security of supply, long-term policy, information transparency, energy efficiency, sustainability, research and development, technology collaboration and international energy relations.
- **Working:**
 - The IEA is an autonomous intergovernmental organisation within the OECD framework.
 - The IEA works with governments and industry to shape a secure and sustainable energy future for all.

- **Areas of Work:**

- Promoting energy efficiency
- Energy security
- Programmes and partnerships
- International collaborations
- Promoting digital demand-driven electricity networks
- Data and statistics
- Training
- Technology collaboration
- Global engagement
- Industry engagement

- **Members:**

- It is made up of **30 member** countries, 8 association countries, and 3 accession countries.
- A candidate country to the IEA must be a member country of the OECD.
- IEA member countries are required to maintain total oil stock levels equivalent to at least 90 days of the previous year's net imports.
- India became an **Associate Member** of IEA in 2017.

- **Important Reports:**

- World Energy Outlook
- Energy Technology Perspectives
- World Energy Balances
- World Energy Statistics
- Net Zero by 2050

Significance of Becoming Full Member

- India is becoming increasingly influential in *global energy trends*.
- For India, it will provide a platform to position itself as a leader on the world energy and environment stage.
- Given that over **75 per cent** of the world's energy consumption comes under the IEA umbrella, the association with the IEA will substantially increase India's relevance in global energy governance.
- The IEA can encourage financial institutions to support India's energy, particularly, its solar energy programme.

Challenges

- **Huge Energy Demand:** The success of India as a world energy leader will depend largely on adapting the technologies needed to meet its energy demand under specific conditions and economic realities.
- **Coal Shortage in India:** As the economy recovers from pandemic blows, a sharp surge in energy demand has triggered an unprecedented fuel shortage at the country's coal-fired stations.
- **Security Challenges:** Growing energy security challenges that result from the increasing importance of electricity include the variability of supply from some renewables and cybersecurity risks.
- **Price Volatility:** The rising dependence on critical minerals required for key clean energy technologies and infrastructure brings risks of price volatility and supply disruptions that could hinder the clean energy transition.

Way Ahead

- The government needs to quickly increase and reprioritise their spending on research and development of clean energy technologies.
- Clean energy technologies must be at the core of energy and climate policy.
- Progress in the areas of advanced batteries, electrolysis for hydrogen, and direct air capture and storage can be very impactful.

Source: [TH](#)

Science & Technology

Indian Space Association

Syllabus: GS3/ Achievements of Indians in Science & Technology

In News

- Recently, the Prime Minister launched the *Indian Space Association (ISpA)*, an industry body of government and private companies.

About ISpA

- **Aim:** To supplement the Centre's efforts in commercial space exploration and space-based communication.
- **Members:** Various stakeholders in the Indian space domain with members comprising the Indian Space Research Organisation (ISRO), Bharti Airtel, OneWeb, Tata Group's Nelco, L&T, MapMyIndia among others.

- Indian Space Association, an organisation meant to **represent the interests of the space sector** with government and private sector bodies across the board.
- It will **support start-ups** and will work towards facilitating and enabling private players to work in tandem with ISRO.
- The industry association will act as an **independent and “single-window” agency** for enabling the opening up of the space sector to start-ups and the private sector.

Significance

- **Organised:** It will prove to be an organised manner of bringing ISRO and private together.
- **New roads:** Opened pathways for Indian talent, whether it is in the public sector or in the private sector. Also, several private sector companies, however, have shown an interest in India’s space domain, with space-based communication networks coming to the fore.
- **Framework:** Engage with stakeholders across the ecosystem for the formulation of an enabling policy framework.
- **Better infrastructure:** expertise of Private businesses can be used to have state of art technology.
- **Funding:** With the involvement of the private sector, the issue of funding could be resolved. Best examples are Elon Musk’s SpaceX, Richard Branson’s Virgin Galactic, and Jeff Bezos’ Blue Origin. It will also help reduce this burden from the Government.
- **Rollback of state:** In sectors where the government “wasn’t needed” the private sector ought to be stepping in. The government shall just play the mere role of facilitator.
- **Establishing global linkages:** Several private sector companies, however, have shown an interest in India’s space domain, with space-based communication networks coming to the fore.
- **Speedy process and other benefits:** The space sector implied better speed from shipment to delivery for entrepreneurs, this also means better security and income for fishermen and better forecast of the natural calamity.
- **Enhanced R&D:** Deeper engagement with academia, industry and government for research and development in the space sector was needed.
- **Enhancing self dependency:** ISpA aims to contribute to the Government of India’s vision of making India Atma Nirbhar and a global leader in the space arena, which is fast emerging as the next growth frontier for mankind.

Importance of satellite-based Internet in India

- **Digital India:**
 - The expansion of the Internet in India is crucial to the Modi government's dream of a Digital India where a majority of government services are delivered directly to the customer.
- **Internet in hilly areas:**
 - Although the government aims to connect all villages and gram panchayats with high-speed Internet over the next 1000 days through BharatNet, internet connectivity in hilly areas and far-flung places of Northeast India are still a challenge.
- **Satellite internet better for remote areas:**
 - Satellite Internet will be essential for broadband inclusion in remote areas and sparsely populated locations where terrestrial networks have not reached.
 - As of now, however, satellite communications remains limited to use by corporates and institutions that use it for emergency use, critical trans-continental communications and for connecting to remote areas with no connectivity.
- **Coming at par with global numbers:**
 - As of August 2021, India had only 3 lakh satellite communications customers, compared with 45 lakh in the US and 21 lakh in the European Union.

Private Projects

- **OneWeb:**
 - OneWeb, backed by Bharti Group, announced that it entered an arrangement with NewSpace India Limited (NSIL), the commercial arm of ISRO, to launch its satellite in India from 2022.
 - OneWeb is building its initial constellation of 648 low-earth orbit satellites and has already put 322 satellites into orbit.
 - Its services are expected to start this year to the Arctic region including Alaska, Canada, and the UK.
 - By late 2022, it will offer its high-speed, low latency connectivity services in India and the rest of the world.
- **Space-based communication:**
 - In India, the space-based communications network has taken off with several Indian and international companies betting on it as the next frontier to provide high-speed and affordable Internet connectivity to inaccessible

areas as well. This includes SpaceX's StarLink, Sunil Bharti Mittal's OneWeb, Amazon's Project Kuiper, US satellite maker Hughes Communications, etc.

- **Satellite-based internet service:**

- StarLink and Amazon are also in discussion with the Indian government for a licence to offer satellite-based Internet services. SpaceX has a plan to create a network of 12,000 satellites of which over 1,300 are already sky-borne.

Way Ahead

- For the space industry to grow, the government should help **small and medium sector enterprises (SME)** access more capital as well as move faster on finalising its space policy.
- The government is working on **four pillars**:
 - The freedom of innovation to the private sector.
 - The role of the government as an enabler.
 - Preparing youth for the future.
 - To see the space sector as a resource for the progress of the common man.
- Ahead of major launches next year, India has announced its intent to liberalise the space sector and have more private companies use the facilities of the ISRO for developing as well as launching satellites.
- While there have been drafts of a new space policy, these are yet to take shape.

Sources: [IE](#) + [TH](#) + [IE](#)

Social Justice

PM-Poshan Scheme

Syllabus: GS2/ Issues Relating to Development and Management of Social Sector/Services relating to Health, Education

In News

- A committee is set up to review the *daily cooking cost of mid-day meals* served under the *PM-Poshan scheme*.

About

- The committee will soon be notified by the *Union Ministry of Education*.
- The cooking cost gets the largest allocation among the components of the mid-day meal programme.

- *Department of School Education and Literacy* will form a committee of experts to review the components of cooking cost, formula and methodology of its revision, actual consumption, coverage etc,

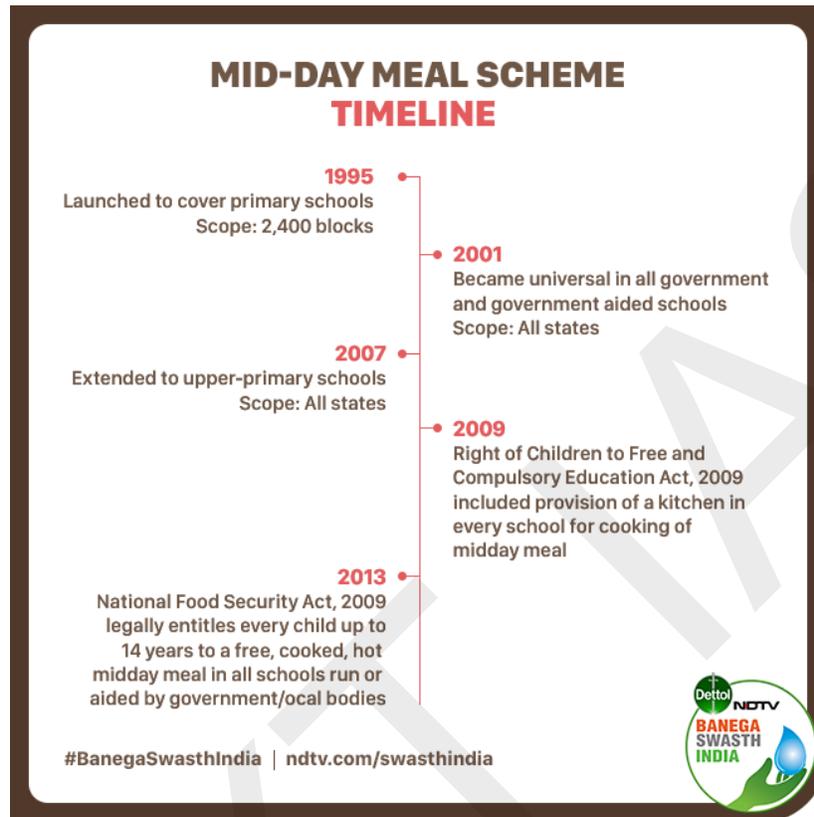


Image Courtesy: Swachh India

Mid-Day Meal (MDM) Scheme

- **About:**
 - The Midday meal scheme comes under the *Ministry of Education*.
 - It is a *centrally sponsored scheme* that was launched in 1995.
 - Provides cooked meals to every child within the age group of six to fourteen years studying in classes I to VIII who enrolls and attends the school.
- **Aim:**
 - It is the world's largest school meal programme aimed to attain the goal of *universalization of primary education*.
- **Objective:**
 - Address hunger and malnutrition,
 - increase enrolment and attendance in school,
 - improve socialisation among castes,
 - provide employment at the grassroots level especially to women.

- **First state:**
 - Tamil Nadu is the first state to implement the midday meal scheme.

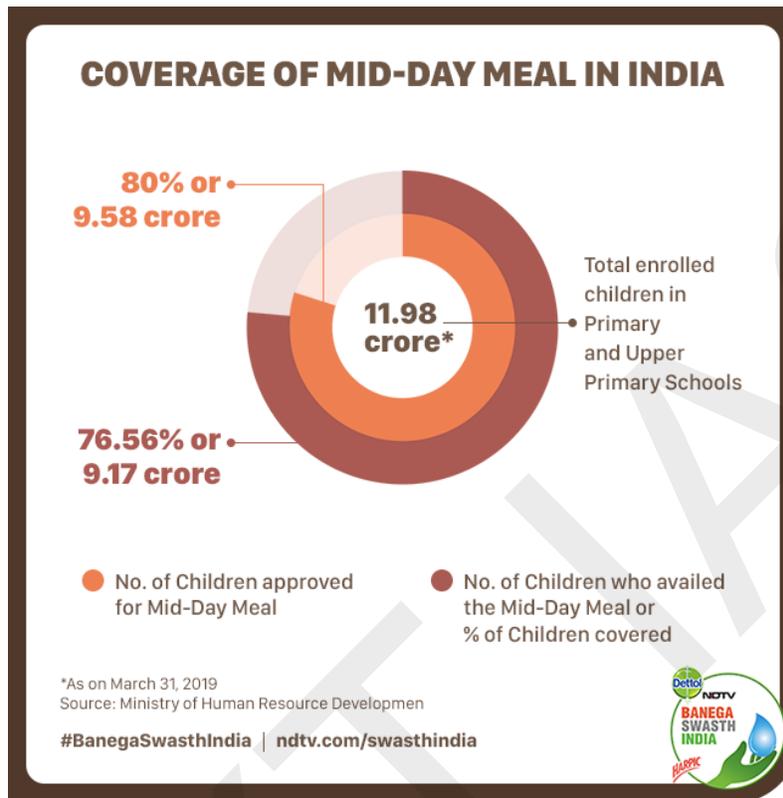


Image Courtesy: Swachh India

- **MDM rules 2015:**
 - Midday Meal Rules 2015 are notified on 30th September 2015 under National Food Security Act (NFSA) 2013.
 - **Quality Check:**
 - AGMARK quality items are procured, tasting of meals by two or three adult members of the school management committee.
 - **School Management Committee:**
 - The School Management Committee (SMCs) play a vital role in the monitoring of MDMS. SMSc is mandated under the right to free and compulsory education act, 2009 or the Right to Education Act.
 - **Food Security:**
 - If the Mid-Day Meal is not provided in school on any school day due to non-availability of food grains or any other reason, the State Government shall pay food security allowance by 15th of the succeeding month.

- **Nutritional Standards:**
 - Cooked meal having nutritional standards of 450 calories and 12 gm of protein for primary (I-V class) and 700 calories and 20 gm protein for upper primary (VI-VIII class)
- **Coverage:**
 - All government and government-aided schools, Madarsa and Maqtabas supported under the Sarva Shiksha Abhiyan (SSA).

Current Cooking Cost of the MDM Scheme

- **Ingredients:** Cooking cost includes the prices of ingredients such as pulses, salt, vegetables, condiments, and fuel needed to prepare cooked meals.
- **Class bifurcation:** Currently, the daily cooking cost per child in primary (classes 1-5) and upper primary (classes 6-8) is Rs 4.97 and Rs 7.45 respectively.
- **Role of Committee:** The new set-up Committee will look into the actual consumption of pulses and vegetables apart from chalking out a new cooking cost, and revising the methodology.

Issues and Challenges with MDM Scheme

- **National family health survey findings:**
 - The National Family Health Survey 2015-16 reported 39 per cent of children to be chronically undernourished.
 - According to the National Family Health Survey-5, several states across the country have reversed course and recorded worsening levels of child malnutrition.
 - India is home to about 30% of the world's stunted children and nearly 50% of severely wasted children under the age of five.
- **Caste Bias and Discrimination:**
 - Food is central to the caste system, so in many schools, children are made to sit separately according to their caste status.
- **Food quality:**
 - Quality of food is often debated where various media reports mention the health of children deteriorating with the food provided under the midday meals. There have been instances of plain chapatis being served with salt, mixing of water in milk, food poisoning etc.
- **Covid-19:**
 - Covid-19 has posed serious threats to children and their health and nutritional rights. The nationwide lockdown has disrupted access to essential services, including Mid-Day Meals.

- **Aadhaar Linking:**

- The mid-day meal scheme has its own demerits of limiting the children's access to the MDMS due to many not having Aadhar cards.

How will it augment PM POSHAN?

- **PM POSHAN:**

- The revamped scheme has been launched for 5 years, from **2021-22 to 2025-26**.
- It has a budget of Rs 1,30,794.90 crore.
- The scheme is different from the mid-day meal scheme in the following ways:
 - **Monitor nutritional levels:** Apart from providing nutritional meals to schoolchildren, the revamped scheme will also focus on monitoring the nutritional levels of schoolchildren.
 - **Major nutritional aspects covered:** A nutritional expert will be appointed in each school to ensure that the BMI, weight levels and haemoglobin levels of the students are monitored.
 - **Special provisions in special areas:** In districts with a high prevalence of anaemia, special provisions for nutritional items would be made.
 - **Nutrition gardens:** The government is also considering developing nutrition gardens on school campuses with active participation by students.



Image Courtesy: [Swachh India](#)

Conclusion

- The PM Poshan scheme will provide supplementary nutrition in aspirational and tribal districts and districts with a high prevalence of anaemia.

Source: [IE](#)

Science & Technology

NASA: Lucy Mission

Syllabus: GS3/Space

In News

- NASA is set to launch its **first spacecraft** to study **Jupiter's Trojan asteroids**.

About the Mission

- **Origin:**
 - Named after an ancient *fossil 3.2 million-year-old ancestor* who belonged to a *species of hominins*.
- **Aim & Objective:**
 - To get insights into the formation of the solar system 4.5 billion years ago.
 - Investigating the group of rocky bodies that are circling the Sun in two swarms- one preceding Jupiter and the other trailing behind it.
- **Duration:**
 - A 12-year journey of eight different asteroids including one in the Main Belt between Mars & Jupiter and seven Trojans.
- **Donald Johnson Asteroid:**
 - The spacecraft's **first encounter** will be with an asteroid that lies in the main belt that can be found between Mars and Jupiter.
 - This asteroid is *named 'Donald Johnson'* after the paleoanthropologist who discovered the *fossilised remains of "Lucy"*.

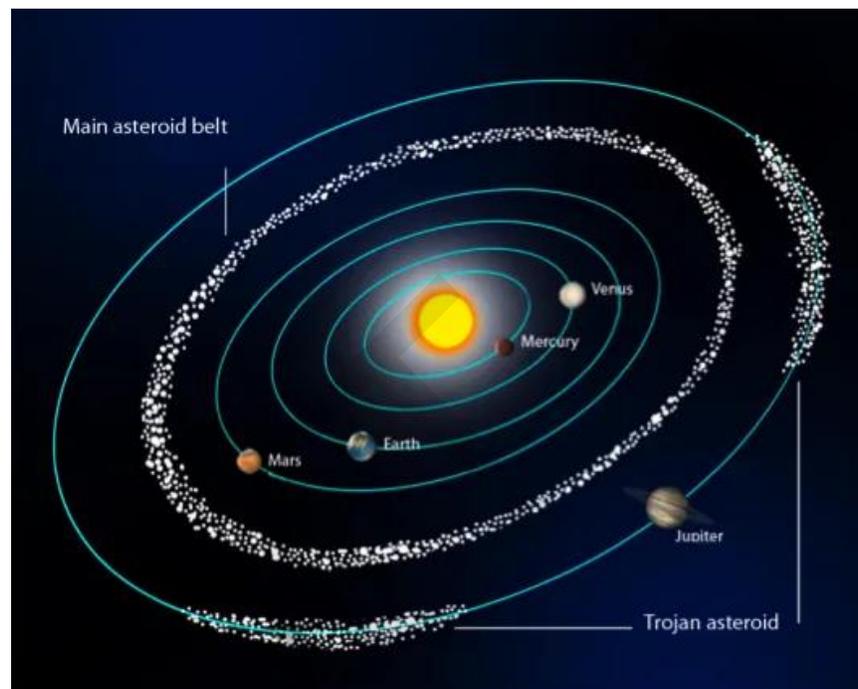
Significance

- Trojan asteroids are formed from the same material that of Planets formed
- Origins and evolution of the Solar System.

What are Asteroids?

- **About:**
 - Rocky objects revolving around the sun that are too small to be called planets.
- **Classification based on their orbits:**
 - Main asteroid belt **b/w Mars and Jupiter**.

- Trojan asteroids orbit a larger planet in two special places, known as **Lagrange points**, where the gravitational pull of the sun and the planet are balanced.
 - NASA reports the presence of Jupiter, Neptune and Mars trojans. In 2011, they reported an Earth trojan as well.
- **Near-Earth Asteroids (NEA)**, circle closer to Earth than the sun.



Lagrange Points

- Lagrange points are positions in space where objects sent there *tend to stay put*.
- At Lagrange points, the *gravitational pull of two large masses precisely equals the centripetal force* required for a small object to move with them.
- These points in space can be used by spacecraft to reduce the fuel consumption needed to remain in position.

Source: [IE](#)

Polity and Governance

28th NHRC Foundation Day Programme

Syllabus: GS 2/ Polity and Governance/ Important Bodies

In News

- The Prime Minister participated in the *28th NHRC Foundation Day programme* on the 12th of October.
 - The PM highlighted the role of NHRC in protecting the human rights and dignity of the marginalised section.

About National Human Rights Commission (NHRC)

- The National Human Rights Commission (NHRC) of India was *established on 12 October 1993*.
- The statute under which it is established is the Protection of *Human Rights Act (PHRA), 1993* as amended by the *2006 Amendment Act*.
 - Hence, it is a *Statutory Body*.
- It was set up in *conformity with the Paris Principles*.
- NHRC has retained its 'A' status of accreditation with the *Global Alliance of National Human Rights Institutions (GANHRI)* for the 4th consecutive term of 5 years.
 - The NHRC, India got 'A' status of accreditation first time in 1999 which is retained in 2006, 2011 and 2017 reviews.
- The NHRC is an embodiment of India's concern for the promotion and protection of human rights.
- The world looks at the NHRC of India as a role model in promoting and monitoring the effective implementation of promotion and protection of human rights.

Human Rights

- **The United Nations** defined Human rights as rights inherent to all human beings.
 - They are universal and are available regardless of any race, sex, nationality, ethnicity, language, religion, or another status

- **Section 2(1)(d) of the PHRA** defines Human Rights as rights.
 - relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or
 - embodied in the International Covenants and enforceable by courts in India.
- **Human Rights include the following but are not limited to**
 - Right to life and liberty,
 - Freedom from slavery and torture,
 - Freedom of opinion and expression,
 - Right to work and education, etc.

Paris Principles

- The Paris Principles set out *six main criteria that NHRIs require to meet*. These are:
 - Mandate and competence,
 - Autonomy from Government,
 - Independence guaranteed by a Statute or Constitution,
 - Pluralism,
 - Adequate resources; and
 - Adequate powers of investigation..
- These principles were adopted at the 1st international workshop on national institutions for the promotion and protection of human rights held in Paris in October 1991.
- It was also endorsed by the General Assembly of the United Nations by its Regulations 48/134 of 20 December 1993.
- The Paris Principles provide international benchmarks against which NHRIs can be accredited by the GANHRI.

Global Alliance of National Human Rights Institutions, GANHRI

- It assesses the NHRIs through a rigorous process of review across the world for 5 years before giving 'A' grade accreditation.
- UN Human Rights acts as secretariat for the Global Alliance of National Human Rights Institutions (GANHRI)
- The Accreditation confers international recognition and protection of the NHRI.
- 'A' status accreditation grants participation in the work and decision-making of
 - the GANHRI, as well as
 - the work of the Human Rights Council and other UN mechanisms.

- **Aim and Functions of NHRC**

- **Aim:** Protection and promotion of human rights.
- The *functions of the Commission* as stated in *Section 12 of the Act* include.
 - Inquiry into complaints of violation of human rights or negligence in the prevention of such violation by a public servant
 - Study of treaties and international instruments on human rights
 - Make recommendations for their effective implementation to the Government.
 - Run Awareness drives for masses on the subject of human rights.
 - Encourage the efforts of all stakeholders in the field of human rights literacy not only at the national level but at the international level too.
 - Play an active role in coordinating with other NHRIs of the world to enhance awareness from the perspective of human rights.
 - host delegations from
 - UN Bodies and other National Human Rights Commissions,
 - members of civil society, lawyers and political and social activists from different countries.
- *Functions relating to human rights in the case of Delhi* will be dealt with by the NHRC.
- **Few Declaration/ Covenants implemented by NHRC**
 - Universal Declaration of Human Rights
 - International Covenant on Civil and Political Rights
 - International Covenant on Economic, Social and Cultural Rights
 - Convention on the Rights of the Child
 - Convention on the Elimination of All Forms of Discrimination against Women

- **Composition of NHRC**

- It is a multi-member body consisting of
 - **1 Chairman:** As per The Protection of Human Rights (Amendment) Act, 2019

- He must be a former Chief Justice of India or a former judge of the Supreme Court.
 - They are appointed for 5 years or till the age of 70 years, whichever is earlier.
 - They can be removed only on the charges of proved misbehaviour or incapacity if proved by an inquiry conducted by a Supreme Court Judge.
- **Members:** Out of the total members, three are ex-officio members.
 - The Act of 2019 provides for 3 persons having knowledge of human rights to be appointed as members of the NHRC.
 - Of these 3 members, at least **one will be a woman.**
 - **Other Members:** Chairpersons of various commissions such as
 - National Commission for Scheduled Castes,
 - National Commission for Scheduled Tribes,
 - National Commission for Women,
 - National Commission for Backward Classes,
 - National Commission for the Protection of Child Rights, and
 - Chief Commissioner for Persons with Disabilities.
 - **Secretary-General**
 - He exercises all administrative and financial powers (except judicial functions), subject to the respective chairperson's control.
- The President appoints the Chairman and members of NHRC on the recommendation of a high-powered committee headed by the Prime Minister.
- Commission also has 5 Specialized Divisions i.e.
 - Law Division,
 - Investigation Division,
 - Policy Research & Programmes Division,
 - Training Division and
 - Administration Division.

- There are few Core Groups too.
 - Core Group on Children
 - Core group on Business, Environment and Human Rights
 - Core Group on Women
 - Core Advisory Group on Criminal Justice System Reforms

Challenges and Criticism of NHRC

- **No Mechanism to Investigate:**
 - In most cases, NHRC asks the concerned Central and State Governments to investigate the cases of the violation of Human Rights.
 - It has been termed as 'India's teasing illusion' by Soli Sorabjee (former Attorney-General of India)
 - due to its incapacity to render any practical relief to the aggrieved party.
- **Can not investigate case registered after 1 year:**
 - A large number of grievances go unaddressed because NHRC cannot investigate the complaint registered after one year of the incident.
- **Inadequacy of Funds:**
 - Inadequacy of funds also hampers the working of NHRC.
- **Only recommendatory in Nature:**
 - NHRC can only make recommendations, without the power to enforce decisions.
 - The government often rejects recommendations of NHRC or there is partial compliance to these recommendations.
- **Highly restricted powers in case of Armed forces:**
 - NHRC has very few powers related to violations of human rights by the armed forces.
- **Post Retirement Destinations:**
 - Many times NHRC is viewed as post-retirement destinations for judges and bureaucrats with political affiliation.

Conclusion and Way Forward

- **Independent Investigation Staff with appropriate Experience;**
 - It will give it real teeth to prosecute and check for any violation of human rights.

- **Involvement of Civil Societies and other stakeholders:**
 - There is a need to change the composition of the commission by including members from civil society and activists.
- **Adequate Funds and Mandatory implementation of recommendations:**
 - The institute should be given more independence and autonomy by providing adequate funds.
 - Further, the recommendations must be mandatory to implement with very few exceptions and procedures.
- The Indian NHRC is a really good and fair body working consistently and diligently in the field of securing human rights for India.
- But it can be made even better for strengthening grassroots democracy.

Source: [NewsonAir](#), [NHRC](#)

International Relation

India-Nepal Rail Link

Syllabus: GS 2, India and its Neighbours

In News

- The *rail link between Nepal and India* is ready to resume on the neighbouring country's first-ever broad gauge passenger service.
 - Nepal has been asked to start operations preferably by this year.
- It remained shut for years but will now be seen again- in a new avatar.

India-Nepal Rail Link

- In 1937, the **British had built a narrow-gauge line** to ferry cargo, mainly logs, from Nepal to India.
 - However, over time it became a popular passenger service before it was stopped in 2014 for conversion to broad gauge.
- India decided to carry out the entire gauge conversion work, including trains to operate on the link **in 3 phases**.
 - The first stretch is a **34-km line between Bihar's Jayanagar and Nepal's Kurtha**.
 - In between these two lies the **Hindu pilgrimage city of Janakpur Dham**.

- The second stretch of 17 km from Kurtha to Bijalpura is also getting the finishing touches.
- For the remaining portion up to Bardibas, the land is being handed over to IRCON.
- **The construction cost of Rs 784 crore for the entire stretch is being borne by India in the form of a grant to Nepal.**
- **The Konkan Railway Corporation Limited** has got the contract for operations and maintenance of the line.
 - It will train and develop manpower provided by Nepal, as per the bilateral understanding.
- Nepal has been asked to start operations preferably by this year.
 - It has been stressed by us that early operations will avoid the deterioration of assets.

Significance of the Project

- **India Nepal close cultural linkages:**
 - The link represents the fact that India and Nepal always had close cultural links.
 - Madhesis of Terai Region have a Relation of Roti-Beti with adjoining India.
- **Connectivity to the pilgrimage site of Janakpur:**
 - Janakpur is considered the birthplace of Mata Sita, who is one of the most divine deities of Hinduism.
 - Hence it also has religious sentiments attached to it.
- **Countering Chinese Influence:**
 - It will also counter Chinese influence by Track 2 and Track 3 diplomacy by increasing inter-country movements.
- **Inauguration of the first commercial rail service in Nepal by India:**
 - It is also a matter of pride to complete a project in a foreign jurisdiction.
 - It shows the competence of Indian Companies after partial success at Chabahar Port.
- **Possibility of next project:**
 - Earlier in Oct 2021, the India-Nepal Joint Working Group signed an agreement for a final location survey for another broad gauge line between **Bihar's Raxaul and Kathmandu.**

- When done, it will be a hill railway that will direct rail connectivity between Nepal's capital city and the Indian network.
- It will open multiple avenues for cross-border movement.

India Nepal Relations

- India and Nepal share a very cordial relation spanning across different fields.
- **Trade:**
 - India is Nepal's biggest trading partner.
 - Nepal has an escalating trade deficit with India.
 - Nepal and India have concluded
 - bilateral Treaty of Transit, Treaty of Trade and the Agreement of Cooperation to Control Unauthorized Trade.
- **Infrastructure Projects:**
 - India is developing different infrastructure in Nepal like
 - Dams: Arun-3 hydro project
 - Rail Links between Kathmandu and Raxual
- **Cultural linkage:**
 - Hinduism is the major religion in Nepal.
 - Terai Belt of Nepal shares the relationship of shelter and marriage (Roti Beti ka Sambandh) with the Indian states of UP and Bihar.
- **Jobs and Other Humanitarian Support:**
 - Nepalese are given jobs in the Indian Government and Army.
 - India has always extended a helping hand during different disasters.

Irritants in the Indo-Nepalese Relations

- **Entry of China:**
 - The Chinese Propaganda and debt diplomacy is luring Nepal.
 - Nepal too is using China Card to negotiate with India
- **Anti-Indian Sentiment post alleged Blockade by India after Constitutional crisis in Nepal:**
 - India has been alleged to apply blockade after the Nepalese Constituent Assembly failed to acknowledge the demands of the Terai region Madhesis.

Conclusion and Way Forward

- It is one of the great opportunities for India to win back Nepal and ensure an integrated and united South Asia.
- In accordance with **Gujral Doctrine**, India must keep on strengthening such ties.

Source: [IE](#)

Facts In News

Dhole: Asiatic Wild Dog

Syllabus: GS3/ Environmental Pollution & Degradation/ Conservation

In News

- A recent study has identified priority areas where habitats can be consolidated to enhance population connectivity for the *dhole or Asiatic Wild Dog (Cuon alpinus)*.

Dhole or Asiatic Wild Dog

- **About:**
 - The dhole is found in a wide variety of habitat types, including deciduous and evergreen forests and alpine steppe.
- **Prevalence in India:**
 - The dhole or Asiatic Wild Dog (*Cuon alpinus*) is found in *three clusters across India* namely the Western and Eastern Ghats, central Indian landscape and North East India.
 - The Western and Eastern Ghats is a stronghold region for dholes.
- **Range:**
 - Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Kazakhstan, Kyrgyzstan, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Russia, Tajikistan, Thailand, VietNam
- **Threats:**
 - Loss of forest cover, depletion of prey base, persecution and possibly disease transfer from domestic and feral dogs.
 - The main preys for the dhole are ungulates, which have also suffered high depletion of their population across the dhole's range.
- **Conservation status:**
 - **IUCN status:** Endangered
 - **CITES:** Appendix II
 - It is protected under *Schedule II of the Wildlife Protection Act, 1972* in India.



Image Courtesy: [Wiki](#)

Science and Technology

Laser-Based Clad Technology

Syllabus: GS3/Science and Technology

In News

- Recently, Indian Scientists have developed a *unique laser-based clad coating technology (LCCT)* that provides improved protection to the boiler parts in thermal power plants.

What is Laser Cladding

- *Laser cladding*, also known as *laser metal deposition*, is a technique for adding one material to the surface of another.
- **Procedure:**
 - Laser cladding involves the feeding of a stream of metallic powder or wire into a melt pool that is generated by a laser beam as it scans across the target surface, depositing a coating of the chosen material.

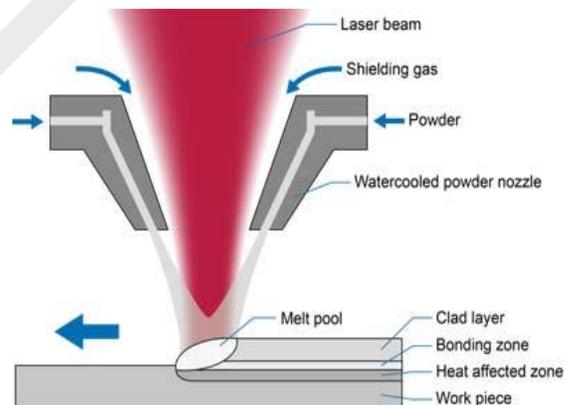


Image Courtesy: [Laserline](#)

Significance

- It can enhance the life of boiler parts by 2- 3 times compared to currently used surfacing technologies.
- It has been found that this technology is suitable, not only for boiler parts of thermal power plants but also for any engineering application involving high temperature erosive and corrosive environments.

Source: [PIB](#)

Inclusive growth

Nobel Prize for Economic Sciences, 2021

Syllabus: GS3/ Indian Economy & related issues, Inclusive growth

In News

- The *2021 Nobel Prize in Economic Sciences* has been awarded in *one half to Canadian-born David Card* and the other half jointly to *Israeli-American Joshua D Angrist and Dutch-American Guido W Imbens*.
 - Unlike the other Nobel prizes, the *economics award wasn't established in the will of Alfred Nobel* but by the Swedish central bank in his memory in 1968.

2021 Edition of Nobel Prize in Economics

- In the year 2021, *David Card* has been conferred the award "*for his empirical contributions to labour economics*".
 - He analysed the *effects of minimum wages, immigration and education* on the labour market.
- *Angrist and Imbens* have been awarded "*for their methodological contributions to the analysis of causal relationships*".
 - Both of them developed a research framework which has been adopted by many researchers who work with observational data.

Nobel Prize in Economics 2021

NEW INSIGHTS ABOUT THE LABOUR MARKET AND WORK
ON NATURAL EXPERIMENTS



David Card

Canada-US
Born in 1956

- PhD from Princeton University (US), 1983
- Class of 1950 Professor of Economics, University of California, Berkeley (US)

• "For his empirical contributions to labour economics"



Joshua Angrist

Israel-US
Born in 1960

- PhD from Princeton University (US), 1989
- Ford Professor of Economics, Massachusetts Institute of Technology (US)

• "For their methodological contributions to the analysis of causal relationships"



Guido Imbens

Netherlands-US
Born in 1963

- PhD from Brown University (US), 1991
- The Applied Econometrics Professor and Professor of Economics, Stanford University (US)

Source: nobelprize.org



Image Courtesy: [Barrons](#)

Sveriges Riksbank Prize in Economic Sciences

- The *Nobel peace prize in Economics* is officially titled as "*Sveriges Riksbank Prize in Economic Sciences*" in Memory of Alfred Nobel".
- **Inception:**
 - This prize was started in the year **1968** by the donation from the central bank of Sweden called "Sveriges Riksbank" to the Nobel Foundation in order to commemorate the 300th anniversary of the central bank.
- **Prize money**
 - Comprises a 10 million Swedish kronor award money which roughly accounts for Rs 8.33 crore.

Source: [TH](#)

