

4th July 2022 Comprehensive News Analysis

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B. GS 2 Related

Category: INTERNATIONAL RELATIONS

1. [Strains on India-Russia defence cooperation](#)

Syllabus: Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests.

Prelims: Major defence platforms brought by India from Russia

Mains: Hindrances to Russia-India defence cooperation and recommendations in this regard.

Context:

- As the Russia-Ukraine conflict stretches on with no end in sight, there are growing apprehensions on Russia's ability to adhere to timely deliveries of spares to existing defence platforms as well as new defence hardware to India.

Background:

Defence relationship between India and Russia:

- Despite the volume of defence imports from Russia into India has reduced in the last decade, **India continues to remain Russia's largest arms buyer** with a major chunk of legacy hardware from Russia and the Soviet Union. India's army has high dependency on Russia with respect to certain weapon systems specially in the area of air defence, rockets, missiles and certain tanks from Russia.
- The defence trade between India and Russia has crossed \$15 billion since 2018.
- India has brought major defence platforms like the **S-400 long range air defence systems** from Russia. Other major contracts include construction of stealth frigates in Russia for India, licensed production of the Mango Armor-piercing fin-stabilised discarding sabot (APFSDS) rounds for the T-90S tanks, T-90S tanks and AK-203 assault rifles among others in India.
- Deals for **MiG-29 fighter jets and SU-30 MKI aircraft** are also a notable defence deal between India and Russia.

Details:

- Some of the **major defence deals with Russia are either pending or under review.**
- There has been a notable delay in the delivery of the second regiment of the S-400 and the operationalization of the agreement for the manufacture of **AK-203 rifles** in India.
- Several big ticket deals have been deferred by the Defence Ministry as part of the review of all direct import deals. This includes the deal for **Ka-31 early warning helicopters and Igla-S very short range air defence systems.**
- The manufacture of 200 **K-226T utility helicopters** in India is also under reconsideration.

India's take on the issue:

- When the war began in February, the Indian armed forces had stocks of spares and supplies for eight to ten months and this was considered sufficient as the then expectation was that the war would end quickly.
- However the prolonged war has adversely impacted the supply chain of certain spares and ammunition. However, officials have stated that there would not be any impact on the Army's operational preparedness along the borders.
- Also the emergency procurements made by the armed forces in the last two years in the backdrop off the standoff in Eastern Ladakh has helped India stock up on spares and ammunition. This can help cover up any shortfall or delay in supply of spares for the time being.

Hindrances to India-Russia defence relationship:

- With Russia itself being involved in a war in Ukraine, the Russian defence industry would be caught up in replenishing the inventories of their own armed forces. This would limit their ability to deliver the defence equipments to other countries like India.
- The **western sanctions on Russia** for its war in Ukraine could have an impact on India-Russia defence relationship. Additionally, country specific sanctions against Russia like the U.S.'s **CAATSA (Countering America's Adversaries Through Sanctions Act)** could also undermine the defence relationship between India and Russia.
- Russia has been shut out of the global **SWIFT system** for money transfers. This could impact the payment by India to Russia for its defence purchases especially given the large volume of payments to be made. This could result in the delaying of the delivery schedule. The **Rupee-Rouble arrangement** could help mitigate this impact to some extent.

Recommendations for India:

- India must try to get Russia to adhere to its agreed timelines by leveraging its special relationship with Russia and through communication at the highest official levels and. This should be the immediate priority.
- The Defence Ministry and Services must carry out assessments on the possible impact of delays in the deliveries of spares and defence hardware and plan for alternative mitigation measures.
- Additionally, India must also seek to **identify alternate sources for defence supplies from other friendly foreign countries** in the long term. This will help India reduce its excessive dependency on Russia for defence platforms.
- Also the **private sector in India must be incentivized to step up domestic production** to meet the requirement for spares as well as defence platforms. This would be in line with the AatmaNirbhar Bharat vision in defence equipments.

Nut graf: *Given that some of the major defence deals with Russia are either pending or under review, this development could strain the otherwise robust defence cooperation between the two countries, which forms a vital aspect of the India- Russia relationship.*

Category: POLITY**1. The functioning of the National Investigation Agency**

Syllabus: Statutory bodies.

Prelims: National Investigation Agency- Scheduled offences, jurisdiction and powers

Context:

- The National Investigation Agency (NIA) has taken over the probe into the killing of tailor Kanhaiyya Lal in Rajasthan's Udaipur. Also the Union Home Ministry has handed over the investigation of a similarly executed murder of pharmacist Umesh Kolhe at Amravati in Maharashtra to the NIA.

National Investigation Agency:

- The National Investigation Agency (NIA) is the **primary counter-terrorism agency of India**, functioning under the Ministry of Home Affairs, Government of India.
- It is **headquartered in New Delhi** and has branches in Hyderabad, Guwahati, Kochi, Lucknow, Mumbai, Kolkata, Raipur, Jammu, Chandigarh, Ranchi, Chennai, Imphal, Bengaluru and Patna.

Establishment of NIA:

- The 26/11 terror attack in Mumbai revealed the failure of intelligence and ability to track such activities by existing agencies in India and the then government contemplated the need to have a specific body to deal with terror related activities in India.
- NIA came into existence with the enactment of the **National Investigation Agency Act 2008** by the Parliament of India.

Mandate of the NIA:

- The NIA is mandated to investigate all the offences affecting the sovereignty, security and integrity of India, friendly relations with foreign states, and the offences under the statutory laws enacted to implement international treaties, agreements, conventions and resolutions of the United Nations, its agencies and other international organisations.
- The agency is empowered to deal with the investigation of terror related crimes and their possible links with crimes like smuggling of arms, drugs and fake Indian currency and infiltration from across the borders.
- NIA is empowered to deal with the **scheduled offences** which include the following:
 - Explosive Substances Act
 - Atomic Energy Act
 - Unlawful Activities (Prevention) Act
 - Anti-Hijacking Act
 - Suppression of Unlawful Acts against Safety of Civil Aviation Act
 - SAARC Convention (Suppression of Terrorism) Act
 - Suppression of Unlawful Acts Against Safety of Maritime Navigation and Fixed Platforms on Continental Shelf Act
 - Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act
 - Relevant offences under the Indian Penal Code, Arms Act and the Information Technology Act.
 - Offences under the Narcotic Drugs and Psychotropic Substances Act that are connected to terror cases.

Jurisdiction of NIA:

- The law under which the agency operates **extends to the whole of India and also applies to Indian citizens outside the country**. This includes Indians in the service of the government wherever they are posted.
- Additionally, persons on ships and aircraft registered in India wherever they may be; persons who commit a scheduled offence even outside India against the Indian citizen or affecting the interest of India can be investigated by the NIA.

Taking up of cases by the NIA:

- **State governments can refer the cases** pertaining to the scheduled offences to the Central government for NIA investigation. After due assessment, the union government can direct the NIA to take over the case.
- Also the **Union government is empowered to suo motu direct the NIA** to take up probe of a scheduled offence.

Powers of the NIA:

- State governments are required to extend all assistance to the NIA with respect to any investigation being undertaken by the NIA.
- NIA has the power to **search, seize, arrest and prosecute** those involved in the scheduled offences.

For more related information on NIA, refer to the following article:

<https://byjus.com/free-ias-prep/national-investigation-agency-nia/>

Nut graf: *The National Investigation Agency (NIA) is the primary counter-terrorism agency of India empowered to deal with the investigation of terror related crimes.*

C. GS 3 Related

Nothing here for today!!!

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: POLITY AND GOVERNANCE

1. Technology is no panacea for custodial deaths

Syllabus: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims: Deception Detection Techniques, Automated Virtual Agent for Truth Assessments in Real-Time (AVATAR), D.K. Basu v. State of West Bengal.

Mains: Measures to stop custodial violence in pursuance of Rule of Law.

Context:

There is a lacuna in controlling the spiral increase of custodial violence in India. Despite Supreme Court guidelines, it is observed that between 2001 and 2018, a total of 1,727 persons died in police custody, while only 26 policemen were convicted for such deaths

Various Scientific Measures:

1. As a pre-emptive measure, the police personnel can be mandated to wear bodycams and affix CCTV cameras in the interrogation rooms.
2. Further, to curb the menace of custodial violence in extracting confessions from the accused persons, the police can be trained to use Deception Detection Techniques (DDTs) such as polygraph, narco-analysis, brain mapping, and Brain Fingerprinting System (BFS).
3. To further strengthen the investigation as per the Rule of Law, usage of Artificial Intelligence and Machine Learning programs can be used such as the University of Arizona's initiative 'The Automated Virtual Agent for Truth Assessments in Real-Time (AVATAR)'.
4. Researcher Joseph Weizenbaum's study on Human Computer Interaction has shown positive signs whereby the accused is more likely to admit guilt to a machine rather than a human. This indicates more usage of scientific measures to detect emotions and predict behaviors during the investigation.

Issues and Concerns:

1. The Constitution under Article 20(3) provides that 'No person accused of an offense shall be compelled to be a witness against himself. Hence, the Supreme Court has laid down guidelines concerning the usage of DDTs in the case of Selvi v. State of Karnataka. There must be absolute, voluntary, and informed consent of the accused before any such methods can be implemented.
2. The usage of machine learning and artificial intelligence can also give rise to biased learning which could target specific individuals and communities.
3. The ethical issues of the involvement of machines and basing primary evidence on the algorithm of machines are also problematic.
4. Apart from the privacy concern, the data breach of such personal information can also render the usage of scientific methods unviable.

Way Forward:

In order to ensure that the investigation of police is free from the menace of custodial violence, one must not depend solely on the scientific aspect but also the humanity of the issue. There cannot be a replacement for the demand for the need of a more humane police force.

A legislative amendment to the Indian Evidence Act, making the police personnel more accountable, enacting the Model Police Act along the lines of Soli Sorabjee Committee, issues strict actions against violations of guidelines of D.K. Basu v. State of West Bengal, and enactment of the Prevention of Torture Bill, 2017 in line with the United Nations Convention against Torture would be more adept.

The issue of custodial violence needs a holistic and exhaustive study and should not be brushed under the carpet with the dependence on only the scientific aspect, as there could be no substitute for compassionate policing.

2. We need an urgent national plan for electrical safety

Syllabus: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims: Central Electricity Authority, Achieving net zero emissions by 2070.

Mains: The lack of a National Plan on Electrical Safety may contribute to further accidents related to electricity.

Context:

Electrical accidents are classified as accidents involving the usage, maintenance, and distribution of electricity. Since the development of the power sector at leaps and bounds, in absence of a National Policy regarding the same has led to immense loss of life and property.

The problem of Electrical Accidents

1. The registered cases of fatalities arising from electricity have been steadily increasing over the years. It is recorded that from 0.36 deaths per lakh population in 1990, it has increased to 1.13 deaths per lakh population in 2020. In contrast, the developed countries have seen a reducing trend over the years with the figure at 0.03 or lower per lakh population.
2. Further, the impact of these accidents is unevenly distributed with 90 percent of the fatalities belonging to the general public.
3. The primary cause of death related to electrical accidents is contact with live conductors in the majority of cases and the second major cause is fire due to electrical faults.

4. Regional disparities also play a part in the distribution of accidents with the majority of accidents occurring in rural areas. However, considering the pace of rapid urbanization, poor urban localities are also in need of urgent attention.
5. It has been observed that most accidents occur in the distribution system and at non-industrial consumer locations. Most fatalities occur at distribution networks i.e. 11 kV and Low-Tension systems at consumer locations, hence these require greater attention.
6. The present national and State specific policies do not provide targets or specific resource allocation for safety. The majority of the resource allocation is under-utilized or a small portion is spent on staff for safety kits or training.

Suggested Checks and Balances

1. There is an absence of regulations being implemented. There is lack of conducting periodic safety audits in violation of regulations framed by the Central Electricity Authority needs to be rectified.
2. Appointment of more electrical inspectors in the States is required, these inspectors are required to approve connections, provide licenses to electricians, and conduct inquiries on accidents.
3. An adequate focus should be made on the non-industrial safety of the rural population with the support of grassroots organizations.
4. There must be an audit of the snapping or sagging of conductors, exposed switchboards at low heights, and an inquiry into the fires caused due to electrical faults.
5. The licensing authority must ensure due diligence with reference to poor design, construction, inadequate maintenance, inadequate protection systems, and lack of safety awareness while distributing the license.
6. There must be a participation of both public and private sector participants. The enactment of a National Policy on the same shall holistically deal with a safety regulatory regime, better data collection, strengthening safety institutions, and developing safety metrics for distribution companies.

Way Forward

The issue of electrical safety touches every home and hence it is a general public safety issue. With the government's promise of providing 24×7 electrical supply to all households and achieving net zero emissions by 2070; this issue gains more relevance in today's time.

The States must aim to reduce electrical accidents in the distribution sector, with a clear scope of work, sufficient resource allocation, and robust monitoring and verification mechanism, and ensure that electricity supply is universal, affordable, of good quality, and safe for all.

Category: DISASTER MANAGEMENT

1. Wake-up call: On Manipur landslides

Syllabus: Disaster and Disaster Management.

Prelims: National Landslide Susceptibility Mapping project.

Mains: Need to pre-empt anthropogenically instigated disasters.

Context:

The unfortunate landslide at Tupul area in Manipur's Noney district led to the loss of 38 lives, this has been exacerbated by another landslide blocking the Ijai river. There has been an alarming number of landslides occurring in the North Eastern Himalayan states in the past decade.

Need for disaster avoidance over disaster mitigation:

1. The present disaster's location indicates that due diligence and proper assessment have not happened. The disaster occurred at a railway construction site in a landslide-prone area. This is a major red flag considering the history of landslides in the area.
2. The Environment Ministry has issued a notification identifying the causes of landslides in Manipur as "a result of modification of slopes for construction, widening of the road, quarrying for construction materials, fragile lithography, complex geological structures, and heavy rainfall". This itself indicates the presence of anthropogenic activity inducing disaster.
3. The need for Landslide mapping and Zonation of Hazardous areas is further important due to the presence of very high, high, or moderate hazard zones. The National Landslide Susceptibility Mapping project also needs to be utilized in this regard.
4. Due consideration has to be paid to the various weather-based geographical developments such as the uncertain nature of rains, with the monsoon being more intense this year compared to predictions.
5. The early warning system for landslides should be developed and refined by the Geological Survey of India across vulnerable States.

Way Forward:

Urgent emphasis needs to be placed on the post-facto exercise by the State governments in the vulnerable areas regarding the sufficient soil and stability tests before undertaking the construction over the sites of infrastructural works.

The developmental demands of the States in the Northeast and improving the connectivity projects to uplift a relatively economically backward region are understandable but the disasters such as the landslide in Tupul indicate that sustainable development is to be pursued otherwise the growth aspect would be deaccelerated including the loss of innocent human lives.

F. Prelims Facts

1. Targeting GI tag, Mayurbhanj's superfood 'ant chutney' to find more tables

Syllabus: GI products of India

Prelims: Kai chutney

Context:

- In Odisha, research is underway to make a presentation for the Geographical Indications (GI) registry of Kai chutney under the food category.

Kai chutney:

- The Kai chutney is made mostly by the tribes of Mayurbhanj district in Odisha using the weaver ants.
- Weaver ants, *Oecophylla smaragdina*, are abundantly found in Mayurbhanj throughout the year. They make nests with leaves of host trees. Kais feed on small insects and other invertebrates, their prey being mainly beetles, flies and hymenopterans.
- This dish is a rich source of essential nutrients and is known to boost the immune system and is also used a remedial cure to many diseases.

G. Tidbits

1. Measuring India's plastic problem

- While India's move to ban certain single-use plastics from July 1st is welcome, there continue to remain some challenges in India's efforts to meet the plastic challenge.
 - According to **the State of India's Environment 2022 report**, 35% of India's plastic waste is in the form of multi-layered packaging which are non-recyclable.
 - Also according to this report, **a substantial share of plastic waste in India ends up in dumpsites and landfills (around 68%)**. Only 12% is recycled and around 20% of the 3.5 million tonnes of plastic waste generated in 2019-20 was burnt.
 - In 2019, India produced an estimated **5 kg of mismanaged waste per person**.
 - Mismanaged waste is material which is at high risk of entering the ocean or coastlines from inland waterways.

H. UPSC Prelims Practice Questions

Q1. With respect to Saharia tribe, which of the following statements is/are incorrect? (Medium)

1. They are classified as Particularly vulnerable tribal group.
2. The categorization is done by the Ministry of Tribal affairs.
3. 3) They speak Munda language that belongs to the Dravidian Language Family

Options:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer: b

Explanation:

-
- The categorization of a tribe as a Particularly vulnerable tribal group is done by the Ministry of Home Affairs and not by the Ministry of Tribal affairs.
- The people of Saharia tribe speak Munda language that belongs to the Austro-Asiatic language family.

Q2. Consider the following statements with respect to 'Ant chutney (Kai Chutney)': (Difficult)

1. It is a much sought after food in Odisha's Mayurbhanj district.
2. It has got the Geographical Indication (GI) tag

Options:

- a. 1 only
- b. 2 only
- c. Both
- d. None

Answer: a

Explanation:

- The Kai chutney is made mostly by the tribes of Mayurbhanj district in Odisha using the weaver ants.
 - Weaver ants, *Oecophylla smaragdina*, are abundantly found in Mayurbhanj throughout the year. They make nests with leaves of host trees. Kais feed on small insects and other invertebrates, their prey being mainly beetles, flies and hymenopterans.
- This dish is a rich source of essential nutrients and is known to boost the immune system and is also used as a remedial cure to many diseases.
- In Odisha, research is underway to make a presentation for the Geographical Indications (GI) registry of Kai chutney under the food category. Currently, it does not have a GI tag.

Q3. Which amongst the following is the best description of Yogyakarta Principles? (Medium)

Options:

- a. It directs companies to undertake initiatives to promote greater environmental responsibility
- b. It is a document about human rights in the areas of sexual orientation and gender identity
- c. It seeks to eliminate all forms of forced and compulsory labour
- d. It is an academic, non-binding study on how international law applies to cyber conflicts and cyber warfare

Answer: b

Explanation:

The Yogyakarta Principles is a document about human rights in the areas of sexual orientation and gender identity, published as the outcome of an international meeting of human rights groups in Yogyakarta, Indonesia, in November 2006.

Q4. *Varroa destructor* (*Varroa* mite) is an external parasitic mite that attacks and feeds on (Difficult)

Options:

- a. Cotton
- b. Earth Worms
- c. Honey bees
- d. Maize

Answer: c

Explanation:

Varroa destructor is an external parasitic mite that attacks and feeds on the honey bees *Apis cerana* and *Apis mellifera*. This mite can reproduce only in a honey bee colony. It attaches to the body of the bee and weakens the bee by sucking fat bodies.

Q5. Consider the following:(Level - Medium)

1. Carbon monoxide
2. Nitrogen oxide
3. Ozone
4. Sulphur dioxide

Options:

- a. 1, 2 and 3
- b. 2 and 4 only
- c. 4 only
- d. 1, 3 and 4

Answer: b

Explanation:

- Acid rain, or acid deposition, is a broad term that includes any form of precipitation with acidic components, such as sulphuric or nitric acid that fall to the ground from the atmosphere in wet or dry forms. This can include rain, snow, fog, hail or even dust that is acidic.
- Acid rain results when sulphur dioxide (SO₂) and nitrogen oxides (NO_x) are emitted into the atmosphere and transported by wind and air currents. The SO₂ and NO_x react with water, oxygen and other chemicals to form sulphuric and nitric acids. These then mix with water and other materials before falling to the ground.

I. UPSC Mains Practice Questions

1. Use of technology by law enforcement agencies can act as a force multiplier but can never be an alternative to compassionate policing based on trust between the police and citizens. Substantiate.
2. Human activities are important factors that trigger landslides. Discuss measures to reduce the chance of landslides.