

INTERNATIONAL RELATION

Phosphorus Bombs

Recently, Ukrainian police has accused Russian forces of launching phosphorus bomb attacks (chemical weapon) in the Lugansk and Donetsk regions of eastern Ukraine, collectively known as the Donbas. International law prohibits the use of white phosphorus shells in heavily populated civilian areas, but allows them in open spaces to be used as cover for troops.

What is Phosphorus Bomb?

- **Allotropes:** White phosphorus munitions are weapons that use one of the common allotropes of the chemical element phosphorus.
- **Pyrophoric:** White phosphorus is pyrophoric (it is ignited by contact with air), burns fiercely, and can ignite cloth, fuel, ammunition, and other combustibles. Apart from this, it is also used in smoke, illumination, and burning elements of tracer ammunition.
- **Chemical Reaction:** In addition to its offensive capabilities, white phosphorus is a highly efficient smoke-producing agent, reacting with air to produce an immediate blanket of phosphorus pentoxide vapour.
- **Effects:** In addition to direct injuries caused by fragments of their casings, white phosphorus munitions can cause injuries in two main ways: burn injuries and vapour inhalation.

What are Chemical Weapons?

- A Chemical Weapon is a chemical used to cause intentional death or harm through its toxic properties.
- Munitions, devices and other equipment specifically designed to weaponize toxic chemicals also fall under the definition of chemical weapons.

What is International Law regarding Use of Chemical Weapons?

- Chemical Weapons Convention (CWC) is a multilateral treaty banning chemical weapons and requiring their destruction within the stipulated time.
- Negotiations for the CWC began in 1980 at the United Nations Conference on Disarmament.
- The convention was drafted in September 1992 and opened for signature in January 1993. It became effective from April 1997.
- It makes it mandatory to destroy old and abandoned chemical weapons.
- Members should also declare the riot-control agents (sometimes referred to as 'tear gas') in possession of them.
- India signed the treaty in January 1993. The Chemical Weapons Convention Act, 2000 was passed to implement the CWC.
- Convention Prohibits:
 1. The development, production, acquisition, stockpiling, or retention of chemical weapons.
 2. Transferring of chemical weapons.
 3. Using chemical weapons.
 4. Assisting other States to indulge in activities that are prohibited by the CWC.
 5. Using riot-control devices as 'warfare methods'.
- Apart from CWC, Australia Group seeks to check proliferation of chemical or biological weapons.

What is the Australia Group?

- The Australia Group (AG) is an informal forum of countries which, through the harmonisation of export controls, seeks to ensure that exports do not contribute to the development of chemical or biological weapons.
- The formation of the Australia Group (AG) in 1985 was prompted by Iraq's use of chemical weapons during the Iran-Iraq War (1980-1988)
- Coordination of National export control measures assists Australia Group members to fulfil their obligations under the Chemical Weapons Convention and Biological & Toxin Weapons Convention.
- It has 43 members (including the European union). The members work on a consensus basis. The annual meeting is held in Paris, France.
- India joined (as 43rd Participant) the Australia Group (AG) on 19th January 2018.
- The Australia Group decided to admit India as the Group's through a consensus decision.

GEOGRAPHY

River Rejuvenation Detailed Project Report

Recently, the Ministry of Environment, Forest and Climate Change released Rs. 19,000–crore Detailed Project Reports (DPRs) on rejuvenation of 13 major rivers through forestry interventions. These 13 rivers are Jhelum, Chenab, Ravi, Beas, Sutlej, Yamuna, Brahmaputra, Narmada, Godavari, Mahanadi, Krishna, Cauvery, and Luni.

What was the idea behind these DPRs?

- It is modelled on the lines of the work done as part of the National Mission for Clean Ganga (NMCG) in 2015-16 for the river and acknowledging that the growing water crisis is on account of degradation of river ecosystems,
- The project adopted a multi-scale, multi-stakeholder, multidisciplinary and holistic approach so as to accomplish broad objectives of 'Aviral Dhara' (uninterrupted flow), 'Nirmal Dhara' (clean water), and ecological rejuvenation.

How much area/landscape is Expected to be Rejuvenated?

- The 13 rivers collectively cover a total basin area of 18,90,110 square kilometres that represents 57.45% of the geographical area of the country.
- The length of 13 rivers, including 202 tributaries within the delineated riverscapes, is 42,830 km. The Brahmaputra Riverscape incorporated the highest number of tributaries (30) and 1,54,456 sq km area, respectively.
- The documents propose many kinds of afforestation for the rivers. They include timber species, medicinal plants, grasses, shrubs and fuel fodder and fruit trees.

What are the Interventions Planned?

- The DPRs recognise the merit of adopting a holistic riverscape approach for forestry interventions in three types of landscapes viz., natural, agriculture, and urban within the vast expanse of a riverscape besides conservation interventions including soil and moisture conservation measures, riverine and riparian wildlife management, and wetland management.
- These are done with supporting activities such as policy level interventions, strategic and adaptive research, capacity development, awareness creation, project management and participatory monitoring & evaluation).

What are the Potential Benefits of the Proposed Interventions?

- **Increase in Forest Cover:** It is expected to increase the cumulative forest cover of 7,417.36 sq km across 13 riverscapes.
- **Help in Sequestration of CO₂:** Proposed interventions would help in sequestration of CO₂ to the extent of 50.21 million tonnes of CO₂ equivalent in 10-year-old plantations while the value of estimated CO₂ sequestered in 20-year-old plantations would be 74.76 million tonnes of CO₂.
- **Help in Groundwater Recharge:** They would help recharge groundwater, reduce sedimentation, generate Rs. 449.01 crore from non-timber and other forest produce.
- **Employment Generation:** They are also expected to make a significant contribution towards employment generation by way of nearly 344 million man-days of work.
- **Achieving International Commitments:**
 1. These efforts would help India meet its international climate commitments of:
 - ✓ Creating an additional carbon sink of 2.5 -3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030 under the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC),
 - ✓ Restore 26 million hectares of degraded lands by 2030 and
 - ✓ Halt biodiversity loss by 2030 under Convention on Biological Diversity (CBD) and Sustainable Development Goals.
 2. At the COP26 meeting, India promised to reduce its projected carbon emission by one billion tonnes by 2030, meet 50% of energy requirements with renewable energy by 2030, enhance non-fossil energy capacity to 500 gigawatt by 2030, reduce the carbon intensity of its economy by 45% by 2030 and achieve net zero emission by 2070.
 3. Under the Bonn Challenge, India had also pledged in 2015 to restore five million hectares of degraded land by 2030.

What are the associated Challenges?

- ✓ Growing water crisis on account of depleting fresh water resources especially due to shrinking and degradation of river ecosystems is a major impediment to achieving national goals pertaining to environment, conservation, climate change and sustainable development.

- ✓ The success of the project hinges on several factors, including the correct method of plantation and changes in climate.

Way Forward

To avoid risks of plantation and changes in climate, the forest department should ensure the “quality of planting stock, particularly age and size are important aspects,” and that conservation of soil and moisture should be done before plantation to further mitigate risk.

ECONOMY**First Gati Shakti Cargo Terminal**

Indian Railways’ first Gati Shakti Cargo Terminal commissioned in Asansol Division in pursuance of the Prime Minister’s vision “Gati Shakti”. This is the first such GCT commissioned in Indian Railways since the publication of GCT policy in December 2021

- It is expected to enhance Indian Railways’ earnings. The commissioning of this terminal and more such terminals will have a very positive impact on the economy of the nation.

What is the PM Gati Shakti Scheme?**About:**

- In 2021 the government launched the ambitious Gati Shakti scheme or National Master Plan for multi-modal connectivity plan, with the aim of coordinated planning and execution of infrastructure projects to bring down logistics costs.

Aim:

- To ensure integrated planning and implementation of infrastructure projects in the next four years, with focus on expediting works on the ground, saving costs and creating jobs.
- The Gati Shakti scheme will subsume the Rs 110 lakh crore National Infrastructure Pipeline that was launched in 2019.
- Besides cutting logistics costs, the scheme is also aimed at increasing cargo handling capacity and reducing the turnaround time at ports to boost trade.
- It also aims to have 11 industrial corridors and two new defence corridors - one in Tamil Nadu and other in Uttar Pradesh.
- Extending 4G connectivity to all villages is another aim. Adding 17,000 kms to the gas pipeline network is being planned.
- It will help in fulfilling the ambitious targets set by the government for 2024-25, including expanding the length of the national highway network to 2 lakh kms, creation of more than 200 new airports, heliports and water aerodromes.

Expected Outcomes

- The scheme will help mapping the existing and proposed connectivity projects.
- Also, there will be immense clarity on how different regions and industrial hubs in the country are linked, particularly for last mile connectivity.
- A holistic and integrated transport connectivity strategy will greatly support Make in India and integrate different modes of transport.
- It will help India become the business capital of the world.

Need for Integrated Infrastructure Development:

- There exists a wide gap between macro planning and micro implementation due to the lack of coordination and advanced information sharing as departments think and work in silos.
- According to a study, the logistical cost in India is about 13% of GDP, which is higher than developed countries. Due to this high logistical cost, the competitiveness of India’s exports is greatly reduced.
- It is globally accepted that the creation of quality infrastructure for Sustainable Development is a proven way, which gives rise to many economic activities and creates employment on a large scale.
- The scheme is in synergy with the National Monetisation Pipeline (NMP). The NMP has been announced to provide a clear framework for monetisation and give potential investors a ready list of assets to generate investment interest.

What are the Challenges?

- **Low Credit Off-take:** Although the government had taken up ‘strong’ banking sector reforms and the Insolvency and Bankruptcy Code had yielded about Rs. 2.4 lakh crore of recoveries on bad loans, there are concerns about declining credit offtake trends. Banks give credit off-takes

to help businesses acquire financing for future projects through the promise of future income and proof of an existing market.

- **Lack of Demand:** In the post-Covid-19 scenario, there is a lack of private demand and investment demand.
- **Structural Problems:** Due to land acquisition delays and litigation issues, the rate of implementation of projects is very slow on global standards. Getting approvals is very difficult in terms of land access, environmental clearances; also impending litigation in court delays the infrastructure projects.

Way Forward

PM Gati Shakti is a step in the right direction. However, it needs to address structural and macroeconomic stability concerns, emanating from high public expenditure.

Thus, it is imperative that this initiative is underpinned by a stable and predictable regulatory and institutional framework.

PRELIMS FACT

Rohingya Muslims in India

Recently, the National Investigation Agency (NIA) has arrested six people who were allegedly part of a syndicate involved in the illegal trafficking of Rohingya Muslims into Indian territory.



1.

Who are Rohingya Muslims?

- Rohingya Muslims are described by the United Nations as the most persecuted minority in the world.
- They fled their homes in 2017 to escape an alleged crackdown by the Myanmar military.
- To escape discrimination and violence in Myanmar, minority Rohingya Muslims have for decades fled from the Buddhist-majority country to neighbouring Bangladesh and other countries, including India.

What are Issues & Concerns to India's Security?

- **Threat to National Security:** The continuance of the illegal immigration of Rohingyas into India and their continued stay in India is found to be having serious national security ramifications and poses serious security threats.
- **Clash of Interests:** It impacts the interests of local populations in the areas seeing large-scale influxes of illegal immigrants.
- **Political Instability:** It also increases the political instability when leaders start mobilising the perception of the citizens of the country against the migrants by the elites to grab political power.

- **Rise of Militancy:** The persistent attacks against the Muslims perceived as illegal migrants have given way to radicalisation.
- **Human trafficking:** In recent decades, trafficking of women and human smuggling has become quite rampant across the borders.
- **Disturbance in Law and Order:** The rule of law and integrity of the country are undermined by the illegal migrants who are engaged in illegal and anti-national activities.

What is the National Investigation Agency?

- It was constituted under the National Investigation Agency (NIA) Act, 2008. It is a central agency to investigate and prosecute offences:
 1. Affecting the sovereignty, security and integrity of India, security of State, friendly relations with foreign States.
 2. Against atomic and nuclear facilities.
 3. Smuggling in High-Quality Counterfeit Indian Currency.
- It implements international treaties, agreements, conventions and resolutions of the United Nations, its agencies and other international organisations.
- It's objective is also to combat terror in India. It acts as the Central Counter-Terrorism Law Enforcement Agency.
- **Headquarters:** New Delhi.

Way Forward

- **Need for Refugee Protection Framework:** In spite of not being a party to the 1951 Refugee Convention and its 1967 Protocol, India has been one of the largest recipients of refugees in the world. Therefore, if India had domestic legislation regarding refugees, it could have deterred any oppressive government in the neighbourhood from persecuting their population and making them flee to India.
- **SAARC Framework on Refugees:** India should take the initiative to encourage other countries in the South Asia Association for Regional Cooperation (SAARC) to develop a SAARC convention or declaration on refugees.

DAILY ANSWER WRITING PRACTICE

Qns. Elaborate upon the functions of Reserve Bank of India (RBI). Why is RBI known as the 'lender of the last resort'? (250 words)

Introduction

The Reserve Bank of India, India's Central bank, was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934. Though originally privately owned, since nationalisation in 1949, the Reserve Bank is fully owned by the Government of India. The Reserve Bank's affairs are governed by a central board of directors. The board is appointed by the Government of India in keeping with the Reserve Bank of India Act.

Body

Functions of Reserve Bank of India (RBI)

- **Monetary Authority**
 1. Formulates, implements and monitors the monetary policy.
 2. Objective: maintaining price stability while keeping in mind the objective of growth.
- **Regulator and supervisor of the financial system**
 1. Prescribes broad parameters of banking operations within which the country's banking and financial system functions.
 2. Objective: maintain public confidence in the system, protect depositors' interest and provide cost-effective banking services to the public.
- **Manager of Foreign Exchange**
 1. Manages the Foreign Exchange Management Act, 1999.
 2. Objective: to facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India.
- **Issuer of currency**
 1. Issues and exchanges or destroys currency and coins not fit for circulation.
 2. Objective: to give the public adequate quantity of supplies of currency notes and coins and in good quality.

- **Developmental role**
 1. Performs a wide range of promotional functions to support national objectives.
 - **Regulator and Supervisor of Payment and Settlement Systems**
 1. Introduces and upgrades safe and efficient modes of payment systems in the country to meet the requirements of the public at large.
 2. Objective: maintain public confidence in payment and settlement system
 - **Related Functions**
 1. Banker to the Government: performs merchant banking function for the central and the state governments; also acts as their banker.
- Banker to banks: maintains banking accounts of all scheduled banks.
- **Financial Inclusion**
 1. The Reserve Bank has selected a bank led model for financial inclusion in India. RBI has undertaken a series of policy measures such as no frills accounts, adoption of technology like e-Kuber etc.

RBI is known as the 'lender of the last resort'

- Under lender of last resort (LoLR) facility, the central bank provides emergency money or liquidity to the bank when the latter faces financial stringency.
- When the central bank extends financial help, the bank can escape from the liquidity crisis.
- Thus, LoLR is a financial safety net provided by the central bank to commercial banks.
- LoLR and the reserve holding have empowered central banks to administer regulatory and supervisory measures on the banking system.
- Lender of last resort' (LoLR) thus, is an exclusive function of a central bank, whereby it lends money to support financial institution facing temporary liquidity stress after exhausting recourse to the market and whose failure is likely to have systemic implications.

Conclusion

RBI is one of the most powerful Central Banks of the world, both in terms of its statutory powers and the functions it performs. However, there are many criticisms concerning its operational independence. For a healthy economy, the Fiscal Policy by the Government and Monetary policy by the Central Bank should be in tandem.

DAILY QUIZ

Q1. Which of the following are the key features of 'National Ganga River Basin Authority (NGRBA)'?

1. River basin is the unit of planning and management.
2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.

Select the correct answer using the code given below:

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

Q2. Consider the following pairs:

International agreement/set-up	Subject
1. Alma-Ata Declaration :	Healthcare of the people
2. Hague Convention :	Biological and chemical weapons
3. Talanoa Dialogue :	Global climate change
4. Under2 Coalition :	Child rights

Which of the pairs given above is/are correctly matched?

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

Q3. Recently, Indian Railways' first Gati Shakti Cargo Terminal commissioned in

- a) Asansol b) Pune c) Mumbai d) Kochi

Q4. Rohingya Muslims are related to which country ?

- a) Thailand b) Myanmar c) Nepal d) China

Q5. Which of these water bodies witnesses sun rise at the earliest?

- a) Red Sea b) Black Sea c) Caspian Sea d) Mediterranean Sea