

1. Pinaka Extended Range (Pinaka-ER) Rocket System

Why in News?

- The DRDO (Defence Research and Development Organization) has successfully test fired the Pinaka Extended Range (Pinaka-ER) Multiple Launch Rocket System (MLRS).

Highlights:

- The DRDO also launched the Supersonic Missile Assisted Torpedo System (SMART).
- The Pinaka, a Multi-Barrel Rocket-Launcher (MBRL) system named after Shiva's bow, can fire a salvo of 12 rockets over a period of 44 seconds.
- The new version is equipped with advanced technology to enhance its strength. The metal weight is lesser compared to the earlier version.
- The newly tested system can achieve a range of up to 45km which is a big feat for the Indian Army.
- The existing Pinaka system, which is already in the Army, has a range of up to 35-37km.
- The new incarnation of pinaka represents one of the few examples of an evolutionary process being followed with an indigenous Indian Weapon System.

2. Log4Shell

Why in News?

- Recently, a critical vulnerability called Log4Shell, detected last week in widely used open-source logging software Apache Log4J.

Highlights:

- It is now being exploited by attackers to target organizations all over the world, including India.
- The vulnerability is based on an open-source logging library used in most applications by enterprises and even government agencies.
- The vulnerability is dubbed Log4Shell and is officially called CVE-2021-44228.
- CVE number is the unique number given to each vulnerability discovered across the world.
- The vulnerability was first detected on websites that were hosting servers of a Microsoft-owned game called Minecraft.
- Log4j is open-source software maintained by a group of volunteer programmers as part of the non-profit Apache Software Foundation and is a key Java-logging framework.

- The Log4j library is embedded in every Java-based web service or application and is used by a wide number of companies to enable logging in on applications.
- Indian companies are not more vulnerable than their western counterparts because they use Java-based applications.
- Indian companies are at high risk because of their weak security posture, especially the smaller companies that may not have the know-how or resources to detect and fix the issue quickly.

3. SMILE

Why in News?

- The Ministry of Social Justice and Empowerment has recently formulated a scheme SMILE – Support for Marginalized Individuals for Livelihood and Enterprise.

Highlights:

- It includes a sub-scheme – ‘Central Sector Scheme for Comprehensive Rehabilitation of persons engaged in the act of Begging.
- A pilot project of it is ongoing in 7 cities namely Delhi, Bangalore, Hyderabad, Indore, Lucknow, Nagpur and Patna.
- It is a new Scheme after the merger of existing Schemes for Beggars and Transgenders.
- Scheme provides for the use of the existing shelter homes available with the State/UT Governments and Urban local bodies for rehabilitation of the persons engaged in the act of Begging.
- In case of non-availability of existing shelter homes, new dedicated shelter homes are to be set up by the Implementing Agencies.
- The focus of the scheme is extensively on rehabilitation, provision of medical facilities, counselling, basic documentation, education, skill development, economic linkages and so on.
- It is estimated that an approximate 60,000 poorest persons would be benefited under this scheme for leading a life of Dignity.
- It will be implemented with the support of State/UT Governments/Local Urban Bodies, Voluntary Organizations, Community Based Organizations (CBOs) , institutions and others.
- It will be a comprehensive scheme for persons engaged in the act of begging.

- The scheme has been implemented in the selected cities on pilot basis having large concentrations of the Beggar community.
- During the year 2019-20, this Ministry had released an amount of Rs. 1 Crore to National Institute of Social Defence (NISD) and Rs. 70 Lakh to National Backward Classes Finance & Development Corporation (NBCFDC) for Skill Development Programmes for Beggars.

4. The case for deeper technological ties with the United Kingdom

Why in News?

- When Delhi thinks of technological cooperation with major powers, the US, Europe and Japan come to mind. The missing link in India's technological mind space, however, is the United Kingdom.

How India can benefit from Technology Partnership with Britain:

- Britain was the first nation to Industrialise and has a Long Tradition of scientific research and Technological Development.
- With top-ranking universities and the golden triangle of science and innovation — London, Oxford and Cambridge — Britain is one of the world's top technology powers.
- **WIPO Ranking:** This year, the World Intellectual Property Organisation ranked Britain fourth in the global innovation index.
- India is far behind at the 46th position.
- India, then, could gain in a technology partnership with Britain.

Overview of the India-UK Bilateral Ties:

- Pakistan angle: India's foreign policy community can't shake off the Pakistan prism in viewing London. To be sure, London's advocacy of Pakistan has always irritated Delhi.
- Instead of complaining about London's South Asian policy, Delhi now simply Ignores London's claims for a special role in India's political disputes with Pakistan.
- By focusing on the positive, Delhi is betting it can reduce the traditional negative elements in the engagement with the UK.
- At the same time, Delhi recognises the enormous strategic possibilities with Britain and is willing to invest political capital to build on those synergies.
- Meanwhile, the steady relative decline of Pakistan — its economy is now about a tenth of India's — and Delhi's deepening strategic partnership with Washington are also encouraging London to rethink its past approach to the Subcontinent.

- India is fully conscious of UK's enduring global salience.
- External Affairs Minister Subrahmanyam Jaishankar has often highlighted Britain's continuing weight in the world as the fifth-largest economy, a permanent member of the UN Security Council, a major financial centre, and a leading hub of higher education and technology.
- Britain also enjoys a global maritime reach and a measure of political influence across the world.

Possibilities for Partnership in the Technological Domain:

- While a trade agreement between Delhi and London is said to be imminent, it is in the technological domain that the prospects are immense but under-explored.
- There is insufficient awareness in India's strategic community of the British moves to put science and technology at the very heart of its political, economic, security and foreign policies.
- London announced a raft of measures this year starting with a major report on "Global Britain in a Competitive Age: An Integrated Review of Security, Defence, Development, and Foreign Policy".
- One of the broad themes stand out from these initiatives, which is forming a coalition of like-minded Countries.
- London wants to build a coalition of like-minded countries to reshape the global Governance of Technology.
- This includes strengthening technological ties with the traditionally close partners in the Anglosphere — US, Canada, Australia, and New Zealand — as well as other partners like Japan and India.
- All these elements of British policy mesh with India's own economic, political, and security interests.
- The British technology initiatives are also aligned with the technological agenda of the Quad — or the Quadrilateral forum that brings together Australia, India, Japan, and the US.

5. National Monetisation Pipeline (NMP)

Why in News?

- As the government seeks to monetise core assets through National Monetisation Pipeline (NMP), it needs to investigate the key reasons and processes which led to once profit-making public sector assets becoming inefficient and sick businesses.

Background of the MNP:

- The National Monetisation Pipeline (NMP) envisages an aggregate monetisation potential of ₹6-lakh crore through the leasing of core assets of the Central government.
- These assets are in sectors such as roads, railways, power, oil and gas pipelines, telecom, civil aviation, shipping ports and waterways, mining, food and public distribution, coal, housing and urban affairs etc. over a four-year period (FY2022 to FY2025).
- Strategic objective of NMP: According to NITI Aayog, the strategic objective of the asset monetisation programme is to unlock the value of investments in public sector assets by tapping private sector capital and efficiencies.
- Unlocking idle capital: The NMP policy advocates unlocking idle capital from non-strategic/underperforming government owned assets
- Contribution of core sectors: Eight core industrial sectors that support infrastructures such as coal, crude oil, natural gas, refinery products, fertilizers, steel, cement, and electricity have a total weight of nearly 40% in the Index of Industrial Production (IIP).

Reasons for the decline of PSU and why the Government should introspect the

Decline:

- Cost overruns, inter alia, is one of the major reasons.
- Exceeding project completion time: In some cases, project completion time is exceeded, leading to elevated project cost so much so that either the project itself becomes unviable at the time of its launching or delays its break even point.
- Lack of optimum input-output ratio: Optimum input-output ratio is seldom observed in a majority of government infrastructural projects leading to their overcapitalisation.
- A reluctance to implement labour reforms, a lack of inter-ministerial/departmental coordination, poor decision-making, ineffective governance and excessive government control are other reasons for the failure of public infrastructural assets.

- Need for introspection: It is quite likely that the nation may find itself in a vicious cycle of creating new assets and then monetising the same when they become liabilities for the Government at a later stage.

Importance of Public Sector Enterprises:

- Going by the annual report (2020-2021) of the Department of Public Enterprises there are 256 operationally-run central public sector undertakings (CPSUs), employing about one million people. They posted a net profit of ₹93,294 crore (FY 2019-20).
- Ratna Status: Out of these, 96 have been conferred the Ratna status (72, 14, and 10 are Miniratnas, Navaratnas, and Maharatna companies, respectively).
- As India needs to invest about \$1.5 trillion on infrastructure development in order to aspire to become \$5 trillion economy by the year 2024-25, according to the Economic Survey 2019-20, public enterprises should be in focus.

Steps to Strengthen Public Sector Businesses:

- Gati Shakti National Master Plan: Recently, the “Pradhan Mantri Gati Shakti National Master Plan” for multi-modal connectivity was launched.
- It is essentially a digital platform for information sharing among different Ministries and departments at the Union and State levels.
- Seamless planning and coordinated execution: The plan aims ‘to synchronise the operations of different departments of 16 Ministries including railways and roadways.
- Revamping corporate governance structure of PSUs: As enunciated in the Economic Survey 2020-21, an important step for the Government to take to strengthen public sector businesses would be to completely revamp their corporate governance structure in order to enhance operational autonomy augmented with strong Governance practices including listing on stock exchange for Greater Transparency and Accountability.
- Initiative to boost domestic production of steel: The Economic Survey also highlights the Government’s initiatives as part of the Atmanirbhar Abhiyaan in order to boost domestic production in the Steel Sector.
- Under it, four different types of steel are included for incentives under the production linked incentive (PLI) scheme; selling steel to Micro, Small and Medium Enterprises (MSMEs), affiliated to Engineering Export Promotion Council of India at export parity Price under the duty drawback scheme of the Directorate General of Foreign Trade (DGFT);

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- It also include measures to provide preference to domestically produced iron and steel in government procurement, where aggregate estimate of iron and steel products exceeds ₹25 crore;
 - Protection of domestic industry from unfair trade practices: Protecting industry from unfair trade through appropriate remedial measures including imposition of anti-dumping duty and countervailing duty on the products on which unfair trade practices were adopted by the other countries.

