

UPSC Daily Current Affairs | Prelim Bits 23-02-2021

VL-SRSAM Missile System

- Vertical Launch **Short Range** Surface to Air Missile (VL-SRSAM) was launched by Defence Research & Development Organisation (DRDO).
- It is indigenously designed and developed by **DRDO**, along with Research Centre Imarat, and the Pune-based Research and Development Establishment (Engineers).
- Once deployed, the VL-SRSAM system will prove to be a force multiplier for the **Indian Navy**.
- With an effective Weapon Control System (WCS), it would neutralize various aerial threats at close ranges including sea-skimming targets.
- [Sea-skimming targets have the capability to avoid detection by radar or infrared sensors.]

Progress MS-16 Cargo Ship

- Progress MS-16 or Progress 77 cargo ship has delivered water, propellant and other supplies to the International Space Station (ISS).
- Progress MS-16 is an **unmanned** Russian cargo ship launched by Russian Space Agency, **Roscosmos**.

International Space Station

- It is the only active modular space station (habitable artificial satellite) in the Earth's Orbit.
- It is the largest artificial object in space and the largest satellite in low Earth orbit, visible to the naked eye from Earth's surface.
- It is a joint project between five participating space agencies NASA (USA), Roscosmos, Japan Aerospace Exploration Agency (JAXA), European Space Agency, and Canadian Space Agency.

International Atomic Energy Agency

• Iran will continue to give access to International Atomic Energy Agency (IAEA) to its declared nuclear sites for three months.

- IAEA's genesis was U.S. President Eisenhower's "Atoms for Peace" address to the United Nations General Assembly in 1953.
- It was established in 1957 as an autonomous organization which is not under direct control of the UN.
- Head quartered in Vienna, IAEA seeks to promote the peaceful use of nuclear energy, and to inhibit its use for any military purpose.
- But it reports to both the United Nations General Assembly (UNGA) and United Nations Security Council (UNSC).
- IAEA Safeguards are a set of technical measures applied by IAEA and countries accept them through the conclusion of safeguards agreements.
- It is an essential component of Non-Proliferation of Nuclear Weapons Treaty (NPT), which states that each Non-Nuclear Weapon State is required to conclude a safeguards agreement with the IAEA.

Scheme of Fund for Regeneration of Traditional Industries

- Fifty **artisan-based clusters** were inaugurated through the Scheme of Fund for Regeneration of Traditional Industries (SFURTI) in 18 States.
- Ministry of MSME is implementing a SFURTI with a view to **organize traditional industries and artisans** into clusters to make them competitive and increase their income.
- The clusters are part of the government's strategy of keeping villages at the core of the economic policy.
- There are 371 artisan-based Clusters which have are being funded by the Ministry of MSME, which aims to support at least one cluster in each district in the future.
- SFURTI clusters are of two types i.e.,
 - 1. Regular Cluster (500 artisans) with Government assistance of up to Rs.2.5 crore and
 - 2. Major Cluster (more than 500 artisans) with Government assistance up to Rs.5 crore.
- The artisans are organized into SPVs which can be
 - 1. Society registered under Societies (Registration) Act, 1860,
 - 2. Co-operative Society under an appropriate statute,
 - 3. Producer Company under Section 465 (1) of Companies Act, 2013,
 - 4. Section 8 Company under the Companies Act, 2013 or
 - 5. It can also be a Trust.
- Under the Scheme, the Ministry supports various interventions including setting up of infrastructure through Common Facility Centers (CFCs), procurement of new machineries, design intervention, etc.
- Besides, the scheme focuses on strengthening the **cluster governance**

systems with the active participation of the stakeholders.

Non-Alcoholic Fatty Liver Disease

- Ministry of Health & Family Welfare is going to integrate Non-Alcoholic Fatty Liver Disease (NAFLD) with NPCDCS.
- [NPCDCS National Programme for Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke]
- Non-Alcoholic Fatty Liver Disease (NAFLD) is emerging as an important cause of liver disease in India (9-32%).
- **Conditions** It is a distinct hepatic condition where there is accumulation of excess fat in the liver of people who drink little or no alcohol, causing fatty liver.
- Non-alcoholic steatohepatitis (NASH) is a more serious condition that may lead to severe liver cell inflammation and scarring, and cirrhosis.
- **Symptoms** Abdominal pain, fatigue, slightly enlarged liver, patchy, dark discoloration of the skin (acanthosis nigricans) over the neck and under the arm.
- **Causes** NAFLD is a part of the metabolic syndrome characterized by diabetes, or pre-diabetes (insulin resistance), being overweight or obese, elevated blood lipids such as cholesterol and triglycerides, and high BP.
- Several factors that may contribute to the development of NASH are:
 - 1. Oxidative stress (between pro-oxidant and anti-oxidant chemicals imbalance that lead to liver cell damage)
 - 2. Release of toxic inflammatory proteins (cytokines) by the patient's own inflammatory cells, liver cells, or fat cells
 - 3. Liver cell necrosis or death, called apoptosis
 - 4. Adipose tissue inflammation and infiltration by white blood cells
 - 5. Gut microbiota (intestinal bacteria) causing liver inflammation
- **Screening/Diagnosis** Blood testing or radiologic investigations such as abdominal ultrasound or CT scan.
- **Treatment** Weight reduction, controlling diabetes and treating elevated cholesterol levels, decrease in the amount of liver inflammation through antioxidant, anti-apoptotic and anti-cytokine medications.

African Swine Fever Virus

- Chinese scientists have found a natural mutation in the African swine fever virus (ASFV) that could be less deadly than the strain that ravaged the world's largest pig herd in 2018 and 2019.
- ASFV is an intra cytoplasmically-replicating DNA arbovirus, which is the sole member of the family Asfarviridae.

- ASF is a severe viral disease that affects wild and domestic pigs resulting in a highly lethal haemorrhagic fever, but doesn't affect humans.
- It has almost 100% case fatality rate (CFR).
- **Transmission** of the ASFV could be through,
 - 1. Direct contact with an infected or wild pig (alive or dead),
 - 2. Indirect contact through ingestion of contaminated material such as feed or garbage, or through biological vectors like ticks.
- **Symptoms** High fever, depression, loss of appetite, haemorrhages in the skin, anorexia, vomiting, diarrhoea and sudden deaths in pigs.
- **Diagnosis** Laboratory testing to differentiate it from Classical Swine Fever (CSF), whose signs may be similar to ASF.
- Even so, while ASF is lethal, there is no approved vaccine, which is also a reason why animals are culled to prevent the spread of infection.

Source: PIB, The Hindu, The Indian Express

