UPSC Daily Current Affairs | Prelim Bits 11-09-2020

Acquisition and Cross-Servicing Agreement (ACSA)

- Recently, India and Japan signed Acquisition and Cross-Servicing Agreement (ACSA) agreement.
- It is a logistics agreement that will allow armed forces of both sides to coordinate closely in services and supplies.
- India has similar agreements with the USA, Australia, France, Oman and Singapore.
- It is aimed at greater maritime cooperation and can upgrade India-Japan naval exercises as both countries are expected to share maritime facilities for mutual benefit.
- It establishes the enabling framework for closer cooperation between the armed forces of both countries in reciprocal provision of supplies and services while engaged in the following such as

1. Bilateral training activities,
2. United Nations Peacekeeping Operations,
3. Humanitarian International Relief and other mutually agreed activities.

- The supplies and services include food, water, transportation, airlift, petroleum, clothing, communications and medical services etc.
- It will remain in force for 10 years and will be automatically extended for periods of 10 years unless one of the parties decides to end it.

List of India-Japan Defence Exercises

- JIMEX - Naval Exercise
- SHINYUU Maitri - Air Force Exercise,
- Dharma Guardian - Military Exercise,
- Malabar Exercise – USA + Japan + India Trilateral exercise.

IEP’s Ecological Threat Register

- The Institute for Economics and Peace (IEP), a think tank has released annual global terrorism and peace indexes.
- According to the IEP’s report 1.2 billion people lived in 31 countries that are not sufficiently resilient to withstand ecological threats.

- The world had 60% less fresh water available than it did 50 years ago, while demand for food was predicted to rise by 50% by 2050 and natural disasters were only likely to increase in frequency because of the climate crisis.
- IEP states that 19 countries facing the highest number of threats, including water and food shortages and greater exposure to natural disasters, are also among the world's 40 least peaceful countries.
- Out of 157 countries' assessed, 141 countries faced at least one ecological threat by 2050.
- **Ecological Threat -** Sub-Saharan Africa, South Asia, Middle East and North Africa the regions facing the largest number of ecological threat.
- Some countries, such as India and China, are most threatened by water scarcity.
- Countries such as Pakistan, Iran, Kenya, Mozambique and Madagascar face a combination of threats and a growing incapacity to deal with them.
- **Mass Migration -** It judged Pakistan to be the country with the largest number of people at risk of mass migration, followed by Ethiopia and Iran.
- 16 countries including Sweden, Norway, Ireland, and Iceland, faced no threat.

Variability of Ozone

- Aryabhatta Research Institute of Observational Sciences (ARIES) has evaluated the near surface ozone in the Brahmaputra River Valley (BRV).
- Scientists analyzed the variability of ozone (O3) and other air pollutants over the BRV region.
- They assessed seasonal characteristics of ozone to identify the emission source of ozone and its precursors, especially methane (CH4) and non-methane hydrocarbons (NMHCs).
- NMHCs such as ethane, ethene, propane, propene, etc. play an important role in controlling ozone concentrations.
- Scientists have found relatively low concentration of ozone over BRV (Guwahati - Assam) compared to the other urban locations in India.
- The pattern of O3 concentrations in the BRV indicated that it was strongly influenced by local oxides of nitrogen (NOx) sources with an adjacent national highway being the likely major source.
- The mean ventilation coefficient was greater than 6000 m2s during the day in the pre-monsoon season indicating pollutant dispersion.
- High O3 winter concentrations were observed, likely driven by local biomass burning providing reactive volatile organic compounds (VOCs) that contributed to ozone formation.

- In the pre-monsoon season, an impact of solar radiation (SR) on the photochemical formation of O3 was observed.
- Tropospheric, or ground-level ozone, is created by chemical reactions between NOx and VOC.

Ventilation Co-efficient

- The ventilation coefficient is the product of mixing depth and the average wind speed.
- It is an atmospheric condition which gives an indication of the air quality and pollution potential i.e. the ability of the atmosphere to dilute and disperse the pollutants over a region.
- The higher the coefficient, the more efficiently the atmosphere is able to dispose of the pollutants and better is the air quality.
- Low ventilation coefficients lead to poor dispersal of pollutants causing stagnation and poor air quality leading to possible pollution related hazards.

Volatile Organic Compounds

- VOCs are compounds that have a high vapor pressure and low water solubility.
- Many VOCs are human-made chemicals that are used and produced in the manufacturing of paints, pharmaceuticals, and refrigerants.
- VOCs are common ground-water contaminants.

Five Star villages Scheme

- The Department of Posts under Ministry of Communications has launched a scheme called Five Star Villages.
- It aims to ensure universal coverage of flagship postal schemes in rural areas of the country.
- Three components of the scheme are

1. Product and Service Availability,
2. Product and Service Publicity
3. Product and Service Marketing.

- Under the scheme Branch offices are empowered to function as one-stop shops to cater all post office related needs of the villagers.
- Schemes covered are :

1. Savings Bank accounts, Recurring Deposit Accounts, NSC/KVP

certificates,
2. Sukanya Samridhi Accounts/ PPF Accounts,
3. Funded Post Office Savings Account linked India Post Payments Bank Accounts,
4. Postal Life Insurance Policy/Rural Postal Life Insurance Policy and
5. Pradhan Mantri Suraksha Bima Yojana Account/Pradhan Mantri Jeevan Jyoti Bima Yojana Account.

- Rating System of the scheme - One Scheme is equal to one star of rating.
- Therefore, if a village attains universal coverage for four schemes from the above list, then that village gets four-star status and so on.
- The scheme is being launched on pilot basis in Maharashtra; based on the experience here, it will be implemented nation-wide.

Shikshak Parv

- Under the Shikshak Parv initiative, Ministry of Education is organizing a series of webinars on NEP and its implementation.
- Shikshak Parv is being celebrated from 8th-25th September 2020.
- NEP aims to pave the way for transformational reforms in school and higher education systems in the country.
- This policy replaces the 34 year old National Policy on Education (NPE),1986.

World Teacher's Day

- World Teachers' Day is celebrated on 5th October annually to commemorate the anniversary of the adoption of the 1966 ILO/UNESCO Recommendation concerning the Status of Teachers.
- This instrument sets forth the rights and responsibilities of teachers, and standards for their initial preparation and further education, recruitment, employment, teaching and learning conditions.

Project 17A

- Recently Indian Navy had laid the keel of the third ship (Yard- 12653) of the prestigious P17A class stealth frigates.
- The P17A class frigates are being built using indigenously developed steel and fitted with weapons and sensors along with Integrated Platform Management System.
- These ships are having stealth features.
- Construction of P17A ships differ in the very concept of warship building

by way of adoption of the modern technology ‘Integrated Construction (IC)’ where the blocks are pre-outfitted before joining to reduce the build period of warships.
- When commissioned the platforms will enhance the combat capability of the Indian Naval fleet.

Source: PIB, Indian Express, the Hindu

