News Analysis (29 Feb, 2020)

Report of the International Narcotics Control Board for 2019

Why in News

The **United Nations Office of Drugs and Crime (UNODC)** has released the **2019 report of the International Narcotics Control Board (INCB).**

> The report features **India among top manufacturers of illicit and licit drugs** that are smuggled to other countries and into the hands of addicts.

Global Scenario

- **Increased Smuggling of Pharmaceutical Drugs:**
  Drug traffickers tend to **smuggle pharmaceutical drugs rather than illicit drugs** (e.g. hashish,heroin,etc.) because of the **more lenient penalties** imposed for smuggling of **controlled pharmaceutical drugs.**
- **Phenobarbital Drug:**
  - It is one of the **most internationally traded controlled psychotropic substances,** with more than 161 countries reporting imports of the substance in 2018.
  - It included on the **WHO Model List of Essential Medicines** for treating **epilepsy** (a neurological disorder).
  - **China is the lead manufacturing country** of phenobarbital in **2018,** followed by India and Hungary.
- **Limited Usage of Pre-Export Notification:**
  It has also been noted that countries like China, South Korea and the United States have received drugs **without pre-notification** through the PEN **Online system.**

PEN Online System

- The Pre-Export Notification (PEN) Online is developed by **UNODC/International Narcotics Control Board (INCB).**
- It is used by the Member States exporting precursor chemicals **to alert the national competent authorities in the importing country** with the details of the export transaction.
- It enables the **easy on-line exchange of information** between the Member States on shipments **(export and import) of the chemicals** required for the manufacture of illegal addictive drugs.
- The system also facilitates **electronic reply** to acknowledge receipt and notify the exporting country of clearance to export. **An electronic copy is sent to INCB by default.**

National Scenario

- **Diversion of Pharmaceutical Drugs:**
  It has also noted an **increased diversion of controlled pharmaceutical precursors,** in particular **ephedrine and pseudoephedrine,** from licit to illicit channels has continued in India.
    - Precursors are chemicals which are used **to manufacture narcotic drugs and psychotropic substances.**
    - Ephedrine and Pseudoephedrine have been notified as **'controlled substance'** in India.
    - The **Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985** empowers the Central Government to declare any substance as **'controlled substance'** after considering its possible use in the production or manufacture of narcotic drugs or psychotropic substances.
- **Tramadol Drug:**
    - Globally most of the tramadol seized between 2013 and 2017 was reported to have **originated in India.** e.g.India was the source of **87% of the tramadol seized in Ghana in 2017.**
    - Tramadol, sold under the brand name **Ultram** among others, is an opioid pain medication used to treat moderate to moderately severe pain.
    - The drug is under the control of the Narcotic Drugs and Psychotropic Substances Act, 1985.

United Nations Office on Drugs and Crime

- The United Nations Office on Drugs and Crime (UNODC) was established in **1997.**
- UNODC publishes the **World Drug Report.**

International Narcotics Control Board

- The International Narcotics Control Board (INCB) is the **independent and quasi-judicial** monitoring body for the implementation of the United Nations international drug control conventions.
- It was established in **1968** in accordance with the Single Convention on Narcotic Drugs, 1961.
- Its **secretariat** is located in **Vienna, Austria.**

Source: HBL

Mission Purvodaya: Accelerated Development of Steel Sector

Why in News

A workshop on **"Enabling Procedures for Increase of Steel Usage for the Growth of Economy"** was organised by the **Ministry of Steel** in partnership with the **Government of Japan** and **Confederation of Indian Industries (CII).**

Key Points

- The Eastern belt has the potential to add more than 75% of the country's incremental steel capacity. In India's march towards a **$5 trillion economy,** the eastern states can play a major role where the steel sector can become the catalyst.
- It is expected that out of the 300 MT capacity by 2030-31, over 200 MT can come from this region alone, driven by **Industry 4.0.**
- Earlier, Japan and India have also launched the India Japan Steel Dialogue to ensure sustainable growth of the steel sector. Iron ore exports from India, particularly Odisha, helped Japan in becoming a leading economic power.

Mission Purvodaya

- It was launched in 2020 for the accelerated development of eastern India through the establishment of an integrated steel hub in Kolkata, West Bengal.
- The focus will be on eastern states of India (Odisha, Jharkhand, Chhattisgarh, West Bengal) and northern part of Andhra Pradesh which collectively hold **~80% of the country's iron ore, ~100% of coking coal** and significant portion of **chromite, bauxite and dolomite** reserves.

- The Integrated Steel Hub would focus on 3 key elements:
    - Capacity addition through easing the setup of Greenfield steel plants.
    - Development of steel clusters near integrated steel plants as well as demand centres.
    - Transformation of logistics and utilities infrastructure which would change the socio-economic landscape in the East.
- The objective of this hub would be to enable swift capacity addition and improve overall competitiveness of steel producers both in terms of cost and quality.

Iron & Steel Industry

- Steel is an **alloy of iron and carbon in which the carbon content ranges up to 2%.** Iron ore, coking coal and limestone are required in the ratio of approximately 4 : 2 : 1. Some quantities of manganese are also required to harden the steel.
- The iron and steel industry is the **basic industry** since all the other industries — heavy, medium and light, depend on it for their machinery. Iron and steel is a heavy industry because all the raw materials as well as finished goods are heavy and bulky entailing heavy transportation costs.
- India is currently the **2nd largest producer of crude steel** in the world.
- **Production and consumption of steel** is often regarded as the **index of a country's development.** Per capita finished steel consumption in 2018 was 224.5 kg for the world and 590.1 kg for China . The same for India was 74.1 kg in 2018.
- The Government has launched the **National Steel Policy 2017** that aims to increase the **per capita steel consumption to 160 kgs by 2030-31.**
- Odisha is the highest steel producing state in the country. The ores of Odisha are rich in haematites.
- Growth of steel industry would lead to:
    - Employment opportunities across the entire value chain.
    - Socio-economic growth of Eastern India.
    - Reduced disparity between the East and other regions of the country.

Iron Ores

- Hematite and magnetite are the most important iron ores in India.
- **Hematite**
    - Hematite refers to a ferric oxide containing no crystal water, and its chemical formula is **Fe_2O_3 (iron oxide).**
    - The pure hematite theoretical iron content is 70%.
    - Its appearance is from red to light gray, sometimes black, and the stripes are dark red. Commonly known as "red mine."
    - Hematite is abundant in nature, but pure hematite is less, often co-existing with magnetite and limonite.

- **Magnetite**
  - The main iron-bearing mineral of magnetite is tri iron tetroxide, and its chemical formula is **Fe_3O_4.**
  - The theoretical iron content is around 72%.
  - The appearance color is usually carbon black or slightly light blue black, metallic luster, streaks (color appearing on the board when the surface is uneven on the white porcelain plate) black. Commonly known as the green mine.
  - The most prominent feature of this ore is its **magnetic nature.**
  - Magnetite is generally very hard, dense in structure and poor in reducing performance.

Source: PIB

Pradhan Mantri Kisan Sampada Yojana

Why in News

32 projects have been sanctioned under the **Pradhan Mantri Kisan Sampada Yojana (PMKSY)** of the **Ministry of Food Processing Industries (MoFPI).**

- The projects are spread across **almost 17 States,** leveraging an **investment worth ₹406 crores.**
- These projects envisage the **creation of direct and indirect employment,** especially in rural areas.

Key Points

- **Food processing** plays an important role in **connecting Indian farmers to domestic and international consumers and markets.**
  The **introduction of modern processing techniques** for food results in **improved shelf-life** of the agricultural produce and **ensures steady revenue** to farmers.
- The **processed food market** is expected to grow to $543 billion by 2020 from $322 billion in 2016, at a **Compound Annual Growth Rate (CAGR)** of **14.6%.**

Compound Annual Growth Rate

CAGR is the mean annual growth rate of an investment over a specified period of time longer than one year.

Pradhan Mantri Kisan SAMPADA Yojana

- In **2016,** MoFPI introduced an umbrella **Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters** or **SAMPADA,** which was proposed to be implemented with an allocation of ₹6,000 crores for the period of 2016-20.
- In **2017,** SAMPADA was **renamed** as the **Pradhan Mantri Kisan Sampada Yojana (PMKSY).**
- It is a **Central Sector Scheme.**
- **Objectives:**
    - To **supplement agriculture.**
    - To create **processing and preservation capacities.**
    - To **modernise and expand** existing food processing units with a view to **increasing the level of processing.**
    - To **add value** leading to the **reduction of wastage.**
- **Seven component schemes under PMKSY:**
    - Mega Food Parks.
    - Integrated Cold Chain and Value Addition Infrastructure.
    - Infrastructure for Agro-Processing Clusters.
    - Creation of Backward and Forward Linkages.
    - Creation/Expansion of Food Processing & Preservation Capacities.
    - Food Safety and Quality Assurance Infrastructure.
    - Human Resources and Institutions.
- Under PMKSY, **capital subsidy** in the form of **grants-in-aid ranging from 35% to 75%** of the eligible project cost **subject to a maximum specified limit** is provided to investors under the various schemes for **undertaking infrastructure, logistic projects and setting up of food processing units** in the country.

Source: PIB

Krishi Vigyan Kendra (KVK) Conference 2020

Why in News

The 11th National Krishi Vigyan Kendra (KVK) Conference was held in New Delhi.

Krishi Vigyan Kendra (KVK)

- KVK is an integral part of the **National Agricultural Research System (NARS).**
- It aims at assessment of location specific technology modules in agriculture and allied enterprises, through technology assessment, refinement and demonstrations.
- KVKs also produce quality technological products (seed, planting material, bio-agents, livestock) and make it available to farmers.

- The KVK scheme is **100% financed by the Government of India** and the KVKs are sanctioned to Agricultural Universities, ICAR institutes, related Government Departments and Non Government Organizations (NGOs) working in Agriculture.
- The first KVK was established in 1974 at **Puducherry.**
- KVKs act as a bridge between the laboratories and farmland.These are crucial to fulfilling the target of doubling farmers' income by 2022.

Developments in Agriculture

R&D has been done in the Agriculture sector.

- Superior crop varieties have been released. (Eg;-Wheat: HD 4728 (Pusa Malvi))
- 171 mobile apps developed for farmers. (Eg:-Kisan Suvidha)
- More than three lakh Common Service Centres (CSCs) opened.
- eNAM portal has been created so that the farmer gets a better price for his produce.

Note:

- It is estimated that India's agriculture and allied sector accounts only for around **14%** of the country's economy but for **42% of total employment.**
- It is a matter of concern that within this sector, the **contribution of Agriculture alone is lower than that of Horticulture, Fisheries and even Animal Husbandry.**

Source: PIB

Red Snow

Why in News

The phenomenon of **"red snow"** or **"watermelon"** has been observed over the last few weeks around **Ukraine's Vernadsky Research Base,** off the coast of **Antarctica's northernmost** peninsula.

The snow is red because of a **red-pigmented**, microscopic **algae called Chlamydomonas nivalis chlamydomonas,** which thrives in freezing water as the ice melts.

Key Points

- This phenomenon has been known since ancient times but now it raises concerns about climate change.
    Aristotle is believed to be one of the first to give a written account of red snow, over 2,000 years ago. He attributed the **redness of the snow to the colour of worms and grub** (larva of an insect), which are found in long-lying snow.
- According to modern-day scientists, it is an **algae species, Chlamydomonas nivalis chlamydomonas** which exists in the **snow in the polar and glacial regions** and carries a **red pigment to keep itself warm.**
    - Algae contain **chlorophyll (green pigment)** as well as a red carotene layer in their cells which mixes with the green colour to cause snow to look like "raspberry jam".
    - This layer is also said to **protect the algae from ultraviolet radiation.**
- These algae **change the snow's albedo** (the amount of light or radiation the snow surface is able to reflect back).
    - The intensity of the redness increases with the dense presence of the algae. The darker tinge leads to more absorption of heat by the snow. Subsequently, the ice melts faster.
    - The melting is **good for the microbes** that **need the liquid water to survive and thrive** but it is **bad for already melting glaciers.**

Source: IE

Renewable Energy Management Centers (REMCs)

Why in News

Recently, the Northern Region Renewable Energy Management Centre (NR-REMC) was inaugurated at a function in New Delhi.

Key Points

- **Renewable Energy Management Centers (REMCs)**
    - They are equipped with Artificial Intelligence based Renewable Energy (RE) forecasting and scheduling tools.
    - They provide greater visualization and enhanced situational awareness to the grid operators.
        Renewal energy supply can be seasonal (wind) or limited to some hours in the day (solar). It disturbs the power grid, used to seamless supply of thermal power.

- **Need:** The Government of India's target of **175 GW Renewable Energy (RE) capacity by 2022** driving accelerated RE penetration poses challenges to the grid management due to intermittent and variable nature of RE generation.
- The Government of India had approved the implementation of the REMCs as a **Central Scheme** and had mandated **POWERGRID,** a Maharatna Central Public Sector Enterprise (CPSE) **under the Ministry of Power as an Implementing Agency**.
- Presently, 55 GW of Renewable (Solar and Wind) is being monitored through the eleven REMCs, located in Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Madhya Pradesh, Gujarat, Rajasthan.

Source:PIB

Project Monitoring Group

- The Project Monitoring Group (PMG) is an **institutional mechanism** for the **expedited resolution of issues and regulatory bottlenecks** in projects with **investments upward Rs. 500 Crores** in India.
- Currently, PMG is situated at **Invest India, Department of Industry and Internal Trade (DPIIT), Ministry of Commerce.**
    - It was set up as a special cell in the Cabinet Secretariat, Government of India in 2013 and was subsequently brought under the administrative control of the Prime Minister's Office (PMO) in 2015.
    - The relocation was enabled in order to create a **one-stop facilitation destination for investors at all stages** of the investment process, including issue resolution.
- The PMG seeks to enlist the unresolved project issues in respect of **all mid and large-sized Public, Private and 'Public-Private Partnership' (PPP) Projects.**
- DPIIT is mandated as the **nodal body for the review of public and private projects** facing challenges and facilitates their resolution **through PMG.**
- The issues taken up by PMG are **both at Union and State-Level.**

Invest India

- Invest India is the **official** Investment Promotion and Facilitation Agency of India and acts as the **first point of reference for investors** in India.
- It is set up as a **non-profit** venture under the Department of Industrial Policy and Promotion, Ministry of Commerce and Industries.

Source: PIB

OPV 'Yard 45006 VAJRA'

Why in News

Recently, the **sixth Offshore Patrol Vessel (OPV) 'Yard 45006 VAJRA'** to enhance coastal security was launched.

- The OPV launched is the **sixth in the series of seven OPV projects** being built by M/s Larsen and Toubro (L&T) Shipbuilding under the **'Make in India'** policy.
    OPVs are long-range surface ships capable of coastal and offshore patrolling, policing maritime zones, control & surveillance, anti-smuggling & anti-piracy operations with limited wartime roles.
- The ship would be utilized for day and night patrol/surveillance along with anti-terrorist/ anti-smuggling operations in the **Exclusive Economic Zone (EEZ)** as well as Coastal Security.
- It will strengthen the efforts of **Indian Coast Guard** for securing over 7500 km vast coastline, an Exclusive Economic Zone (EEZ) of over 20 lakh sq kms and more than one lakh merchant ships transiting per year through Indian waters for global trade.

Indian Coast Guard

- The Indian Coast Guard was formally inaugurated on 19th August, 1978. It operates under the **Ministry of Defence.**
- The organization is headed by the Director General Indian Coast Guard (DGICG) exercising his overall command and superintendence from the Coast Guard Headquarters (CGHQ) located at **New Delhi.**
- It has jurisdiction over the territorial waters of India including contiguous zone and exclusive economic zone.
- It is responsible for marine environment protection in maritime zones of India and is coordinating authority for response to oil spills in Indian waters.

- It has a wide range of task capabilities for both surface and air operations. It is **one of the largest coast guards in the world.**

Source: PIB

Initiatives for Gender Equality in Science

Why in News

The President of India has announced a few initiatives for **gender advancement and equality in academic and research institutions** on the **National Science Day (28th February)** celebrations.

> The theme for National Science Day 2020 is **"Women in Science".**

Key Points

- **Vigyan Jyoti Scheme:**
  - Vigyan Jyoti Scheme is launched by the **Department of Science & Technology (DST).**
  - It is intended to create a **level-playing field** for the **meritorious girls in high school** to pursue Science, Technology, Engineering, and Mathematics (STEM) in their higher education.
  - It also offers exposure for girl students from the rural background to help to plan their journey from school to a job of their choice in the field of science.
- **GATI Scheme:**
  The Gender Advancement for Transforming Institutions (GATI) will develop a **comprehensive Charter and a framework for assessing Gender Equality** in STEM.

Source: PIB
