

**GOVERNANCE****Parakram Diwas**

Government of India has decided to celebrate birthday of Netaji Subhas Chandra Bose on the 23rd day of January every year as 'PARAKRAM DIWAS'.

**Key Points**

- Government of India has decided to celebrate the 125th Birth Anniversary year of Netaji Subhas Chandra Bose in a befitting manner at national and international level, beginning from 23rd January 2021.
- A High Level Committee, headed by the Prime Minister has been constituted for deciding the programs, and to supervise and guide the commemoration.
- Objective: To remember Netaji's indomitable spirit and selfless service to the nation and to inspire people of the country, especially the youth, to act with fortitude in the face of adversity as Netaji did.

**Important value additions**

- Subhash Chandra Bose was twice elected President of the Indian National Congress, (1938-Haripur and 1939-Tripuri).
- Owing to political differences, he resigned from the Congress Presidentship in 1939 and organised the All India Forward Bloc a faction within the Congress in Bengal.
- In Calcutta, Bose organised mass protests and was arrested.
- He was later put under house arrest from where he escaped.
- He went to Germany via Afghanistan.
- However, in 1943 Bose lost hope that Germany could be of any help in gaining India's independence.
- He then turned to Asia where he finally came at the helm of the Indian National Army (INA).
- INA found support among expatriate Indians and Bose formed the Azad Hind government which came to produce its own currency, postage stamps, court and civil code.
- It was recognised by Axis states.
- During the final two years of the war, Bose with considerable Japanese backing- led the forces of the Indian National Army into battle against the British.
- The I.N.A. was essentially non-communal, with Muslims quite prominent among its officers and ranks, and it also introduced the innovation of a women's detachment named after the Rani of Jhansi.

**INDIAN ECONOMY****Market Infrastructure Institutions (MIIs)**

The Securities and Exchange Board of India (SEBI) has floated a discussion paper on review of ownership and governance norms to facilitate new entrants to set up stock exchanges and depositories, otherwise called as market infrastructure institutions (MIIs).

**Key Points**

- As per the key proposals, a resident promoter setting up an MII may hold up to 100% shareholding, which will be brought down to not more than either 51% or 26% in 10 years.
- A foreign promoter from Financial Action Task Force (FATF) member jurisdictions setting up an MII may hold up to 49% shareholding, which shall be brought down to not more than either 26% or 15% in 10 years.
- Foreign individuals or entities from other than FATF member jurisdictions may acquire or hold up to 10% in an MII.
- Any person other than the promoter may acquire or hold less than 25% shareholding.
- At least 50% of ownership of the MII may be represented by individuals or entities with experience of five years or more in the areas of capital markets or technology related to financial services.

**INTERNATIONAL RELATION****India-Nepal Joint Commission Meet**

Recently, the 6th India-Nepal Joint Commission meeting was held where in Nepal raised the Kalapani boundary dispute with India. The two sides also discussed cooperation in a range of areas, including power, oil and gas, water resources, capacity building and tourism among others.

India distanced itself from discussing the matter at the Joint Commission level as there is a dedicated Foreign Secretary-level mechanism to discuss boundary disputes.

**Key Points**

- Nepal's requirement for vaccines to fight the Covid-19 pandemic was discussed as it has approved Serum Institute of India's (SII) Covishield vaccine.
- Both the delegations reviewed the development partnership and discussed the benefit of the Integrated Check Posts (ICP) at Birgunj and Biratnagar (Nepal). The Posts have helped in seamless movement of people and trade between the two countries.

**India - Nepal Relations****Historical Ties:**

- Nepal is an important neighbour of India and occupies special significance in its foreign policy because of the geographic, historical, cultural and economic linkages/ties that span centuries.
- India and Nepal share similar ties in terms of Hinduism and Buddhism with Buddha's birthplace Lumbini located in present day Nepal.
- The two countries not only share an open border and unhindered movement of people, but they also have close bonds through marriages and familial ties, popularly known as Roti-Beti ka Rishta.

**Connectivity:**

- Nepal being a landlocked country, it is surrounded by India from three sides and one side is open towards Tibet which has very limited vehicular access.
- India-Nepal has undertaken various connectivity programs to enhance people-to-people linkages and promote economic growth and development.

**Defence Cooperation**

- Bilateral defence cooperation includes assistance to Nepalese Army in its modernization through provision of equipment and training.
- The Gorkha Regiments of the Indian Army are raised partly by recruitment from hill districts of Nepal.
- India from 2011, every year undertakes joint military exercise with Nepal known as Surya Kiran.

**Multilateral Partnership**

- India and Nepal share multiple multilateral forums such as BBIN (Bangladesh, Bhutan, India, and Nepal), BIMSTEC (Bay of Bengal Initiative for Multi Sectoral Technical and Economic Cooperation), Non Aligned Movement, and SAARC (South Asian Association for Regional Cooperation) etc.

**Issues & Challenges****China's Intervention:**

- As a landlocked nation, Nepal depended for many years on Indian imports, and India played an active role in Nepal's affairs.
- However, in recent years, Nepal has drifted away from India's influence, and China has gradually filled the space with investments, aid and loans.
- China considers Nepal a key partner in its Belt and Road Initiative (BRI), and wants to invest in Nepal's infrastructure as part of its grand plans to boost global trade.

**Border Dispute:**

- The issue erupted in November 2019 when Nepal had released a new political map that claims Kalapani, Limpiyadhura and Lipulekh of Uttarakhand as part of Nepal's territory. The area of Susta (West Champaran district, Bihar) can also be noted in the new map.

**Way Forward**

India should negotiate diplomatically to resolve the boundary dispute with Nepal under the aegis of International law on Trans-boundary Water Disputes. In this case, boundary dispute resolution between India and Bangladesh should serve as a model.

India should engage more proactively with Nepal in terms of people to people engagement, bureaucratic engagement as well as political interactions.

Mere differences shall not turn into disputes and both the countries should resolve the issues peacefully.

**GEOGRAPHY**

The India Meteorological Department (IMD) may introduce new monsoon models in 2021 to better forecast changes in rainfall.

**Key Points**

- There were three different models that could be tested this year.

- Two of them were dynamical models and one a statistical model.
- In the former, the climate on any particular day is simulated on supercomputers and meteorologists observe the changing daily output.
- The other is the traditional statistical model that equates relationships of physical parameters, such as for instance sea surface temperatures, snowfall, the temperature of landmass etc, with the actual observed rainfall in the past.

**The three models under consideration are:**

- 12 global circulation models (dynamical) whose outputs would be combined into a single one;
- a model that gauges rainfall based on the sea surface temperature in the tropics (developed by Professor Suman Nigam, University of Maryland, U.S.) and
- the statistical model based on climate variables observed during the pre-monsoon.
- All of them are smaller models which are combined to arrive at an average value.
- The traditional statistical model would continue to be used this year.

**NATIONAL DEVELOPMENT****1st National Conference Of States On Logistics**

Union Minister of Commerce & Industry recently addressed the 1st National Conference of States on Logistics.

**Key Points**

National Logistics Policy, which is under consultation, along with the National Logistics Council and State Logistics Coordination Committee, will work as a template for better coordination and integrated development for logistics centre.

Logistics consists of 5R's: Getting the Right product – In the Right condition – At the Right place – At the Right time – To the Right customer.

**Important Facts**

India has a \$200 billion logistics ecosystem.

A good part of it is supported by the Indian Railways.

About 13-14% cost of a product is logistics, and Ministry shall work towards bringing it down to about 8%.

**SCIENCE AND TECHNOLOGY****DRDO hands over Motor Bike Ambulance 'Rakshita' to CRPF**

DRDO hands over Motor Bike Ambulance 'Rakshita' to CRPF.

**Key Points**

- Institute of Nuclear Medicine and Allied Sciences (INMAS), Delhi based DRDO laboratory, handed over Rakshita to Central Reserve Police Force (CRPF).
- It is a bike-based casualty transport emergency vehicle.



- Rakshita is fitted with a customized reclining Casualty Evacuation Seat (CES), which can be fitted in and taken out as per requirement.
- The bike ambulance will help in overcoming the problems faced by Indian security forces and emergency healthcare providers.
- It will provide life-saving aid for evacuation of injured patients from low intensity conflict areas.

- This bike ambulance is useful not only for the paramilitary and military forces but has potential civil applications too.

### BIODIVERSITY & ENVIRONMENT

#### Untreated industrial effluent increases pollution in Gujarat rivers

The unchecked flow of untreated industrial effluent into rivers in Gujarat has led to increasing pollution in the Sabarmati, Mahisagar, Narmada, Vishwamitri and Bhadar.

#### Key Points

- According to data from the Ministry of Environment and Forest (MoEF), the Sabarmati is among the most polluted rivers in the country.
- Gujarat ranks fourth among the top five States with highly polluted rivers, with as many as 20 rivers in the critically polluted category.
- As per the official parameters, if the chemical oxygen demand (COD), which indicates organic pollutant load, is higher than 250 mg per litre, then it should not be released into the rivers.
- Most of the Gujarat rivers where the effluents are dumped into, the COD level is in the range of 700 to 1000 mg per litre.
- While Dissolved Oxygen (DO) level (indicating the health of a river) in perennial rivers like Mahisgar should be in the range of 6 to 8 mg per litre, it is actually below 2.9 mg per litre.

### IMPORTANT FACTS FOR PRELIM

#### Mukundpura CM2

A new study by Geological Survey of India, Kolkata has shed light on the mineralogy of the meteorite which fell in 2017 in Mukundpura village near Jaipur.

#### Key Points



Hand specimen of Mukundpura CM2

- The meteorite named Mukundpura CM2 was classified to be a carbonaceous chondrite.
- The composition of carbonaceous chondrites is also similar to the Sun.
- This is a type of stony meteorite, considered the most primitive meteorite and a remnant of the first solid bodies to accumulate in the solar system.
- Meteorites are broadly classified into three groups – stony (silicate-rich), iron (Fe–Ni alloy), and stony-iron (mixed silicate–iron alloy).
- Chondrites are silicate-droplet-bearing meteorites, and this Mukundpura chondrite is the fifth carbonaceous meteorite known to fall in India.
- The results of the Mukundpura CM2 study are relevant to the surface composition of near-Earth asteroids Ryugu and Bennu.

### DAILY ANSWER WRITING PRACTICE

**Qns. What are the challenges and opportunities of the food processing sector in the country? How can the income of the farmers be substantially increased by encouraging food processing? (UPSC GS-3 Mains, 2020)**

Ans:

Food processing generally includes the basic preparation of foods, the alteration of a food product into another form, and preservation and packaging techniques.

India, being an agrarian economy, has a natural advantage in terms of food processing industries (FPI). With the rise in demand for agri-products, there will be a commensurate rise in the price paid to the farmer, thereby increasing the income.

#### Challenges Faced by Food Processing Industry In India

- Supply Side Bottlenecks: Fragmented holdings result in low farm productivity, due to this farmers are left with a small and dispersed marketable surplus.
- Demand Side Bottlenecks: The demand for processed food is mainly restricted to urban areas of India.
- Infrastructure Bottlenecks: Lack of mechanization, high seasonality, perishability, and lack of proper intermediation (supply chain) results in a lack of availability of raw material.
- Further, the lack of all-weather roads and connectivity make supply erratic.
- Due to inadequate infrastructure, more than 30% of the produce from the farm gate is lost.
- Informalization in Food Processing Industry: The food processing industry has a high concentration of unorganized segments, representing almost 75% across all product categories. Thus, causes inefficiencies in the existing production system.
- These factors, in turn, impedes food processing and its exports.
- Deficiencies in the Regulatory Environment: There are numerous laws, under the jurisdiction of different ministries and departments, which govern food safety and packaging.
- The multiplicity of legislation and administrative delays leads to contradictions in food safety specifications and guidelines.
- Sanitary and Phytosanitary (SPS) Measure: The stringent (SPS) measures applied by developed countries also impedes the exports of processed foods.

**Opportunities Associated with Food Processing Industries**

- Employment Generating Sector: The Food Processing Industry (FPI) is of enormous significance as it provides vital linkages and synergies that it promotes between the two pillars of the economy, i.e. agriculture and industry.
- Therefore, it provides direct and indirect employment opportunities.
- Ensuring Nutritional Security: Processed foods when fortified with vitamins and minerals can reduce the nutritional gap in the population.
- Boosts Trade and Earns Foreign exchange: It is an important source of foreign exchange. For e.g. Indian Basmati rice is in great demand in Middle Eastern countries.
- Curbing Food Inflation: Processing increases the shelf life of the food thus keeping supplies in tune with the demand thereby controlling food-inflation. For e.g. Frozen Safal peas are available throughout the year.

**Food Processing Industry & Farmers' Income Correlation**

- High-yield Varieties (HYV) of Food: Indian agriculture is presently dominated by cereals oriented production, but the next phase of income boost for farmers will come from switching to high-yield varieties (HYV) of food like horticulture, dairy, etc.
- However, the issue associated with HYV is low shelf life. This is where FPI can come into play and subsequently increase farmers' income.
- Increasing Demand For Agro-Products: Urbanization is increasing at a rapid pace in India, which subsequently, increases the demand for processed food.
- Moreover, India is one of the largest producers of food in the world but processes less than 10% of what it produces. Given this, there is a scope of the rise in demand for processed food, which in turn will lead to rising in farmers' income.
- Curbing Rural Unemployment: As FPI links agriculture and industry, it will help in addressing the problem of disguised unemployment that affects the productivity of Indian agriculture.
- Food Processing being a labor-intensive industry will provide localized employment opportunities and thus will reduce the push factor in source regions of migration.

**Conclusion**

Food processing provides an opportunity to utilize excess production efficiently, ensuring food & nutritional security and supporting farmers. Thus, food processing has become an integral part of the food supply chain in the global economy.

India being an agrarian dominated country must leverage its potential in the Food Processing Industry.

**DAILY QUIZ**

1. Consider the following statements about Rare Diseases:
  1. More than half of the rare diseases are genetic in origin and hence mainly impact children.
  2. Lysosomal storage disorder is a metabolic disease caused by excessive release of enzymes.

3. Duchenne Muscular Dystrophy (DMD) is a rare genetic disorder caused by alterations of protein in the body.

Which of the statements given above is/are correct?

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

2. Consider the following statements about the Indian Star Tortoise:

- 1. It is found in Central and Southern part of India only.
- 2. It is protected under Schedule 1 of the Wild Life Protection Act 1972
- 3. It is listed as Vulnerable in the IUCN Red List.

Which of the statements given above is/are not correct?

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

3. With reference to the Bad Bank, consider the following statements:

- 1. These are the banking institutions which are facing balance sheet problems.
- 2. The banks are restricted from getting involved in lending and taking deposits.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) **Neither 1 nor 2**

4. With reference to the Central Vigilance Commission (CVC), consider the following statements:

- 1. The CVC was set up on the recommendations of the K. Santhanam Committee.
- 2. The CVC is an investigating agency under the Union Home Ministry.

Which of the statements given above is/are correct?

- a) **1 only**
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

5. With reference to Indian Railway Finance Corporation (IRFC), consider the following statements:

- 1. It is the dedicated market borrowing arm of the Indian Railways.
- 2. It could lease the railway infrastructure assets.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) **Both 1 and 2**
- d) Neither 1 nor 2