International relations

Pakistan Retained on FATF’s ‘Greylist’

Syllabus: GS 2/International Organisations & Groupings

In News

• Pakistan will continue to be on the “Grey List” of the FATF as it needs to “further demonstrate” that action is being taken against UN-designated terrorists.

About

• The FATF also announced the ‘greylisting’ of Jordan, Mali and Turkey, following the conclusion of the Plenary session.

• FATF observed that Pakistan needed to further demonstrate that investigations and prosecutions were being pursued against the senior leadership of U.N.-designated terror groups, which include Lashkar-e-Taiba, Jaish-e-Mohammed, al-Qaeda and the Taliban.

Background

• Pakistan has been on the FATF grey list since June 2018 and was asked to implement the FATF Action Plan fully by September 2019.

  ○ It was in the same category from 2012 to 2015 too.

• Pakistan’s inclusion in the grey list can be attributed to the fact that the country’s anti-terror laws are still not in line with FATF standards and also with the latest UN resolution 2462 that pitches for criminalising terrorist financing.

About Financial Action Task Force

• It is an inter-governmental decision-making body. It was established in 1989 during the G7 Summit in Paris to develop policies against money laundering and its Secretariat is located in Paris.
- **India became an Observer at FATF in 2006.** Since then, it had been working towards full-fledged membership. On June 25, 2010, India was taken in as the 34th country member of FATF.

- **Functions:**
  - Bring national legislative and regulatory reforms in money laundering and efforts to stop funding for weapons of mass destruction.
  - Review money laundering and terrorist financing techniques and continuously strengthen its standards to address new risks, such as the regulation of virtual assets, which have spread as cryptocurrencies gain popularity.
  - Monitor countries to ensure they implement the FATF Standards fully and effectively and hold countries to account that do not comply with the standards.

- **FATF Lists:**
  - **Black List:** Countries known as Non-Cooperative Countries or Territories (NCCTs) are put on the blacklist. These countries support terror funding and money laundering activities. The FATF revises the blacklist regularly, adding or deleting entries.
    - Enlisted nations: North Korea and Iran.
  - **Grey List:** Countries that are considered a safe haven for supporting terror funding and money laundering are put in the FATF grey list. This inclusion serves as a warning to the country that it may enter the blacklist.

**Consequences of being in the FATF Grey List**
- The countries in the grey list may face
  - Economic sanctions from IMF, World Bank, ADB.
  - The problem in getting loans from the IMF, World Bank, ADB and other countries.
  - Reduction in international trade.
  - International boycott.

*Source: TH*
Biodiversity & Environment

Climate Change in Third Pole

Syllabus: GS 3, Environment

In News

- The two lakes — Chibzhang Co and Dorroidong Co — in the Hindu Kush Himalaya region grew larger between October 1987 and 2021.
  - But much of these glaciers are retreating due to rising temperatures, accelerating ice loss and meltwater runoff.

Climate Change

- United Nations-backed research in June 2021 flagged that
  - Up to 2 billion people in southeast Asia can face food and water shortages
    - even as the Hindu-Kush-Himalayan (HKH) Region mountain ranges lose up to two-thirds of their ice by 2100.
  - In the future, even if global warming is kept to 1.5 degrees C above the pre-industrialisation levels,
    - warming in the HKH region is likely to be at least 0.3 degrees C higher, and
    - In the northwest Himalaya and Karakoram at least 0.7 degrees C higher.

Third Pole and the Worrying Signs

- The climate crisis is altering the geography of the Third Pole.
  - The region's glaciers have been melting faster than any other part of the world.
  - A study published in 2019 on the ice thickness of glaciers estimated that
    - Glaciers in the HKH may contain 27 per cent less ice than previously suggested.

- Reasons of retreating, thinning and shrinking of Glaciers
  - rising temperatures
  - accelerating ice loss
  - meltwater runoff.
This region also accounts for the largest reserve of freshwater lakes.

- Satellite images from the region have reported growth in the size of its lakes.

### Third Pole

- Hindu-Kush-Himalayan (HKH) Region is often referred to as the Third pole.
- It spans over countries like Afghanistan, Bangladesh, Bhutan, China, India, Kyrgyzstan, Mongolia, Myanmar, Nepal, Pakistan, Tajikistan, and Uzbekistan.
- It traverses about 5 million square kilometres and hosts a large and culturally diverse population.
- It divides the valley of the Amu Darya (the ancient Oxus) to the north from the Indus River valley to the south.
- It contains vast cryospheric zones and is also the world’s largest store of snow and ice outside the polar region.

### Observations of NASA’s Earth Observatory

- Two lakes Chibzhang Co and Dorsoidong Co
  - **Location:** to the west of the Tanggula Mountains.
    - a small range in the central part of the Tibetan Plateau.
  - **Increase in size**
    - Grew larger between October 1987 (when the first image was acquired) and October 2021 (when the second image was acquired).
    - The area of the lakes grew by 23 per cent between 1976 and 2017, according to the researchers.
  - **Increased Depth**
    - The lakes have become much deeper over time.
    - The depth of the channel that connects the two main lobes of the lake increased.
      - According to data from NASA’s global water monitor, the increase is by about 26 feet between the early 1990s and 2021
  - **Water Levels**
    - Water levels were much steadier in the lakes that received water from glacial melting than in the lakes that received water from precipitation.
    - About half of the overall increase in the size of lakes was driven by glacial melting.
Processes that affect the size of the lakes

- Amount of annual precipitation
- Rate of evaporation
- Amount of runoff from melting glaciers
- Permafrost during summer months.

(Image: October 12, 1987. Source: NASA: The colour difference between the two lakes in the 1987 image was caused by the two lakes being separated by a thin strip of land. The two lakes merged into one in the mid-2000s when rising water levels submerged the strip of land.)

(Image: October 9, 2021. Source: NASA)
Way Ahead

- The world needs to mitigate the climate change crisis by Policies and actions as described below
  - **Net Zero targets**
    - The countries need to push for net-zero rather than the targets of gross zeros as per IPCC’s 6th Assessment Report.
  - **Food Security**
    - Farmers will need support to design and invest in locally appropriate agricultural practices.
  - **Energy Security**
    - New hydropower plants and grids will need to take into account the changing climate and water availability.
    - India can be a model in utilising Solar and other Renewable Energy.
  - **Information dissemination**
    - Early warning systems need to be improved and upgraded.
  - **More R&D and Investment**
    - Higher spending in discovering novel techniques for capacity building and infrastructure design can go miles in mitigating climate change.

**Source:** DTE

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Polity and Governance

E-Cigarettes

**Syllabus:** GS 2/Government Policies & Interventions/Health/Issues Relating to Development

**In News**

- E-cigarettes *don’t help smokers quit cigarettes* according to a new longitudinal study of smokers in the United States.

**What are E-cigarettes?**

- E-cigarettes are sometimes called “e-cigs,” “vapes,” “e-hookahs,” “vape pens,” and “Electronic Nicotine Delivery Systems (ENDS).”
• Some e-cigarettes look like regular cigarettes, cigars, or pipes. Some look like USB flash drives, pens, and other everyday items.

• Using an e-cigarette is sometimes called “vaping.”

Potential Benefits: E-cigarettes have often been suggested as a potential means to help smokers quit.

What are the harmful effects?

○ E-cigarettes are not safe for youth, young adults, and pregnant women, as well as adults who do not currently use tobacco products.

○ In 2016, the U.S. Surgeon General had concluded that “e-cigarette use among youths and young adults is a public health concern; exposure to nicotine during adolescence can cause addiction and can harm the developing adolescent brain.”

○ Study of 2018: It found the use of e-cigarette daily was associated with a 79% increase in heart attack risk after other variables were taken into account.

○ the Indian Council of Medical Research (ICMR): According to a white paper on e-cigarettes by the Indian Council of Medical Research (ICMR), depending on the battery output voltage used, nicotine solvents can release in varying amounts potential carcinogens such as acetaldehyde, formaldehyde and acetone.
- The liquid-vaporizing solutions also contain “toxic chemicals and metals that can cause several adverse health effects including cancers and diseases of the heart, lungs and brain”.

- **Defective e-cigarette batteries** have caused fires and explosions, some of which have resulted in serious injuries. Most explosions happened when the e-cigarette batteries were being charged.

**What is in e-cigarette aerosol?**

- The e-cigarette aerosol that users breathe from the device and exhale can contain harmful and potentially harmful substances, including:
  - Nicotine
  - Ultrafine particles that can be inhaled deep into the lungs
  - Flavouring such as diacetyl, a chemical linked to a serious lung disease
  - Volatile organic compounds
  - Cancer-causing chemicals
  - Heavy metals such as nickel, tin, and lead

![Diagram of e-cigarette aerosol](Image Courtesy: CDC.gov)

**What is Nicotine?**

- Nicotine is a **highly addictive chemical compound** present in a tobacco plant.
- All tobacco products contain nicotine, including cigarettes, non-combusted cigarettes (commonly referred to as “heat-not-burn tobacco products” or “heated tobacco products”), cigars, smokeless tobacco, hookah tobacco, and most e-cigarettes.
- Nicotine chemical symbol **over a woman holding her head**
- Using any tobacco product can lead to nicotine addiction. This is because nicotine can change the way the brain works, causing cravings for more of it.
Steps of Indian Government

- **Prohibition of Electronic Cigarettes Bill, 2019**: It prohibits production, manufacture, import, export, transport, sale, distribution, storage and advertisement of e-cigarettes.

- **Combating the menace of e-Cigarettes through a Statute on Prohibition of Electronic Cigarettes and like devices, regulation of display and use of tobacco products in films and television programs.**

- **Cigarettes Act, 1975**: Tobacco control legislation in India dates back to the Cigarettes Act, 1975 which mandates the display of statutory health warnings in advertisements and on cartons and cigarette packages.

- **Delhi Prohibition of Smoking and Non-Smokers Health Protection Act**: It was passed in the Delhi assembly in 1997 and became the model for Central Legislation banning smoking in public places in 2002, on the directions of the Supreme Court.

- **Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade, Commerce, Production, Supply and Distribution) Act (COTPA) 2003**:  
  ○ The comprehensive tobacco control legislation aims to provide smoke-free public places and also places restrictions on tobacco advertising and promotion.

- **Tobacco Quitline Services**: These toll-free quitline services (1800-112-356) were initiated in 2016 and were expanded in September 2018.
  ○ These are now available in 16 languages and other local dialects from 4 centres.
• National Health Policy 2017: It sets an ambitious target of reducing tobacco use by 30 per cent by 2025, which has been devised keeping in view the targets for control of NCDs.

• Ratification of the WHO Framework Convention on Tobacco Control (FCTC).

• National Tobacco Control Programme (NTCP)
  ○ The Ministry of Health and Family Welfare launched the National Tobacco Control Programme (NTCP) in 2007-08 in 42 districts of 21 States/Union Territories of the country.
  ○ Currently, the Programme is being implemented in all States/Union Territories covering over 600 districts across the country.
  ○ Objectives
    ■ To bring about greater awareness about the harmful effects of tobacco use and Tobacco Control Laws.

• Other steps highlighted
  ○ Measures like the displaying large warnings covering 85% of the area on packs of tobacco products, the introduction of a dedicated helpline for assisting people to quit tobacco

Way Forward

• Some people believe that e-cigarettes are less harmful than regular cigarettes but that doesn’t mean e-cigarettes are safe.

• Scientists still have a lot to learn about whether e-cigarettes are effective for quitting smoking and additional research can help understand long-term health effects.

• Schools can raise awareness of the dangers of initiating nicotine and tobacco use by providing information resources and making their campuses tobacco-free.

• Youth groups can organize local events to engage and educate young people on the many harms of tobacco use, including its impact on personal finances.

• Film, television and drama production companies can pledge to no longer depict tobacco or e-cigarette use.

• Celebrities and social influencers can reject offers of “brand ambassadorship” and refuse sponsorship by nicotine and tobacco industries.
Tobacco Consumption in India

- In India, over 1.3 million deaths are attributable to tobacco use every year amounting to 3500 deaths per day, imposing a lot of avoidable socio-economic burden.
- In addition to the death and diseases, tobacco also impacts the economic development of the country.
- As per the WHO study titled “Economic Costs of Diseases and Deaths Attributable to Tobacco Use in India” it has been estimated that the economic burden of diseases and deaths attributable to tobacco use of tobacco in India was as high as Rs. 1.77 lakh crores, amounting to approx 1 per cent of Gross Domestic Product (GDP).

Consequences of Tobacco Consumption

- Tobacco use has negative social consequences as it affects social interactions and relationships negatively.
- It adds to the financial burden as smokers burn through an average of USD 1.4 million in personal costs, including spending on cigarettes and associated medical costs.
- The tobacco industry exploits farmers and children and deteriorates growers' health as they are exposed to ill health by nicotine that is absorbed through the skin, as well as exposure to heavy pesticides and tobacco dust.
- It has physical impacts on almost every body part and their functions and increases the risk of cancers, heart diseases and other fertility and reproduction-related problems.
- Smokers face a 40-50 per cent higher risk of developing severe disease deaths from Covid-19.
- Passive smoking or second-hand smoke threatens the health of those who do not smoke.
- Tobacco causes air pollution and pollutes the environment as cigarette butts are among the most commonly discarded pieces of waste globally.
- Hazardous substances like arsenic, lead, nicotine and formaldehyde have been identified in cigarette butts, which leach into aquatic environments and soil.

Global Reduction Efforts

- Director General’s Special Recognition Awards: Every year, WHO recognizes individuals or organizations in WHO Regions for their accomplishments in the area of tobacco control.
WHO Framework Convention on Tobacco Control (WHO FCTC): It provides a strong, concerted response to the global tobacco epidemic and its enormous health, social, environmental and economic costs.

Global Youth Tobacco Survey: It is a self-administered, school-based survey of students in grades associated with 13 to 15 years of age designed to enhance the capacity of countries to monitor tobacco use among youth and to guide the implementation and evaluation of tobacco prevention and control programmes.

United Nations Inter-Agency Task Force on the Prevention and Control of Non-Communicable Diseases (NCDs): It has both the WHO and the Secretariat of the WHO FCTC as leading participants, has crafted a Model policy for UN agencies on preventing tobacco industry interference, a strong policy to prevent industry tactics operating in the UN and then ensured its implementation at the intergovernmental level.

Firewall by WHO: In 2007, WHO established a firewall 2007 to protect policies from commercial and other vested interests of the tobacco industry.

Other Steps: In 2008, the UN General Assembly adopted a Resolution for Smoke-free United Nations Premises.
  ○ In 2012, the United Nations Economic and Social Council called for “system-wide coherence on tobacco control”.

Source: IE

Biodiversity & Environment

Global Agricultural Productivity Report

Syllabus: GS3/ Environmental Pollution and Degradation

In News

• According to the recent Global Agricultural Productivity Report, global agricultural productivity is not growing as fast as the demand for food, amid the impact of climate change.

Key Highlights

• Rising Demand: During the next 30 years, demand for food and agricultural goods, including meat, dairy, fruits, vegetables, timber, oilseeds for cooking and industrial uses will increase.
• **Depleting Resources:** At the same time, the natural resource base and ecosystems are under stress from climate change, soil degradation, and poor water management.

• **Varying Productivity:** Productivity growth rates vary significantly by region and country.

• **Many Obstacles:** Poverty, food insecurity, and malnutrition remain stubbornly high, condemning hundreds of millions of people to ill health and unfulfilled potential.

• **Increased Productivity is Must:** Accelerating productivity growth at all scales of production is imperative to meet the needs of consumers and address current and future threats to human and environmental well-being.

Image Courtesy: [GAP](https://www.gap.org)
GAP Initiative

- **Mission:**
  - The Global Agricultural Productivity (GAP) Initiative is central to the mission of CALS Global in the Virginia Tech College of Agriculture and Life Sciences (CALS):
    - build partnerships,
    - drive thought-leadership, and
    - create opportunities for students and faculty to serve globally.

- **Release & Data:**
  - The report was released in conjunction with the World Food Prize Foundation’s annual conference.
  - It primarily made use of data from the United States Department of Agriculture.

- **Opportunities:**
  - In addition to producing this annual assessment of global progress toward productive, sustainable agricultural systems, the GAP Initiative creates opportunities for collaboration and learning between its partners, the university, and stakeholders worldwide.

- **Stakeholder:**
  - The GAP Initiative brings together experts from the private sector, NGOs, conservation and nutrition organizations, universities, and global research institutions.

- **Total Factor Productivity (TFP):**
  - TFP tracks changes in how efficiently agricultural inputs such as land, labour, fertiliser, feed, machinery and livestock are transformed into outputs like crops, livestock and aquaculture products.
  - TFP growth is influenced by climate change, weather events, changes in fiscal policy, market conditions, investments in infrastructure and agricultural research and development.

- **Partners:**
  - **Supporting Partners** provide financial support and serve on the Leadership Council, offering essential perspectives on critical issues facing agricultural systems worldwide.
○ **Consultative Partners** contribute their knowledge of agricultural R&D and extension, natural resource conservation, human nutrition, international development, gender equity, and the needs of small-scale farmers.

![Without Productivity Growth](image)

Image Courtesy: **GAP**

**Way Ahead**

- Accelerate investments in agricultural research and development to increase and preserve productivity gains, especially for small farmers.
- Report identified **six strategies and policies** that would create sustainable agricultural growth at all scales of production:
  ○ Invest in agricultural research and development
  ○ Embrace science-and-information-based technologies
  ○ Improve infrastructure for transportation, information and finance
  ○ Cultivate partnerships for sustainable agriculture, economic growth and improved nutrition
  ○ Expand and improve local, regional and global trade
  ○ Reduce post-harvest loss and food waste.
Yield
● It measures output per unit of a single input, for example, the number of crops harvested on a hectare of land.
● Yields can increase through productivity growth, but they can also increase by applying more inputs, called input intensification.
● Therefore, an increase in yield may or may not represent improvements in sustainability.

Total Factor Productivity (TFP)
● It captures the interaction between multiple agricultural inputs and outputs.
● TFP growth indicates that more farmers generate more crops, livestock, and aquaculture products with the same amount or less land, labor, fertilizer, feed, machinery, and livestock.
● As a result, TFP is a powerful metric for evaluating and monitoring the sustainability of agricultural systems.

Source: DTE

Polity & Governance

BharatNet PPP


In News
● The Department of Telecommunications (DoT) is likely to soon come out with a revised tender for the public-private partnership (PPP) implementation of BharatNet.

BharatNet
● BharatNet project originally aimed to provide broadband services at 100 Mbps to around 2.5 lakh gram panchayats of the country.
● Aim: To provide on-demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households of India especially in rural areas.
• **Implementing Agency:** The project is being implemented by Bharat Broadband Network Limited (BBNL) through a Special Purpose Vehicle (SPV).

• **Funding:** The entire project is being funded by the Universal Service Obligation Fund (USOF), which was set up for improving telecom services in rural and remote areas of the country.

• **Importance:**
  - It is a highly scalable network infrastructure accessible on a non-discriminatory basis.
  - It is the world’s largest rural connectivity scheme to be connected by the Optical Fibre network.
  - States are contributing free Rights of Way for establishing the Optical Fibre Network.

• **Support:** Central Public Sector in Undertakings (CPSUs) BSNL, RailTel, and PGCIL are providing the optical fibre network for broadband connections for the BharatNet project.

• **Benefits:**
  - The BharatNet project would reduce the cost of broadband services in India.
  - The project would have advantages like easy maintenance, faster implementation, and utilization of the present power line infrastructure.
  - It would provide internet connectivity to citizens especially in rural areas via Wi-Fi Hotspots.
  - It would provide a boost to the economy and would generate around 10 crore man-days of employment during the rollout of the project.
  - It will help in the expedition of government’s initiatives such as Make In India, Start-up India, Stand-up India etc.

**Significance of BharatNet PPP**

• **Enhanced Efficiency:** It will leverage Private Sector efficiency for operation, maintenance, utilization and revenue generation and is expected to result in the faster rollout of BharatNet.
• **Better access of e-services:** Extension of reach of BharatNet to all inhabited villages with reliable, quality, high-speed broadband will enable better access of e-services offered by various Central and State Government agencies.

• **Augmenting Applications:** It will also enable online education, telemedicine, skill development, e-commerce and other applications of broadband.

• **Increased Revenue:** It is expected that revenue will be generated from different sources including the proliferation of broadband connections to individuals & institutions, sale of dark fibre, Fiberization of mobile towers, e-commerce etc.

• **Benefits for Rural Areas:** The proliferation of broadband in rural areas will bridge the rural-urban divide of digital access, accelerate the achievement of Digital India, increase direct and indirect employment and income generation.

• **Consumer-friendly advantages:**
  - Use of innovative technology by the Private Sector Provider for the consumers;
  - High quality of service and Service Level to consumers;
  - Faster deployment of network and quick connectivity to consumers;
  - Competitive tariffs for services;
  - Variety of services on high-speed broadband including Over top (OTT) services and multi-media services as part of packages offered to consumers
  - Access to all online services.
  - Better quality of service,
  - Enhanced consumer experience and
  - leverage private sector expertise, entrepreneurship and capacities for accelerating the achievement of digital India.
  - Substantial savings of public money.

**Way Ahead**

- The PPP Model in this critical infrastructure of Telecom is a novel initiative.
- The States where PPP Model is envisaged will facilitate the free Right of Way.
- The Private Sector Partner is expected to bring an equity investment and raise resources towards capital expenditure and for operation and maintenance of the network.

**Source:** IE
Facts In News
Indian Economy

Sovereign Gold Bond

Syllabus: GS 3/Indian Economy & Related Issues

In News

- The Government of India in consultation with the Reserve Bank of India has decided to issue Sovereign Gold Bonds.

About Sovereign Gold Bonds

- **Launched in:** November 2015.
- **Objective:** To reduce the demand for physical gold and shift a part of the domestic savings (to purchase of gold) into financial savings.
- **Issuance:** The Gold Bonds are issued as Government of India Stock under the Government Securities (GS) Act, 2006.
  - These are issued by the Reserve Bank of India (RBI) on behalf of the Government of India.
  - The Bonds will be sold through Scheduled Commercial banks (except Small Finance Banks and Payment Banks), Stock Holding Corporation of India Limited (SHCIL), Clearing Corporation of India Limited (CCIL), designated post offices, and recognised stock exchanges viz., National Stock Exchange of India Limited and Bombay Stock Exchange Limited.
- **Eligibility:** It is restricted for sale to resident individuals, Hindu Undivided Families (HUFs), trusts, universities and charitable institutions.
- **Price:** The price is calculated based on the spot price of gold as provided by the Mumbai-based India Bullion and Jewellers Association (IBJA).
- **Term:** Maturity period is 8 years, with an option to exit the investment after the first five years.
- **Investment Limit:** Gold bonds can be purchased in multiples of one unit.
  - The upper limit for retail (individual) investors and HUFs is 4 kilograms (4,000 units) each per financial year.
  - For trusts and similar entities, an upper limit of 20 kilograms per financial year is applicable.
  - Minimum permissible investment is 1 gram of gold.
• **Interest Rate:** A fixed rate of 2.5% per annum is applicable on the scheme, payable semi-annually.
  
  ○ The interest on Gold Bonds shall be taxable as per the provision of the Income Tax Act, 1961.

  **Source:** PIB

**Indian Economy**

**Strategic Petroleum Reserves**

**Syllabus:** GS 3/Mobilisation of Resources/Growth & Development

**In News**

• Recently, India has started **selling crude oil from its strategic reserves** to state refiners with a view to soften the blow from **surging global crude prices**.

**About**

• Strategic petroleum reserves are essentially **huge stockpiles of crude oil** to keep the **wheels of the country running in crunch situations**.

• The petroleum reserves are strategic in nature and the crude oil stored in these reserves will be used **during an oil shortage event, as and when declared so by the Government of India**.

• **Strategic Petroleum Reserves (SPR) programme:** Under the first phase of the Strategic Petroleum Reserves (SPR) programme, the Government of India through its special purpose vehicle, the **Indian Strategic Petroleum Reserve Limited (ISPRL)**, has set up petroleum storage facilities with a total capacity of 5.33 Million Metric Tonnes (MMT) at 3 locations, namely
  
  ○ Visakhapatnam (1.33 MMT)
  ○ Mangaluru (1.5 MMT)
  ○ Padur (2.5 MMT), and all the storage facilities have been filled with crude oil.

• **Second Phase:** The government has approved the setting up of two additional commercial-cum-strategic facilities with a total storage capacity of 6.5 MMT underground storage at Chandikhol (4 MMT) and Padur (2.5 MMT) in July 2021, on PPP Mode.
○ This would raise India’s strategic reserve capacity to 11.83 MMT, and in times of crisis, India can manage its oil requirement for a specific time period.

- **Importance of SPR Programme**: The Gulf War in 1990 led to a sharp rise in oil prices and a huge increase in India’s imports.
  ○ During the post-1991 Indian economic crisis, foreign exchange reserves could barely finance three weeks’ worth of imports, while the government came close to defaulting on its financial obligations.
    ■ India was able to address the crisis through policies that liberalized the economy.
  ○ However, India continued to be affected by volatility in oil prices.
    ■ In 1998, former Prime Minister Atal Bihari Vajpayee administration proposed the creation of petroleum reserves as a long-term solution for managing the oil market.

  *Source: New Indian Express*

### Biodiversity and Environment

**Debrigarh wildlife Sanctuary**

**Syllabus**: GS 3/Conservation

**In News**

- The wildlife wing of Odisha’s forest department decided to relocate around 420 families from four zero-connectivity villages in Debrigarh wildlife sanctuary, Bargarh district in Odisha.
  ○ The move is aimed to reduce man-animal conflict and provide better living conditions to the relocated families.

**About Debrigarh wildlife sanctuary**

- The 353-square kilometre sanctuary is situated adjacent to the huge Hirakud reservoir.
- The sanctuary is an important biogeographic zone from both the ecological and environmental points of view.
• **Biodiversity:** It is home to over 40 species of mammals, 234 species of birds, 41 species of reptiles, 12 species of amphibians, 42 species of fishes, 85 species of butterflies and 38 species of spiders.

• Wild animals like **leopards, elephants, gaur, wild boar, Sambar, Deer**, a host of birds and other animals are found in the thick and dense forests of the Debrigarh sanctuary.
  
  • It is also known for its easy sightings of animals particularly Indian Bison’s, Wild Boars, Sambhar and Peacocks to name a few.

  **Source:** DTE

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**Geography**

**Chilika Lake**

**Syllabus: GS1/Geographical Features & their Location**

**In News**

• Thousands of migratory birds have been spotted in Chilika lake a little early this time.

**About Chilika Lake**

• It is **Asia’s largest and world’s second-largest** brackish water **lagoon** after The New Caledonian barrier reef.

  ○ **A lagoon** is a shallow body of water separated from a larger body of water by a narrow landform, such as reefs, barrier islands, barrier peninsulas, or isthmuses.

  ○ It has been listed as Ramsar Site as well as a tentative UNESCO World Heritage site.

  ○ In 1981, Chilika Lake has designated the first Indian wetland of international importance under the Ramsar Convention.

  ○ **Physical Features:**

    ■ Chilika is **64 kilometres long in the north-south direction and 13.5 km wide in the east-west direction.**

    ■ It is spread over the **Puri, Khurda and Ganjam districts of Odisha.**

    ■ It is located at the mouth of the Daya River, flowing into the Bay of Bengal, covering an area of over 1,100 km2.
○ **Significance:**
  - It is the largest wintering ground for migratory birds on the Indian sub-continent and is home to a number of threatened species of plants and animals.

- **Major attraction at Chilika is**
  - *Irrawaddy dolphins* are often spotted off *Satapada Island*.
  - *Kalijai Temple* – Located on an island in Chilika Lake.
  - *Nalabana Island (Forest of Reeds)* covering about 16 sq km in the lagoon area was declared a bird sanctuary in 1987.

**Process of Formation**

- The process of the formation of the Chilika might have begun in the latter part of the Pleistocene epoch, **around 20,000 years ago**.
- India’s peninsular river *Mahanadi* carried a heavy load of silt and dumped part of it at its delta.
- As the sediment-laden river met the Bay of Bengal, sand bars were formed near its mouth.
- These created a backflow of the seawater into the sluggish fresh water at the estuary, resulting in the huge brackish water lake.

**Source:** DTE
Governance

e-Prisons
Syllabus: GS3/ Governance

In News
- Recently, the Ministry of Home Affairs (MHA) has advised the States to update the ‘ePrisons’ and ‘Interoperable Criminal Justice System’ databases.

E-Prisons Project
- About
  - It aims at computerization of the functioning of prisons in the country.
  - It is a cloud-based product designed with easy to use GUI and embedded with comprehensive security features.
  - It is developed by National Informatics Centre (NIC), Ministry of Electronics & IT
  - It has been operationalised in all States and Union Territories.

- Purpose
  - The e-Prisons uses data maintained by the States and Union Territories on the National Prisons Information Portal as per protocols notified for e-Prisons.
    - The system can be accessed through the secure National Informatics Centre (NIC) network, exclusively by the authorized officials of Law Enforcement Agencies and Prisons, through Inter-operable Criminal Justice System (ICJS).
  - It provides vital information about the inmates, lodged in the prisons, in a real-time environment to the prison officials and other entities involved in the Criminal Justice System.
  - It also facilitates online visit requests and grievance redressal.

National Prisons Information Portal
- It is a citizen-centric portal showing statistical data of various prisons in the country.
- Visitors can book their visit request to meet their ward inside the prison through this portal
- **Grievances** with respect to their wards inside the prisons can also be submitted through the portal.

- It also provides inmate tracking facilities in a secured way to various investigating agencies.

- **Kara Bazaar**: Portal for showcasing and selling the products manufactured in various prisons of the country by inmates.
  - Necessary platform required for onboarding for all the state prison departments is in place.

  **Source**: TH

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### Places In News

**Cumbre Vieja Volcano**

**Syllabus**: GS1/Places In News

**In News**

- **Cumbre Vieja volcano** erupted on **Spain's Canary Island** of La Palma.
  - **Cumbre Vieja** last erupted in 1971 and in 1949.

**About La Palma**

- **La Palma** is one of the eight volcanic islands in **Spain’s Canary Islands archipelago** off Africa’s western coast.

- It has rugged and forested terrain and is dotted with volcanoes like Teneguía and Cumbre Vieja.

- Its **highest mountain is the Roque de los Muchachos**, at 2,423 metres being second among the peaks of the Canaries only to the peaks of the Teide massif on Tenerife.

- **Capital**: Santa Cruz de la Palma.

**Location of Canary Islands**

- The Canary archipelago (group of islands) is located in the Atlantic Ocean, about 1300 km South of mainland Spain and 115 km West of the African coast (Morocco).

- It includes **7 islands belonging to Spain**, among which La Palma (in the North-West of the archipelago), Tenerife and Gran Canaria (central).
Volcanoes in India

- Barren Island, Andaman Islands (India's only active volcano)
- Narcondam, Andaman Islands
- Baratang, Andaman Islands
- Deccan Traps, Maharashtra
- Dhinodhar Hills, Gujarat
- Dhosi Hill, Haryana

Source: TH