Indian Polity

Anti-defection Law


In News

- Recently the political development in Maharashtra saw a group of MLAs defecting from the state legislative assembly.

Anti-defection Law:

- **Origin:**
  - *Aaya Ram Gaya Ram* was a phrase that became popular in Indian politics after a *Haryana MLA Gaya Lal* changed his party thrice within the same day in 1967.
  - The anti-defection law was a response to the similar toppling of multiple state governments by party-hopping MLAs.
  - Parliament added it to the Constitution in **1985**.

- **10th Schedule:**
  - **Constitutional basis:**
    - The *Tenth Schedule* was inserted in the Constitution in by **52nd Amendment Act**.
    - It lays down the process by which legislators may be disqualified on grounds of defection.

- **What constitutes defection?**
  - The law covers three kinds of scenarios:
    - **Voluntarily giving up:**
      - When legislators elected on the ticket of one political party “voluntarily give up” membership of that party or vote in the legislature against the party’s wishes.
      - A legislator’s speech and conduct inside and outside the legislature can lead to deciding the voluntarily giving up membership.
    - **Independent members:**
      - The second scenario arises when an MP/MLA who has been elected as an independent joins a party later.
    - **Nominated legislators:**
The law specifies that nominated legislators can join a political party within six months of being appointed to the House, and not after such time.

- Violation of the law in any of these scenarios can lead to a legislator being penalised for defection.

- **Applicable to:**
  - The law applies to both Parliament and state assemblies.

- **Deciding authority:**
  - The **Presiding Officers of the Legislature (Speaker, Chairman)** are the deciding authorities in such cases.
  - The Supreme Court has held legislators can challenge their decisions before the higher judiciary.

- **How long does it take for deciding cases of defection?**
  - The **law does not provide a time frame** within which the presiding officer has to decide a defection case.
  - The court in its recent judgment has held that, ideally, Speakers should take a decision on a defection petition **within three months**.

- **Exceptions in Law:**
  - Legislators may change their party without the risk of disqualification in certain circumstances.
    - The law allows a party to merge with or into another party provided that at least two-thirds of its legislators are in favour of the merger.
    - In such a scenario, neither the members who decide to merge, nor the ones who stay with the original party will face disqualification.

**Significance:**
- The law aims to bring stability to governments by discouraging legislators from changing parties.
- Also, anti-defection law tries to bring a sense of loyalty of the members towards their own party.
- It aims to ensure that members selected in the name of the party are also loyal to the part manifesto and the basic philosophy of the party to which he belongs.

**Criticisms:**
- **Ambiguous Nature of Split:**
  - The law punishes **individual MPs/MLAs** for leaving one party for another but allows **a group of MP/MLAs to join (i.e. merge with)** another political party without inviting the penalty for defection.
  - In recent years, opposition MLAs in some states have broken away in small groups gradually to join the ruling party.
  - The flaw seems to be that the exception is based on the number of members rather than the reason behind the defection.

- **Power to the Speaker:**
○ One of the major criticisms of this power is that it is not necessary that the speaker has legal knowledge and expertise to look upon and perform such acts in such cases.

- **No penalty for political parties:**
  ○ The law does not penalise political parties for encouraging or accepting defecting legislators.

- **No Freedom to go against party whip:**
  ○ A political party acts as a dictator for its members who are not allowed to dissent.
  ○ In this way, it violates the principle of representative democracy wherein the members are forced to obey the high command.

- **Problem with merger provision:**
  ○ The provision tends to safeguard the members of a political party where the original political party merges with another party subject to the condition that at least two-thirds of the members of the legislature party concerned have agreed to such a merger.

**Suggestions made to improve the law:**
- Former Vice President Hamid Ansari has suggested that it apply only to save governments in no-confidence motions.
- The Election Commission has suggested it should be the deciding authority in defection cases.
- The Supreme Court recently said Parliament should set up an independent tribunal headed by a retired judge of the higher judiciary to decide defection cases swiftly and impartially.
- Some commentators have argued that the President and Governors should hear defection petitions.

**Way Ahead**
- The introduction of the Tenth Schedule in the Indian Constitution was aimed at curbing political defections.
- Though the law has succeeded in a reasonable way but due to some of its loopholes, it has not been able to achieve the best it can.

**International scenario on Anti Defection Law**
- Anti-defection law is not only practiced in India but it is prevalent in various other countries like Bangladesh, Kenya, South Africa, etc.
  ○ **Bangladesh:**
    ■ Article 70 of the Bangladesh Constitution says a member shall vacate his seat if he resigns from or votes against the directions given by his party.
    ■ The dispute is referred by the Speaker to the Election Commission.
  ○ **Kenya:**
    ■ Section 40 of the Kenyan Constitution states that a member who resigns from his party has to vacate his seat.
The decision is by the Speaker, and the member may appeal to the High Court.

- **Singapore:**
  - Article 46 of the Singapore Constitution says a member must vacate his seat if he resigns, or is expelled from his party.
  - Article 48 states that Parliament decides on any question relating to the disqualification of a member.

- **South Africa:**
  - Section 47 of the South African Constitution provides that a member loses membership of the Parliament if he ceases to be a member of the party that nominated him.

Source: TH

**Polity & Governance**

**NIPUN Scheme**

Syllabus: GS2/ Government policies & interventions

In News

- Recently, the government launched the NIPUN (National Initiative for Promoting Upskilling of Nirman workers) scheme to train over 1 lakh construction workers.

More about the scheme:

- The project NIPUN is an initiative of the Ministry of Housing & Urban Affairs (MoHUA) under its flagship scheme of the Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM).

- **Aim:**
  - It aims to train over 1 lakh construction workers, through fresh skilling and upskilling programmes.
  - It will also provide workers with work opportunities even in foreign countries.

- **Role of National Skill Development Corporation (NSDC):**
  - NSDC, the nodal agency under the Ministry of Skill Development & Entrepreneurship (MSDE), will be the Implementation Partner for the project.
    - The project implementation is divided into three parts –
      - Training through Recognition of Prior Learning (RPL) at construction sites,
      - Training through Fresh Skilling by Plumbing and Infrastructure SSC and
      - International Placement through industries/ builders/ contractors in countries such as the Kingdom of Saudi Arabia, UAE and other GCC countries.
The courses are aligned with National Skills Qualifications Framework (NSQF).
- NSDC will be responsible for the overall execution of training, monitoring and candidate tracking.
- It will provide trainees with ‘Kaushal Bima’, three-year accidental insurance with coverage of INR 2 lakhs.
- Digital skills such as cashless transactions, orientation about entrepreneurship, and EPF and BOCW facilities will also be provided to trainees.

Significance:
- **Boost to the GDP:**
  - The construction industry is a significant contributor to the nation’s GDP and this initiative will enable the construction workers to seek better job opportunities, increase their wages and even pursue overseas placements.

- **Horizontal coverage for the workers:**
  - The construction industry has not spread horizontally across the industry and this project may help for the cause.

- **Diversifying skills:**
  - This initiative will enable Nirman workers to be more proficient and skilled while making them adopt future trends in the construction industry by increasing their capabilities and diversifying their skill sets.

- **Boost for the important projects:**
  - It will also provide a skilled workforce for key projects like Metro construction, Central Vista, etc.

- **Self-employment:**
  - The spirit of entrepreneurship has been encouraged and supported by giving urban workers access to self-employment and skilled wage employment opportunities.

Challenges
- **Categorised in ‘Informal workforce’:**
  - The construction industry despite being a significant contributor to the GDP, its key contributors, the construction workers are still amongst the informal workforce in India.
  - The problems in the informal sector can be costly as they can lead to job and wage losses, higher inflation and even risk to the livelihood of construction workers.

- **Inadequate Social security benefits:**
  - Informal sector workers lack social security benefits, making them very vulnerable to any calamity, may it be natural or man-made.

- **Marginalised groups:**
  - A significantly high proportion of these workers belong to the marginalised groups and are also migrant labourers.

- **Structural disadvantage:**
○ The structural disadvantage in terms of literacy and skills make them more prone to exploitation.
○ Few of these workers are skilled yet have low-paid occupational jobs.
○ The discrimination in the urban informal labour market against these people leaves them with no choice but to accept the offered wage.

### Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM):

- DAY-NULM is a Centrally Sponsored Scheme, under the aegis of Ministry of Housing & Urban Affairs (MoHUA).
- It is being implemented since 2014-15.
- **Aim:**
  - It aims to reduce poverty and vulnerability of urban poor households in the country by enabling them to access self-employment and skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis.
  - It provides coverage for the urban poor, including the urban homeless.
- **Urban poor women:**
  - The mission has also focussed on equipping the urban poor women with adequate skills and opportunities and enabling them to promote sustainable micro-enterprises.
  - It mobilises women from urban poor households into SHGs and their federations to create a support system for these women.

### e-Shram Portal

- The portal was launched in 2021 with the aim of creating a national database of unorganised workers (NDUW).
- **Ministry:**
  - Ministry of Labour & Employment
- **e-Shram Card:**
  - Workers will be provided with an e-SHRAM card which will have a 12 digit unique number.
  - The details of workers will also be shared by the state government and departments.
- There is a single-point reference to help authorities reach out to and track workers in the informal sector, and offer welfare in times of crisis.
- The database will include construction workers, migrant workers, gig and platform workers, street vendors, domestic workers, agriculture workers, migrant workers and similar other sub-groups of unorganised workers.

Source: TH
In Context

Five years after the Goods and Services Tax (GST) came into force, the much-debated indirect tax regime seems to be finally stabilising.

Objectives and need of GST

- The reasons for adopting a single rate structure in most countries are to have a simple tax system, prevent misclassifications and litigations arising therefrom, and to avoid an inverted duty structure of taxes on inputs exceeding those on outputs requiring detailed scrutiny and refunds.

Overview of GST

- It is India’s biggest indirect tax reform and was introduced in India from 1 July 2017.
- It follows a multi-stage collection mechanism.
  - It is a single tax on the supply of goods and services, right from the manufacturer to the consumer.
  - Credits of input taxes paid at each stage will be available in the subsequent stage of value addition, which makes GST essentially a tax only on value addition at each stage.
  - The final consumer will thus bear only the GST charged by the last dealer in the supply chain, with set-off benefits at all the previous stages.
- It is meant to be a unified indirect tax across the country on products and services.

Salient Features of GST

- It is applicable on ‘supply’ of goods or services as against the present concept on the manufacture of goods or on sale of goods or on provision of services.
- It is based on the principle of destination-based consumption taxation as against the present principal of origin-based taxation.
- It is a dual GST with the Centre and the States simultaneously levying tax on a common base.
  - The GST to be levied by the Centre would be called Central GST (CGST) and that to be levied by the States would be called State GST (SGST).
  - An Integrated GST (IGST) would be levied an inter-state supply (including stock transfers) of goods or services.
  - GST is being levied at four rates viz. 5%, 12%, 16% and 28%.
- The GST would apply to all goods other than alcoholic liquor for human consumption and five petroleum products, viz. petroleum crude, motor spirit (petrol), high speed diesel, natural gas and aviation turbine fuel.
- The GST Council headed by the Union Finance Minister is the governing and key decision-making body for GST.

Achievements
• GST revenues have shown reasonably high buoyancy with collections of over **Rs 1 lakh crore in the last 10 months and touching a record of Rs 1.68 lakh crore** in April 2022.
• The GSTN has been able to **stabilise the technology platform**.
• **Mandating the issue of e-invoicing for all businesses above Rs 100 crore** has enabled **better invoice matching and detection** of fake invoices that were used to claim the input tax credit.
  ○ This has helped to **improve tax compliance** and has also enabled better enforcement.
• In India, it has been a **remarkable achievement and a unique experiment in cooperative federalism**.
• In this, both the Union and the state governments gave up their tax autonomy in favour of **harmonising domestic trade taxes**.
• It helped the country in **transitioning to an automated indirect tax ecosystem**.
  ○ From electronic compliances, generation of e-invoices to tracking movement of goods through e-waybill - everything is now online
• The **E-invoicing system** helped reduce fake invoicing.
  ○ Use of technology with online bill generation has resulted in smoother consignment movement and much fewer disputes with officials.
• After the introduction of GST, there has been a significant reduction in **transaction costs**.
• GST has improved the competitiveness of domestic industries in the international market by removing hidden and embedded taxes.
• A system of **seamless tax-credits** throughout the value-chain, and across boundaries of States, would ensure that there is minimal cascading of taxes.
  ■ This would reduce hidden costs of doing business.
• GST gave a **major boost to the ‘Make in India’ initiative** of the Government of India by making goods and services produced in India competitive in the National as well as International market.

**Shortcomings /Challenges**

• **Refund delay issues**: the Government has taken many steps to smoothen the process of export refunds, automatic processing of refunds has always been an area of major concern under GST.
• **Rate differentiation**
  ○ This is an **inefficient way of targeting benefits for the poor**.
• **Lack of Dispute redressal mechanism**
  ○ There is **no statutory mechanism under the GST regime** that could ensure uniformity in the rulings passed by the Authorities.
• **Constant amendments**: Over the last few years, the GST law has seen many amendments. During this time, all these revisions often confused the taxpayer and as well the tax administrators which created misunderstandings and misconceptions.
• **Adaption & Technical Issues**: Small and medium businesses are still grappling to adapt to the tech-enabled regime. The fundamental principles on which the
GST law was built viz. seamless flow of input credits and ease of compliance has been impaired by IT glitches,

- **Complex Penalties:** Many businesses are genuinely not able to monitor their vendor behaviour and feel that they should not be penalised for the tax compliance deficiencies of their vendors once they have paid the GST amounts to their vendors.
- **Other Concerns:** Further, the 15th Finance Commission, in its report, has also highlighted several areas of concern in the GST regime relating to:
  - multiplicity of tax rates,
  - shortfall in GST collections vis-à-vis the forecast,
  - high volatility in GST collections,
  - inconsistency in filing of returns,
  - dependence of States on the compensation from Centre

### Conclusion & Way Forward

- **Streamlining of anti-profiteering measures and simplification of compliance procedures** also needs to be revisited to ensure that the cost efficiency and reduction in prices envisaged under GST law finally reach the common man.
- **To overcome the issues of dispute related to GST and increase efficiency in tax administration, there is a need for a robust dispute redressal mechanism.**
- **GST requires administrative reforms which will establish a robust mechanism to redress such irregularities and will also remove gaps in the provisions of advance rulings under the GST law.**
- **Pandemic** has had severe impacts on GST also and led to economic contraction.
  - Certain structural level changes to the law may help boost the business and economy.
- **A group of ministers (GoM) reviewing goods and services tax (GST) rates has proposed removal of exemptions on a host of services, including for stay in relatively cheaper hotel rooms, hospital rooms above a tariff threshold and services provided by financial sector and food safety regulators.**

Source: BS

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### Indian Economy

**India’s Emerging Twin Deficit Problem**

**Syllabus:** GS 3/ Indian economy & related issues

**In News**

- Recently, the Ministry of Finance in its latest **Monthly Economic Review** cautioned the re-emergence of the **twin deficit problem** in the Indian economy.

**About Twin Deficit**
- **Twin deficit** identity is used to refer to a nation’s **current account deficits** and a simultaneous fiscal deficit.
  - A fiscal deficit is a **budget shortfall**. The fiscal deficit is essentially the amount of money that the **government has to borrow in any year** to fill the gap between its expenditures and revenues.
  - A current account deficit means a country is sending more money overseas for goods and services than it is receiving.
- The current account essentially refers to two specific sub-parts:
  - Import and Export of goods is the “**trade account**”.
  - Import and export of services is called the “**invisibles account**”.
- The term became widely used in the 1980s until the 1990s because the United States experienced the “twin” deficits during this time-frame.

**Issues/Challenges**
- The economic growth outlook is likely to be affected by several factors owing to the trade disruptions, export bans and the resulting surge in global commodity prices all of which will continue to stoke inflation.
- **Government revenues take a hit** following cuts in excise duties on diesel and petrol.
- **Lack of funds**: Higher levels of fiscal deficit typically imply the government eats into the pool of investible funds in the market which could have been used by the private sector for its own investment needs.
- **Counter-productive**: At a time when the government is trying its best to kick-start and sustain a private sector investment cycle, borrowing more than what it budgeted will be counter-productive.
- **Costlier imports such as crude oil and other commodities** will not only widen the CAD but also put downward pressure on the rupee.
A weaker rupee will in turn make future imports costlier.

- Foreign portfolio investors (FPI): in response to higher interest rates in the western economies especially the US, foreign portfolio investors (FPI) continue to pull out money from the Indian markets that too will hurt the rupee and further increase CAD.

- Higher commodity prices and rising subsidy burden is leading to an increase in both fiscal deficit and current account deficit.
  - India’s fertiliser subsidy bill for FY23 could rise to around Rs 2.5 trillion against the Budget Estimate of Rs 1.05 trillion because of a global supply shortage amid the war in Ukraine.

**Way forward/ Suggestions**

- Accomodative fiscal stances of MPC helps investors to make robust investment.
- Maintaining the stock of essential commodities to balance the demand and supply situation.
  - Ex: India’s Ban on wheat export to tame demand/supply situation.
- Revenue expenditure: There is a need to trim revenue expenditure or the money the government spends just to meet its daily needs.
- Rationalising non-capital expenditure has become critical not only for protecting growth supportive capital but also for avoiding fiscal slippages.
  - Capital expenditure essentially refers to money spent towards creating productive assets such as roads, buildings, ports etc.
- The World is looking at a distinct possibility of widespread stagflation: India however is at low risk of stagflation, owing to its prudent stabilisation policies.
- India continued to be the quickest growing economy among major countries in 2022-23.

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<td>It has a much bigger multiplier effect on the overall GDP growth than revenue expenditure.</td>
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<th>Stagflation</th>
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<td>It is a situation in which the inflation rate is high, the economic growth rate is slow, and unemployment remains steadily high.</td>
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Source: IE

**Science & Technology**

Drug Resistant Typhoid Strains

**Syllabus: GS2/ Health, GS3/ Scientific Innovations & Discoveries**

**In News**
- Recent study of the bacteria Salmonella Typhi, published in The Lancet Microbe, has found emergence of drug-resistant typhoid strains.

**Key Findings**
- Typhoid fever causes 11 million infections and more than 100,000 deaths per year.
Typhoid fever is a life-threatening systemic infection caused by the bacterium Salmonella enterica serovar Typhi (commonly known as Salmonella Typhi).

Since 2000, multi-drug-resistant (MDR) S Typhi has declined steadily in Bangladesh and India, remained low in Nepal, and increased slightly in Pakistan.

- Strains were classified as MDR if they had genes giving resistance to antibiotics ampicillin, chloramphenicol, and trimethoprim/sulfamethoxazole.
- Now these are being replaced by strains resistant to other antibiotics.

Global spread from South Asia:

- South Asia accounts for 70% of the global disease burden.
- The genome analysis also reveals that resistant strains – almost all originating in South Asia – have spread to other countries 197 times since 1990.

New strains:

- In recent years, increase in resistant strains are seen that are threatening because of lack of effective antibiotics against this bacterium.
- There are strains for which there is only a single oral antibiotic remaining, termed XDR typhoid.
- Strains resistant to the antibiotic (azithromycin) have been seen in India, Bangladesh, Nepal and Pakistan.

Major emergence & Spread in India:

- Evidence to date suggests that much of the drug-resistance in typhoid has evolved within India, so there are concerns about the appearance of drug resistance in the country.
- Surveillance at 18 Indian sites during 2016-20 found typhoid was as common as it was two decades ago, especially in urban areas.

Government of India’s efforts

- India’s Health Ministry is considering introducing new typhoid conjugate vaccines into the national immunisation program.
- Two WHO-prequalified vaccines have been developed in India (by Bharat Biotech and Biological E).

Antimicrobial Resistance (AMR)

- AMR occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death.
- Factors Responsible:
  - Misuse and overuse of antimicrobials are the main drivers in the development of drug-resistant pathogens.
  - Lack of clean water and sanitation and inadequate infection prevention and control.
- Impact: As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become increasingly difficult or impossible to treat.
- Global Threat: WHO has declared that AMR is one of the top 10 global public health threats facing humanity.

**HOW ANTIBIOTIC RESISTANCE HAPPENS**

Image courtesy: AMR

**Factors Causing AMR in India**
- Inappropriate consumption of **broad-spectrum (last resort) antibiotics** is high because of changing prescription practice in the healthcare system.
- **Inappropriate antibiotic use** among the general public like Self-medication to avoid the financial burden.
- The large proportion of **sewage is disposed of untreated** into receiving water bodies, leading to gross contamination of rivers with antibiotic residues, antibiotic-resistant organisms.

**Challenges of AMR**
- Antibiotic resistance is emerging as the threat to successful treatment of infectious diseases, organ transplantation, cancer chemotherapy and major surgeries.
- In addition to death and disability, prolonged illness results in **longer hospital stay**.
- The issue of AMR causes **out of pocket expenditure** on health care, especially on medicines.
- The cost of AMR to the economy is significant. The use of high order drugs or second-line expensive antibiotics pushing **treatment cost high**.
- **Neonates and elderly** both are prone to infections and are vulnerable.

**India’s Initiative on AMR**
- To prevent the Over the counter sales of antibiotics, the central drug standard control organisation (CDSO) **prohibits** medical stores from selling **24 key antibiotics** without a doctor's prescription.
- **India’s Red Line campaign** which demands that prescription-only antibiotics be marked with a red line, to discourage the over-the-counter sale of antibiotics.
- **National Health Policy, 2017,** terms antimicrobial resistance as one of the key healthcare issues and prioritises the **development of guidelines** regarding antibiotic use and check on restricting the growth of antibiotics.
The National Action Plan on Antimicrobial Resistance (NAP-AMR) 2017 has assigned coordinated tasks to multiple government agencies involving health, education, environment, and livestock to change prescription practices and consumer behaviour and to scale up infection control and antimicrobial surveillance.

- FSSAI has set certain guidelines limiting the antibiotics in food products such as fish and honey.

Way Ahead
- Discovery of new drugs, before the emergence of resistance in germs; and prudent use of available antibiotics.
- Use the available antibiotics carefully to ensure their efficacy for as long as possible.
- AMR requires a united multisectoral approach -
  - Efforts to control prescription through provider incentives should be accompanied by efforts to educate consumers to reduce inappropriate demand, issue standard treatment guidelines.
  - Policy alignment is also needed much beyond the health system.
  - Solutions in clinical medicine must be integrated with improved surveillance of AMR in agriculture, animal health and the environment.

Source: IE
Facts In News

Geography

**Summer Solstice**

Syllabus: GS 1/Geographical Features & their Location

**In News**

- The Summer Solstice 2022 occurred on 21 June recently.

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**About Summer Solstice**

- The word "solstice" comes from the Latin words "sol" (i.e. sun) and "sistere" (i.e. stationary).
  - It occurs twice a year.
  - In the Northern Hemisphere, it happens in June and in the Southern Hemisphere, it occurs in December.
- Summer Solstice is the longest day in the Northern Hemisphere and the shortest one in the Southern Hemisphere.
- The day also marks the onset of summer in the Northern Hemisphere and the onset of winter in the Southern Hemisphere.
  - The rays of the sun fall directly on the Tropic of Cancer.
- Significance
  - The solstice has been seen as a significant time of the year in many cultures and has been marked by festivals and rituals across the globe.

Source: IE

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**Red Dunes**

Syllabus: GS 1/ Physical geography and various formations

**In News**

- There is a small desert situated in the state of Tamil Nadu. It consists of red sand dunes and is confined to Thoothukudi district.

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**About Red Dunes**
• **Location:** The dunes are spread over **Kuthiraimozhi theri and Sathankulam reserve forest** of Tiruchendur taluk, which is located on the shoreline overlooking the **Bay of Bengal** in the south-eastern part of Tamil Nadu.
• **Theri:** The red dunes are called theri in Tamil.
• **Quaternary Period:** They consist of sediments dating back to the Quaternary Period and are made of marine deposits.
• **Low capacity:** They have very low water and nutrient retention capacity.
• **Aerodynamic lift:** The dunes are susceptible to aerodynamic lift.
  ○ This is the push that lets **something move up.**
  ○ It is the **force that is the opposite of weight.**
• **Presence of heavy and light minerals:** The petrographical study (petrography is the study of composition and properties of rocks) and X-ray diffraction analysis (a method used to determine a material’s crystallographic structure) of the red sand dunes reveal the presence of heavy and light minerals.
  ○ **These include** Ilmenite, Magnetite, Rutile, Garnet, Zircon, Diopside, Tourmaline, Hematite, Goethite, Kyanite, Quartz, Feldspar, Biotite.

**Various theories of formation**
• **Marine transgression:** The lithology (the study of general physical characteristics of rocks) of the area shows that the area might have been a paleo (ancient) coast in the past.
  ○ The presence of limestone in many places indicates marine transgression.
• **High velocity winds:** The present-day theris might have been formed by the confinement of beach sand locally, after regression of the sea.
  ○ When high velocity winds from the Western Ghats blew east, they induced migration of sand grains and accumulation of dunes.
• **South west monsoon winds:** The red sand is brought from the surface of a broad belt of red loam in the plains of the Nanguneri region by south west monsoon winds.
  ○ When the dry monsoon wind blows with high velocity, the red loam is churned and driven east in huge columns of red sand, till they are met by sea breeze near the coastal tract of Tiruchendur and get deposited there.
• **Aeolian processes:** processes of erosion, transport and deposit of sediments that are caused by wind at or near the surface of the earth, are called Aeolian processes.
  ○ They lead to **continual sand redistribution.**

**Source:** [DTE Indian Economy]

**Hybrid Securities**
**Syllabus:** GS 3/Indian Economy & related issues

**In News**
• Recently, Sebi has set up an **advisory committee on hybrid securities under KV Kamath on issues related to development and regulation** of primary and secondary markets of hybrid securities in the country.
Hybrid Security

- It is a single financial security that combines two or more different financial instruments.
- Hybrid securities, often referred to as "hybrids," generally combine both debt and equity characteristics.
- The most common type of hybrid security is a convertible bond that has features of an ordinary bond but is heavily influenced by the price movements of the stock into which it is convertible.
- They are bought and sold on an exchange or through a brokerage.
  - REITs and InvITs are classified as hybrid securities and they are relatively new investment instruments in the Indian context but are extremely popular in global markets.
    - A REIT comprises a portfolio of commercial real assets, a major portion of which is already leased out, InvITs comprise a portfolio of infrastructure assets, such as highways and power transmission assets.

Source: IE

Indian Economy

Pink Bollworm

Syllabus: GS3/ Agriculture

In News

- Pink bollworm (PBW) infestation is seen spelling trouble for cotton growers in the Northern States of Punjab and Haryana.

About Pink Bollworm (Pectinophora gossypiella)

- It is one of the most destructive pests of cotton.
- Originally reported in India in 1842, it has spread throughout the cotton-producing countries, causing annual crop losses.
- It bores into cotton bolls, devouring blossoms and seeds.
- The pinkish-coloured larva generally pupates in a cocoon inside a boll or seed, in litter, or underground.

Source: TH
Web: www.nextias.com  Mob.: 8081300200