



## PM-EAC Report on Share of Religious Minorities

**For Prelims:** [Demographic Dividend](#), [Total Fertility Rate \(TFR\)](#), [National Family Health Surveys](#), Census 2011, Demographic Transition Theory.

**For Mains:** Demographic Transition In India, Significance of India's Demographic Dividend, Challenges Associated with India's Demographic Dividend.

**Source:** IE

### Why in News?

According to a new analysis by the [Economic Advisory Council to the Prime Minister \(PM-EAC\)](#), the percentage of Hindus in India has decreased by 7.82% between 1950 and 2015, while the percentages of Muslims, Christians, and Sikhs have increased.

### What are the Key Findings of this PM-EAC Report?

#### ▪ Declining Majority Population across the World:

- From 1950 to 2015, as per the data collected on the religious demographics of **38 OECD countries**, 30 of these countries experienced a **significant decrease in the proportion of Roman Catholics**, the predominant religious group.
  - In 167 surveyed countries, the average reduction of majority populations globally during the period 1950-2015 was **22%**.
  - The decline of the majority religious population was steeper in OECD countries, with an average decline of 29%.
  - **In Africa, animism or native religion** was the dominant religion in 24 countries in 1950.
    - By 2015, they are no longer a majority in any of these 24 countries in Africa.
  - In the **South Asian** region, the **majority religious group is increasing** while minority populations have significantly **declined** in countries such as Bangladesh, Pakistan, Sri Lanka, Bhutan, and Afghanistan.

#### ▪ Findings for India:

- **Decline in Share of Hindu Population:** The population of Hindus has declined by 7.82%. As per [2011 census](#), Hindu population in India as of 2011 is approximately 79.8%.
- **Rising Share of Minority Population:** The share of Muslim population rose from 9.84% to 14.095% and Christian population rose from 2.24% to 2.36%.
  - Sikh population increased from 1.24% to 1.85% and the share of the Buddhist population rose from 0.05% to 0.81%.
  - The Jain and Parsi community populations decreased. The share of Jains dropped from 0.45% to 0.36%, and the share of the Parsi population decreased by 85% from 0.03% to 0.0004%.
- **Healthy Population Growth Rate:** As per the data from [National Family Health Survey](#), India's [Total Fertility Rate \(TFR\)](#) is currently around 2, which is close to the preferred TFR of 2.19. TFR is a reliable indicator for projecting population growth.
  - For Hindus, **it declined from 3.3 in 1991 to 2.1 in 2015, and further to 1.9 in**

**2024.**

- In Muslims, it declined from 4.4 in 1991 to 2.6 in 2015, and further to 2.4 in 2024.
- **Equality for Minorities:** In India, minorities experience equal benefits and live a comfortable life, while global demographic shifts remain a cause for concern.

## What are Demographic Patterns and its Relevance?

### ▪ Demographic patterns

- It refers to the **systematic variations and trends observed in human populations.**
- These patterns **emerge from the study of population dynamics**, including factors such as birth rates, death rates, migration, and population composition.

### ▪ Relevance:

#### ◦ Understanding Population Trends:

- Demographic data is used to identify patterns over time. By studying birth and death rates, they **can predict population growth or decline.**
- It is crucial for **planning infrastructure, healthcare, education**, and social services.

#### ◦ Analysing Causes and Consequences:

- It investigates the **causes behind population changes.** Factors like economic development, education, healthcare, and cultural norms influence birth and death rates.
- **Consequences include workforce dynamics**, dependency ratios (proportion of non-working age groups), and implications for social security systems.

#### ◦ Policy Formulation and Implementation:

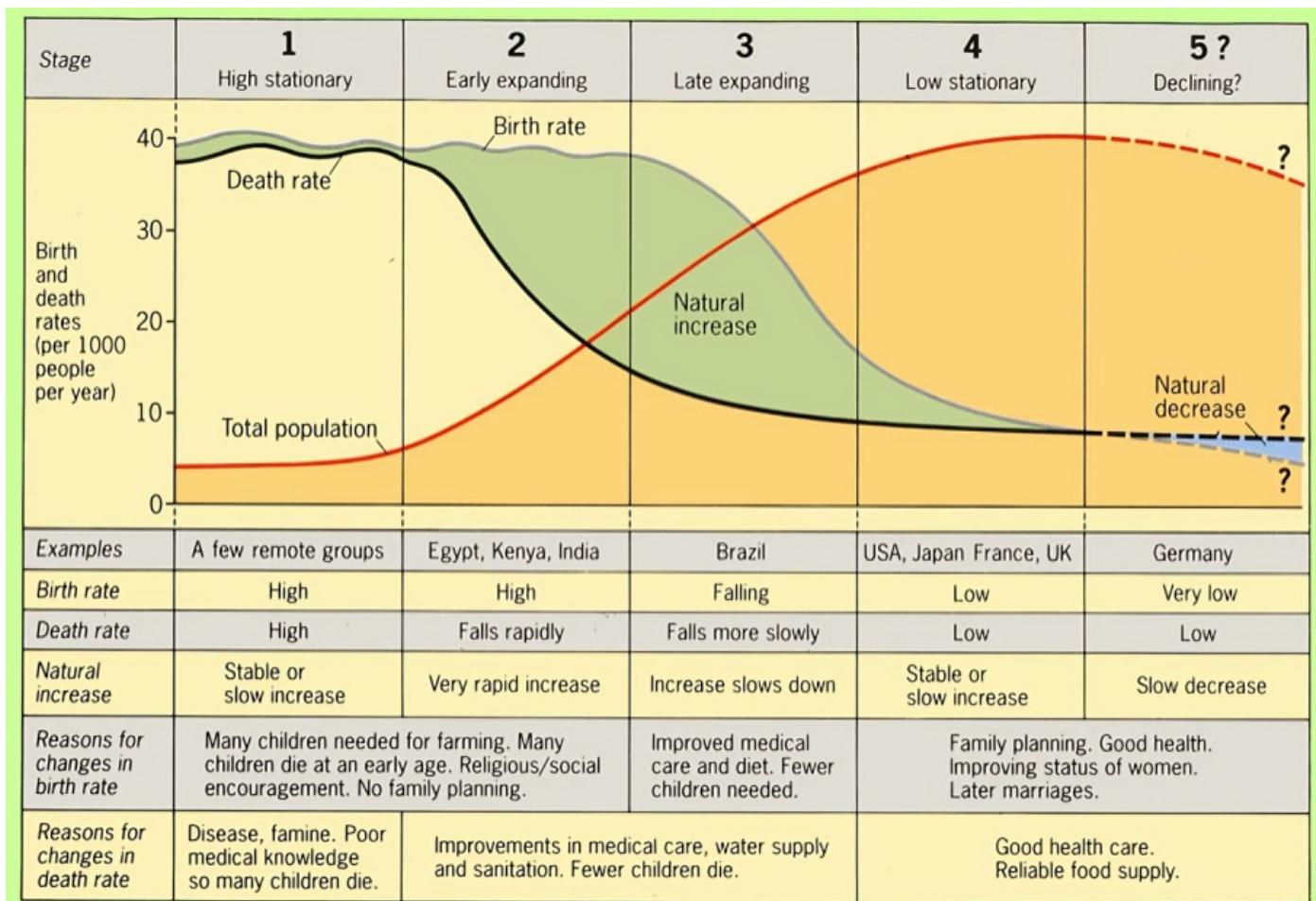
- **Healthcare:** Understanding age-specific health needs helps allocate resources effectively.
- **Education:** Demographics guide educational planning, such as school infrastructure and teacher recruitment.
- **Urban Planning:** Population distribution affects city infrastructure, housing, and transportation.
- **Ageing Population:** Policies address the needs of elderly citizens, including pensions and healthcare.

## What are the Basic Population Control Theories?

- **Malthusian Theory:** It was proposed by Thomas Robert Malthus, an English economist and demographer, in his 1798 work "**An Essay on the Principle of Population.**"
  - It revolves around the **relationship between population growth and resources.**
  - **Population Growth:** Malthus argued that **populations tend to grow exponentially**, meaning they increase at a geometric rate (1, 2, 4, 8, 16, etc.), while the **availability of resources only increases arithmetically** (1, 2, 3, 4, 5, etc.).
    - Therefore, population growth will eventually outstrip the capacity of resources to sustain it.
  - **Resource Constraints:** Malthus identified two primary constraints on resources: **subsistence (food)** and the ability of the environment to support the population (**limited land, water, etc.**).
    - He believed that as **population increased, pressure on these resources** would intensify, leading to scarcity, famine, and ultimately, a decrease in population through "positive checks" such as disease, starvation, and war.
  - **Checks on Population Growth:** Malthus classified checks on population growth into two categories:
    - **Positive Checks:** These are the natural forces that decrease population **growth**, such as **famine, disease, and war.**
    - **Preventive Checks:** These are **conscious decisions made by individuals or societies** to control population growth, such as delayed marriage, abstinence, and birth control.
  - However, **Malthus was ultimately proved wrong as breakthroughs** in agricultural technology made countries, such as India, net food surplus.

- **Demographic Transition Theory:** It outlines the **process of population change** over time as societies progress through **different stages of economic and social development**.
- **Stage 1 - Pre-Industrial Society:**
  - Characterised by **high birth rates and high death rates**, resulting in a relatively stable population size.
  - Birth rates are high due to the **absence of birth control** and cultural preferences for large families.
  - Death rates are also high due to **limited medical knowledge, poor sanitation, and widespread disease**.
- **Stage 2 - Transitional Phase:**
  - Begins with industrialisation and improvements in healthcare and sanitation.
  - **Death rates decline significantly due to advances in medicine, hygiene, and food production.**
  - **Birth rates remain high initially, leading to rapid population growth** as death rates plummet.
  - This stage often witnesses a population explosion.
- **Stage 3 - Industrial Society:**
  - Birth rates start to decline due to various factors such as urbanization, education, economic changes, and the empowerment of women.
  - However, birth rates remain somewhat higher than death rates, resulting in continued population growth, albeit at a slower pace.
- **Stage 4 - Post-Industrial Society:**
  - **Both birth rates and death rates are low**, resulting in a stable or slowly growing population.
  - Birth rates may even fall below replacement level, leading to concerns about population ageing and demographic imbalance.
- **Stage 5:**
  - In some models, **a fifth stage is proposed where birth rates fall below replacement level**, resulting in population decline (**E.g. Germany**).
  - This stage is characterised by a significant ageing population and potential demographic challenges.

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## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims:

**Q1. In the context of any country, which one of the following would be considered as part of its social capital? (2019)**

- (a) The proportion of literates in the population
- (b) The stock of its buildings, other infrastructure and machines
- (c) The size of population in the working age group
- (d) The level of mutual trust and harmony in the society

**Ans: (d)**

**Q2. India is regarded as a country with “Demographic Dividend”. This is due to (2011)**

- (a) Its high population in the age group below 15 years
- (b) Its high population in the age group of 15-64 year
- (c) Its high population in the age group above 65 years
- (d) Its high total population

**Ans: (b)**

## **Mains:**

**Q1.** Discuss the main objectives of Population Education and point out the measures to achieve them in India in detail. **(2021)**

**Q2.** "Empowering women is the key to control the population growth." Discuss. **(2019)**

**Q3.** Critically examine whether growing population is the cause of poverty or poverty is the main cause of population increase in India. **(2015)**

## **Question on Existence of Article 31C**

**For Prelims:** [Article 31C](#), [Supreme Court](#), [Kesavananda Bharati Case \(1973\)](#), [Fundamental rights](#)

**For Mains:** Article 31C, Legal and constitutional challenges associated with Article 31C.

**Source:** [IE](#)

### **Why in News?**

Recently, a **nine-judge Bench** of the [Supreme Court](#) has chosen to address the question regarding the **existence of Article 31C**, while hearing a case to decide whether the government can acquire and redistribute private property.

### **What is Article 31C?**

#### **▪ About:**

- Article 31C **protects laws** enacted to **ensure social goals**:
  - The "material resources of the community" are distributed to serve the common good (**Article 39B**)
  - The wealth and the means of production are not "concentrated" to the "common detriment" (**Article 39C**).

#### **▪ Introduction of Article 31C:**

- It was added to the Indian Constitution in 1971 through the **25<sup>th</sup> Constitutional Amendment**, primarily in response to the Supreme Court's decision in the **R.C. Cooper v. Union of India (Bank Nationalisation Case, 1969)**.
  - In this case, the court **invalidated the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1969** due to issues with the compensation offered.

#### **▪ Purpose of Article 31C:**

- Article 31C **protects directive principles (Articles 39B and 39C)** from being challenged by the right to equality (Article 14) or rights under Article 19 (freedom of speech, right to assemble peacefully, etc).

### **What are the Legal and Constitutional Challenges Associated with Article 31C?**

#### **▪ Kesavananda Bharati Case (1973):**

- The Supreme Court established the "**basic structure doctrine**," asserting that certain fundamental elements of the Constitution are immune to modification by Parliament.
  - The court **invalidated a portion of Article 31C** stating that **laws claiming** to be based

on a **specific government policy cannot be challenged in court** for failing to achieve that policy's goals.

- This **opened the door for the court to examine laws** that had been **enacted to further Articles 39(b) and 39(c)**, to determine whether the purpose of those laws actually lined up with the principles espoused in these provisions.

- **Constitution (Forty-second) Amendment Act, (CAA) 1976 and Minerva Mills Case (1980)**

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- **CAA, 1976 extended the protective ambit of Article 31C** to encompass all directive principles of state policy outlined in Articles 36-51 of the Constitution.
  - **Clause (4) of the CAA, 1976**, deprived the courts of their power to call in question any amendment of the Constitution.
  - Also, **Clause (5) of the CAA, 1976** tried to **remove all limitations** on the amending power.
  - It aimed to **prioritise the implementation of directive principles over certain fundamental rights**, particularly in the pursuit of socio-economic reforms..
- In a subsequent legal ruling of **Minerva Mills Case (1980)**, the Supreme Court **struck down clauses 4 and 5** of the Constitution (Forty-second) Amendment Act, 1976.
- This **judicial pronouncement** underscored the **limitations on Parliament's authority to amend the Constitution extensively**.
- Consequently, questions arose regarding the continued validity and applicability of Article 31C following the Minerva Mills case.

## What are the Arguments Regarding Article 31C?

- **Argument Against Automatic Revival:**

- The original Article 31C was completely '**substituted by an expanded version**' in the **42<sup>nd</sup> Amendment**. Therefore, when the new version was struck down in the Minerva Mills case, the original could not automatically revive.
- This argument is based on the legal principle that once replaced, the **original provision ceases to exist unless explicitly reinstated**.

- **Argument for Doctrine of Revival:**

- The original **Article 31C** should automatically be revived based on the doctrine of revival.
- This view is supported by precedents like the ruling on the **National Judicial Appointments Commission**, where **struck-down amendments led to the revival of previous provisions**, suggesting that the pre-amended Article 31C should resurface if the subsequent amendments are invalidated.

## Conflicts Between Fundamental Rights and DPSP

- **Champakam Dorairajan v the State of Madras, 1951:**

- In this case, the **Supreme Court** ruled that in case of any **conflict between the Fundamental Rights and the Directive Principles**, the **former would prevail**.
- It declared that the **Directive Principles** have to conform to and **run as subsidiary** to the Fundamental Rights.
- It also held that the **Fundamental Rights** could be amended by the Parliament by enacting constitutional amendment acts.

- **Golaknath v the State of Punjab, 1967:**

- In this case, the **Supreme Court** declared that Fundamental Rights could not be amended by the Parliament even for implementation of Directive Principles.
- It was contradictory to its own judgement in the 'Shankari Parsad case'.

- **Kesavananda Bharati v the State of Kerala, 1973:**

- In this case, the **Supreme Court overruled its judgement** in the **Golak Nath case**. It **upheld the validity of the 24<sup>th</sup> Amendment Act** and stated that Parliament is empowered to abridge or take away any of the **Fundamental Rights**.
  - At the same time, it laid down a new doctrine of the '**basic structure**' (or 'basic features') of the Constitution.
- It ruled that the constituent power of **Parliament under Article 368** does not enable it to alter the 'basic structure' of the Constitution.

- **Minerva Mills vs. Union of India, 1980:**

- In this case, the Supreme Court held that 'the Indian Constitution is founded on the **bedrock of the balance** between the **Fundamental Rights** and the **Directive Principles**.
- The Parliament can amend the Fundamental Rights for implementing the Directive Principles, so long as the **amendment does not damage or destroy the basic structure of the Constitution**.

## Article 31, 31A, 31B and 31C

### ▪ About:

- Originally, the **right to property** was one of the seven fundamental rights and provided that no person shall be deprived of his property except by authority of law.
- However, being one of the most controversial rights, the **44th Amendment Act of 1978** abolished the right to property as a Fundamental Right and made it a legal right (constitutional right) **under Article 300A in Part XII of the Constitution**.
- Article 31 led to a number of **Constitutional amendments**; 1<sup>st</sup>, 4<sup>th</sup>, 7<sup>th</sup>, 25<sup>th</sup>, 39<sup>th</sup>, 40<sup>th</sup> and 42<sup>nd</sup> Amendments.
  - The **First Amendment Act, 1951** inserted Articles **31A** and **31B** to the Constitution.
  - **Article 31C was inserted in the Constitution by 25th Amendment Act, 1971.**

### ▪ Article 31A:

- It saves **five categories of laws from being challenged** and invalidated on the ground of contravention of the fundamental rights conferred by **Article 14** and **Article 19**.
- It also provides the **guaranteed right to compensation** in case of acquisition or requisition of the private property by the state.
- **It includes:**
  - Acquisition of estates and related rights by the State;
  - Taking over the management of properties by the State;
  - Amalgamation of corporations;
  - Extinguishment or modification of rights of directors or shareholders of corporations
  - Extinguishment or modification of mining leases.

### ▪ Article 31B:

- It **protects the acts and regulations included in the Ninth Schedule** from being challenged and invalidated on the ground of contravention of any of the fundamental rights.
- The scope of **Article 31B** is wider than Article 31A as it immunises any law included in the Ninth Schedule from the Fundamental Rights (**unlike article 31A that protects only five categories**).
- However, the Supreme Court in its judgement in the **I.R. Coelho case, 2007** ruled that even laws under the **Ninth Schedule would be open to scrutiny if they violated Fundamental Rights or the basic structure of the Constitution**.
- The Supreme Court first propounded the doctrine of 'basic structure' of the constitution in the **Kesavananda Bharati on April 24, 1973**.

### **Drishti Mains Question:**

Q. Discuss about the legal and constitutional challenges associated with Article 31C?

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### **Prelims**

Q. With reference to the Indian judiciary, consider the following statements: (2021)

1. Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with the prior permission of the President of India.

2. A High Court in India has the power to review its own judgement as the Supreme Court does.

**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

**Ans: (c)**

**Q. What was the exact constitutional status of India on 26th January, 1950? (2021)**

- (a) A Democratic Republic
- (b) A Sovereign Democratic Republic
- (c) A Sovereign Secular Democratic Republic
- (d) A Sovereign Socialist Secular Democratic Republic

**Ans: (b)**

**Mains**

**Q.** Critically examine the Supreme Court's judgement on 'National Judicial Appointments Commission Act, 2014' with reference to the appointment of judges of higher judiciary in India. **(2017)**

## Indian Space Situational Assessment Report 2023

**For Prelims:** [ISRO](#), [PSLV-C55/ TeLEOS-2](#), [Chandrayaan-3](#), [Chandrayaan-2](#), [Aditya-L1](#), [POEM-2](#), [Indian Space Research Organisation](#)

**For Mains:** Space Missions, Achievements of Indians in science & technology, India's Growing Involvement in Space Activities

**Source:** [TH](#)

### Why in News?

The [Indian Space Research Organisation \(ISRO\)](#) has released the ***Indian Space Situational Assessment Report (ISSAR) for 2023***, which provides a comprehensive overview of the current state of India's space assets and their vulnerability to potential collisions in space.

### What does the ISSAR 2023 Report Highlight?

#### ▪ **Space Object Population:**

- **Global Increase:** Globally, 3,143 objects were added in 2023 from 212 launches and on-orbit breakup events.
- **Indian Additions:** India contributed to this with the launch of 127 satellites by the end of December 2023.
  - In the year 2023, all seven launches of ISRO, namely [SSLV-D2/EOS7](#), [LVM3-M3/ONEWEB 2](#), [PSLV-C55/ TeLEOS-2](#), [LVM3-M4/ Chandrayaan-3](#), and [PSLV-C57/Aditya L-1](#), were successful.
  - A total of 5 Indian satellites, 46 foreign satellites, and 8 rocket bodies (including [POEM-2](#)) were placed in their intended orbits.

#### ▪ **Indian Space Assets:**

- **Operational Satellites:** As of 31st December 2023, India has 22 operational satellites in [Low Earth Orbit \(LEO\)](#) and 29 in [Geostationary Orbit \(GEO\)](#).
- **Deep Space Missions:** There are three active Indian deep space missions, [Chandrayaan-2 Orbiter](#), [Aditya-L1](#), and [Chandrayaan-3 Propulsion Module](#).

#### ▪ **Space Situational Awareness Activities:**

- ISRO regularly carries out analyses to predict close approaches by other space objects to Indian space assets.
- In case of critical close approaches, ISRO carries out **Collision Avoidance Maneuvers (CAMs)** to safeguard its operational spacecraft.
  - About 1 lakh close approach alerts were received from [USSPACECOM \(US Space Command\)](#), and over 3,000 alerts for close approaches within a distance of 1 km were detected for ISRO satellites.
- No close approaches with other space objects were detected for the Chandrayaan-3 mission throughout its mission phases, and also for Aditya-L1 during its Earth-bound phase.

#### ▪ **Collision Avoidance Maneuvers (CAMs):**

- The report highlights a significant increase in the number of CAMs conducted by ISRO in 2023.
- ISRO conducts **Collision Avoidance Analysis (COLA)** to assess and prevent potential collisions.
  - A total of 23 Collision Avoidance Maneuvers (CAMs) were carried out during 2023 to protect Indian space assets, compared to 21 in 2022 and 19 in 2021.

#### ▪ **Satellites Re-entry:**

- The report details the successful re-entry of 8 Indian satellites in 2023. This includes the controlled **de-orbiting of Megha-Tropiques-1**, showcasing ISRO's commitment to responsible space debris management.

#### ▪ **International Cooperation on Space Sustainability:**

- ISRO is an active participant in many international fora such as the [Inter-Agency Debris Coordination Committee \(IADC\)](#) with 13 space agencies, the **International Academy of Astronautics (IAA) space debris working group**, **International Astronautical Federation (IAF) space traffic management working group**, **International Organization for Standardization (ISO) space debris working group** and **UN-Committee on the Peaceful Uses of Outer Space (COPUOS)**, contributing to discussions and guidelines on space debris and long-term sustainability of outer space activities.
- ISRO, as the chair of **IADC for 2023-24**, hosted the 42nd annual IADC meeting in April 2024.
- ISRO participated in the IADC annual re-entry campaign and contributed to the revision of IADC space debris mitigation guidelines and other space sustainability aspects.

#### ▪ **Challenge of Space Debris:**

- The report also acknowledges the ongoing challenge of space debris. It notes that **82 rocket bodies from Indian launches remain in orbit**, with fragments from a 2001 PSLV-C3 mishap still contributing to the total.

## **Indian Space Research Organisation (ISRO)**

- ISRO is a major constituent of the **Department of Space (DOS)**, Government of India.
  - The department executes the Indian Space Programme primarily through various Centres or units within ISRO.
- ISRO was previously the **Indian National Committee for Space Research (INCOSPAR)**, set up

in 1962, as envisioned by Dr Vikram A Sarabhai.

- ISRO was formed on **15th August 1969** and superseded INCOSPAR with an expanded role to harness space technology.
  - DOS was set up and ISRO was brought under DOS in 1972.
- The prime objective of ISRO/DOS is the development and application of space technology for various national needs.
- ISRO has developed satellite launch vehicles, PSLV and GSLV, to place the satellites in the required orbits.
- **ISRO has its headquarters in Bengaluru.**
- Its activities are spread across various centres and units.
  - Launch Vehicles are built at **Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram**
  - Satellites are designed and developed at **U R Rao Satellite Centre (URSC), Bengaluru.**
  - Integration and launching of satellites and launch vehicles are carried out from **Satish Dhawan Space Centre (SDSC), Sriharikota**
  - Development of liquid stages including cryogenic stage is carried out at Liquid Propulsion Systems Centre (LPSC), Valiamala & Bengaluru
  - Sensors for Communication and Remote Sensing satellites and application aspects of the space technology are taken up at Space Applications Centre (SAC), Ahmedabad
  - Remote Sensing satellite data reception processing and dissemination is entrusted to **National Remote Sensing Centre (NRSC), Hyderabad.**
- The activities of ISRO are guided by its Chairman, who would also be the **secretary of DOS and Chairman of Space commission** (the apex body that formulates the policies and oversees the implementation of the Indian Space Programme).

## Way Forward

- Establish a **global framework for Space Traffic Management (STM)** to standardise procedures for **collision avoidance and inter-operator coordination**.
- Promote responsible space practices, including **debris mitigation measures** and sustainable satellite deployment.
- Encourage innovation in **active debris removal and on-orbit servicing technologies**.
- Facilitate international collaboration to share resources, expertise, and data for space situational awareness.
- Review and update space regulations to accommodate the evolving needs of the space sector and raise awareness about space sustainability.

### **Drishti Mains Question:**

Q. Evaluate ISRO's impact on India's socio-economic development, particularly in agriculture, communication, and disaster management, through satellite applications and space technology spin-offs.

Read more: [Space Missions in 2024](#)

## **UPSC Civil Services Examination, Previous Year Question (PYQ)**

### **Prelims**

**Q.1 In the context of space technology, what is “Bhuvan”, recently in the news? (2010)**

- (a) A mini satellite launched by ISRO for promoting the distance education in India
- (b) The name given to the next Moon Impact Probe, for Chandrayaan-II
- (c) A geoportal of ISRO with 3D imaging capabilities of India
- (d) A space telescope developed by India

**Ans: (c)**

## **Q. Consider the following statements: (2016)**

### **The Mangalyaan launched by ISRO**

1. is also called the Mars Orbiter Mission
2. made India the second country to have a spacecraft orbit the Mars after USA
3. made India the only country to be successful in making its spacecraft orbit the Mars in its very first attempt

**Which of the statements given above is/are correct?**

**(a) 1 only**

**(b) 2 and 3 only**

**(c) 1 and 3 only**

**(d) 1, 2 and 3**

**Ans: (c)**

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### **Mains**

**Q.1** What is the main task of India's third moon mission which could not be achieved in its earlier mission? List the countries that have achieved this task. Introduce the subsystems in the spacecraft launched and explain the role of the 'Virtual Launch Control Centre' at the Vikram Sarabhai Space Centre which contributed to the successful launch from Sriharikota. **(2023)**

**Q.2** What is India's plan to have its own space station and how will it benefit our space programme? **(2019)**

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## **India Sugarcane Subsidy under WTO Scrutiny**

**For Prelims:** [World Trade Organisation](#), Sugarcane, WTO's Agreement on Subsidies and Countervailing Measures, WTO's [Agreement on Agriculture](#), General Agreement on Trade and Tariffs (GATT).

**For mains:** WTO and its role, Issue of sugar subsidy in WTO, Significance of subsidy in sugar industry.

**Source:** [ET](#)

### **Why in News?**

Recently, the **US** and **Australia** have contended that India is giving sugarcane [subsidies](#) to its farmers beyond the limits set in the [World Trade Organisation's \(WTO\) Agreement on Agriculture \(AoA\)](#) calling it violative of global standards that can distort global trade.

### **What is the WTO's Agreement on Agriculture (AoA)?**

- **About:**

- The Agreement on Agriculture (AoA) is an **international treaty** established by the [\*\*World Trade Organization \(WTO\)\*\*](#).
  - It was negotiated during the Uruguay Round of the **General Agreement on Tariffs and Trade (GATT)** and entered into force with the establishment of the WTO on 1st January 1995.
- **Objective:**
- AoA is aimed to **remove trade barriers** and to **promote transparent market** access and integration of global markets.
  - The AoA aims to establish a **fair and market-oriented** agricultural trading system.
  - It sets out rules applicable to all WTO members to provide for **substantial progressive reductions in agricultural support and protection** in their country.

▪ **3 Pillars of AoA:**

- **Domestic Support:** It calls for reduction in domestic subsidies that distorts free trade and fair price.
  - Under this provision, the **Aggregate Measurement of Support (AMS)** is to be reduced by 20% over a period of 6 years by **developed countries** and 13% over a period of 10 years by developing countries.
  - Under this, subsidies are categorised into: [\*\*Blue Box, Green Box and Amber Box subsidies.\*\*](#)
- **Market Access:** Market access for goods in the WTO means the conditions, tariff and non-tariff measures, agreed by members for the entry of specific goods into their markets.
  - Market access requires that **tariffs fixed** (like custom duties) by individual countries **be cut progressively to allow free trade**. It also required countries to **remove non-tariff barriers** and convert them to Tariff duties.
- **Export Subsidy:** Subsidy on inputs of agriculture, making export cheaper or other incentives for exports such as import duty remission etc are included under export subsidies.
  - These can result in dumping of highly subsidised (and cheap) products in other countries and damage the domestic agriculture sector of other countries.

# WTO AGREEMENT ON AGRICULTURE (AoA)

A WTO treaty negotiated during the Uruguay Round of the General Agreement on Tariffs and Trade (GATT); formally ratified in 1994 at Marrakesh, Morocco; Came into effect in 1995

## FEATURES

- Market access (Promote market access for agricultural products by reducing trade barriers)
- Domestic support (Subsidy Boxes are included in this)
- Export subsidies (Reduce the use of export subsidies, which can distort trade)

## SUBSIDY BOXES

### Amber Box Subsidies:

- » Can distort international trade by making a country's products **cheaper** in comparison to those of other countries
- » Examples: Subsidies for inputs such as fertilisers, seeds, electricity, irrigation, and Minimum Support Price (MSP)
- » Amber box is used for all domestic support measures that are deemed to distort production and trade
- » As a result, the **signatories are required to commit to reducing domestic supports** that fall into the amber box
- » Members who do not make these commitments must keep their amber box support within 5-10% of their value of production. (*Di Minimus Clause*)
- » 10% for developing countries
- » 5% for developed countries
- » India's MSP program remains under scrutiny, as it exceeds 10% ceiling

### Blue box Subsidies:

- » "Amber box with conditions" – designed to reduce distortion
- » Any support that would normally be in the amber box is placed in the blue box if it requires farmers to limit production
- » These subsidies aim to limit production by imposing production quotas or requiring farmers to set aside part of their land
- » At present there are **no limits on spending** on blue box subsidies

### Green Box Subsidies:

- » Domestic support measures that don't cause trade distortion or at most cause minimal distortion
- » These subsidies are **government funded without any price support to crops**
- » Also include environmental protection and regional development programmes
- » **Allowed without limits** (except in certain circumstances)



## What are the Allegations against India Regarding Violating AoA?

### Background of the Incident:

- This allegation follows a previous one from 2019 when Brazil, Australia, and Guatemala initiated a dispute against India at the WTO, alleging that India's sugar subsidies are inconsistent with global trade rules.
- Consequently, a WTO panel in 2021 confirmed the claims, however, India appealed the findings and prevented the panel's report from being adopted by the WTO's Dispute Settlement Body.

### Complaint Against India:

- The US and Australia have claimed that India's domestic support measures are inconsistent with various articles of the WTO's **Agreement on Agriculture**.
  - For the Period 2018-2022, India's Market Price Support constituted over 90% of the value of production of sugar every year against the permitted level of 10% as per WTO's AoA.
- The US and Australia also highlighted a crucial absence in India's reporting claiming that India hadn't included sugarcane or its derivatives in any domestic support notifications since the marketing year 1995-96.
  - This omission has left the WTO without adequate information to assess India's compliance with global trade regulations.
  - Since the WTO's Appellate Body is currently inactive due to the lack of appointed members, no appeals can be decided on until it becomes operational once more.

### India's Stand:

- In 2022, India had appealed against a ruling of the WTO's trade dispute settlement panel which ruled that the country's domestic support measures for **sugar and sugarcane** are inconsistent with global trade norms.

- In its appeal, India argued that the panel had erred in finding that India's FRP and SAP constitute market price support under the AoA.
- India pointed out the error and said that US-Australia analysis uses the entire sugarcane production in India in a given year for calculating the subsidies, regardless of whether or not the sugarcane was actually delivered to sugar mills for crushing under the Sugarcane (Control) Order.
  - The Sugarcane (Control) Order, 1966 is a regulatory framework that governs various aspects related to sugarcane production, pricing, and trade in India.

## Note:

- **Fair and Remunerative Price (FRP):** It is a set price that is determined by the government and serves as the minimum price that sugar mills must pay to farmers for their sugarcane. This price ensures that farmers receive a fair and reasonable payment for their crops.
- **State-Advised Prices (SAPs):** In some States, farmers receive extra payments in addition to FRP for improving production efficiency, and in certain states, sugar mills provide additional payments to farmers through specific state-level support called State-Advised Prices (SAPs).

## What is the World Trade Organisation (WTO)?

- **About:**
  - WTO is an international organisation that regulates and promotes global trade.
  - It was established in 1995 and currently has 164 member countries (including the European Union).
  - It provides a forum for member countries to negotiate and enforce trade agreements, resolve disputes, and promote economic growth and development.
  - It's headquartered in Geneva, Switzerland.
- **Origin of WTO:**
  - The WTO is the successor to the [\*\*General Agreement on Tariffs and Trade \(GATT\)\*\*](#), which was created in 1947.
  - The Uruguay Round (1986-94) of the GATT led to the WTO's creation.
    - WTO began operations on 1st January 1995.
  - The Agreement Establishing the WTO, commonly known as the "Marrakesh Agreement", was signed in Marrakesh, Morocco in 1994.
    - India was one of the founding members of the 1947 GATT and its successor, the WTO.
  - Main difference between GATT and WTO was that GATT mostly dealt with trade in goods, the WTO and its agreements could not only cover goods but also trade in services and other [\*\*intellectual properties\*\*](#) like trade creations, designs, and inventions.
- **Dispute Redressal Mechanism of WTO:**
  - According to WTO rules, a WTO member or members can file a case in the Geneva-based multilateral **Dispute Settlement Body (DSB)**, if they feel that a particular trade measure is against the norms of the WTO.
    - **Bilateral consultation** is the first step to resolve a dispute. If both the sides are not able to resolve the matter through consultation, either can approach for the establishment of a **dispute settlement panel**.
- **Dispute Settlement Body (DSB):**
  - The DSB makes decisions on trade disputes between member countries. It consists of all **WTO members**.
  - The DSB makes all its decisions by **consensus**.
  - The DSB has the sole authority to establish panels of experts to consider the case, and to accept or reject the panels' findings or the results of an appeal.
  - It monitors the implementation of the rulings and recommendations, and has the power to authorise retaliation when a country does not comply with a ruling.
- The panel's ruling or report can be challenged at the **WTO's Appellate Body (WTOAB)**.
  - However, as of now, the WTOAB is not functioning due to the differences among member countries to appoint members in this body.
  - Over 20 disputes are already pending with the appellate body. The US has been blocking the appointment of the members.

## Conclusion

The allegations against India's sugarcane subsidies significantly affect international trade dynamics. Moreover, the prolonged dispute resolution process underscores the complexities and challenges associated with enforcing compliance with WTO regulations.

### **Drishti Mains Question:**

Identify key reform areas in WTO amid rising trade disputes. Evaluate impact on India's trade interests and role in shaping global trade future.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### **Prelims:**

**Q. With reference to the current trends in the cultivation of sugarcane in India, consider the following statements: (2020)**

1. A substantial saving in seed material is made when 'bud chip settlings' are raised in a nurse, and transplanted in the main field.
2. When direct planting of setts is done, the germination percentage is better with single budded setts as compared to setts with many buds.
3. If bad weather conditions prevail when setts are directly planted, single-budded setts have better survival as compared to large setts
4. Sugarcane can be cultivated using settlings prepared from tissue culture.

**Which of the statements given above is/are correct?**

- (a) 1 and 2 only  
(b) 3 only  
(c) 1 and 4 only  
(d) 2, 3 and 4 only

**Ans: (c)**

**Q. Consider the following statements: (2017)**

1. India has ratified the Trade Facilitation Agreement (TFA) of WTO.
2. TFA is a part of WTO's Bali Ministerial Package of 2013.
3. TFA came into force in January 2016.

**Which of the statements given above is/are correct?**

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

**Ans: (a)**

**Q. In the context of which of the following do you sometimes find the terms 'amber box, blue box and green box' in the news? (2016)**

- (a) WTO affairs

(b) SAARC affairs

(c) UNFCCC affairs

(d) India-EU negotiations on FTA

**Ans: (a)**

**Q. The Fair and Remunerative Price (FRP) of sugarcane is approved by the (2015)**

(a) Cabinet Committee on Economic Affairs

(b) Commission for Agricultural Costs and Prices

(c) Directorate of Marketing and Inspection, Ministry of Agriculture

(d) Agricultural Produce Market Committee

**Ans: (a)**

**Mains:**

**Q1.** What are the key areas of reform if the WTO has to survive in the present context of 'Trade War', especially keeping in mind the interest of India? **(2018)**

**Q2.** "The broader aims and objectives of WTO are to manage and promote international trade in the era of globalisation. But the Doha round of negotiations seem doomed due to differences between the developed and the developing countries." Discuss in the Indian perspective. **(2016)**

**Q3.** WTO is an important international institution where decisions taken affect countries in a profound manner. What is the mandate of WTO and how binding are their decisions? Critically analyse India's stand on the latest round of talks on Food security. **(2014)**

## Illegal Mining in Orchha Wildlife Sanctuary

**Source: DTE**

### Why in News?

Recently, the [National Green Tribunal \(NGT\)](#) formed a committee to look into the complaint of the **illegal operation** of stone crushers and mining quarries in an [eco-sensitive zone](#) of **Orchha Wildlife Sanctuary**.

- According to the NGT, **immediate action is required** for the **disposal of 337 tonnes of chemical waste**, addressing [groundwater contamination](#), shortage of piped water, and monitoring iron, manganese and nitrate concentrations exceeding the permissible limit.

### What are the Key Points About the Orchha Wildlife Sanctuary?

- **About:**

- It was established in **1994** and is located within a large forest area.
- It is **situated near the Betwa River** (a tributary of the Yamuna), in the **border region between Madhya Pradesh and Uttar Pradesh**, contributing to its unique ecosystem and biodiversity.

- **Fauna Species:**

- It is home to a **diverse range of fauna**, including [spotted deer](#), [Blue Bull](#), [Peacock](#), [Wild pig](#), [Monkey](#), [Jackal](#), [Nilgai](#), [Sloth Bear](#), and various bird species.
  - **Birdwatching** is particularly popular, with around 200 bird species found in the sanctuary's river ecosystem. These include both resident birds and migratory species such as peafowls, peacocks, swans, Jungle Bush Quail, minivet, etc.
- **Forest Types:**
- It has **southern tropical dry deciduous forests**. The sanctuary **features dense plantations of Dhawa Trees, Kardhai Trees, Teak, Palaash, and Khair**, contributing to its rich biodiversity and natural ambience.

## What are Eco-Sensitive Zones?

- **About:**
  - The [National Wildlife Action Plan \(2002-2016\)](#) of the **Ministry of Environment, Forest and Climate Change (MoEFCC)** stipulated that state governments should declare land falling **within 10 km of the boundaries of national parks and wildlife sanctuaries** as eco-fragile zones or [Eco-Sensitive Zones \(ESZs\)](#) under the [Environmental \(Protection\) Act, 1986](#).
- **Activities around ESZs:**
  - **Prohibited Activities:** Commercial mining, establishment of major [Hydroelectric Projects \(HEP\)](#), commercial use of wood.
  - **Regulated Activities:** Establishment of hotels and resorts, commercial use of natural water, drastic change of agriculture system, such as: adoption of heavy technology, pesticides, etc, widening of roads.
  - **Permitted Activities:** [Rainwater harvesting](#), [organic farming](#), use of renewable energy sources.
- **Significance of ESZs:**
  - **Protect Core Ecological Areas:**
    - **Acts as buffer zone** reducing impact from activities like construction and pollution.
    - **Minimises threats to wildlife** and ecosystems.
    - **Promotes in-situ conservation** within natural habitats.
  - **Ensure Sustainable Development:**
    - **Reduces human-wildlife conflict** by minimising disturbances.
    - Encourages **sustainable practices** in surrounding communities.
    - Creates a transition zone between high-protection and lower-restriction areas.

Read More: [Wildlife Protection Act, 1972](#)

### UPSC Civil Services Examination, Previous Year Question

**Q. In which one among the following categories of protected areas in India are local people not allowed to collect and use the biomass? (2012)**

- (a) Biosphere Reserves
- (b) National Parks
- (c) Wetlands declared under Ramsar Convention
- (d) Wildlife Sanctuaries

**Ans: (b)**

# Himalayan Magpies

[Source: TH](#)

## Why in News?

Recently, the enchanting **Himalayan magpies** have garnered increased attention as researchers delve deeper into their habitats and behaviours.

- These captivating birds adorn the mountainous landscapes from Kashmir to Myanmar, adding vibrancy to the region.



## What are the Key Facts About Himalayan Magpies?

- Corvidae Family and Magpies:** Magpies belong to the **Corvidae family** of birds, which includes **crows, jays, and ravens**.
  - Corvids are generally considered to be **noisy, inquisitive birds** that are often associated with omens, both good and bad, in folklore from around the world.
  - Despite their folklore associations, magpies are striking in appearance, and some of the most noticeable species are found in the Himalayas.
  - Himalayan magpies are classified as "**least concern**" on the [IUCN Red List of Threatened Species](#).
- Himalayan Magpie Species:** From Kashmir to Myanmar, a few closely related blue magpie species are a common sight in the Himalayas.
  - The **gold-billed magpie (*Urocissa flavirostris*)**, also called the **yellow-billed blue magpie**, occupies the high-altitude zone between 2,000 and 3,000 meters above sea level.
  - The **red-billed magpie (*Urocissa erythrorhyncha*)** is found at slightly lower heights, while the **blue magpie** is found at lower altitudes where human populations are larger.
- Corridors and Bird Diversity:** The best sightings of the yellow-billed and red-billed magpies are in the trekking corridor in **Western Sikkim, which leads from the town of Yuksom (1,780 meters) to the Goche La pass (around 4,700 meters)**.
- Nesting and Behavior of Himalayan Magpies:** Yellow-billed blue magpies build nests in **rhododendron trees**, hastily constructed with twigs and grass.
  - The blue magpie and red-billed magpie are similar in appearance, though a little smaller than the yellow-billed variety.
  - Magpies can be spotted as solitary birds, in pairs, or noisy flocks of 8-10 individuals.
- Threats and Conservation Concerns:** Increasing human activity in forested areas raises concerns about the ability of magpies to cope with habitat changes.
  - Tourist attractions like rhododendron flowers pose sustainability challenges, as villagers may resort to forest resources to support tourism

## 5th Customs Meeting Between India and Bhutan

Souce: PIB

The 5<sup>th</sup> **Joint Group of Customs (JGC)** meeting between India and Bhutan took place on 6- 7<sup>th</sup> May 2024 in **Leh, Ladakh**.

- Meeting discussed bilateral issues such as opening new **Land Customs Stations** and **notifying new trade routes**, development of infrastructure, automation and digitisation of transit processes, **prevention of smuggling**, **coordinated cross-border management**, and pre-arrival exchange of Customs data.
- These meetings enhance connectivity and trade infrastructure for smooth customs clearance at **10 Land Customs Stations** along the **India-Bhutan border** (6 in West Bengal and 4 in Assam).
- Bhutan is a **top trade partner of India** for both imports and exports.
  - It has more than tripled from USD 484 million in 2014-15 to **USD 1,615 million in 2022-23**.
  - This accounts for about **80% of Bhutan's overall trade**.
- Bhutan thanked the [\*\*Central Board of Indirect Taxes and Customs\*\*](#) for supporting its capacity building, training, and skill development through workshops, seminars, and various training programmes.
- Enhancing connectivity with Bhutan is important for **India's 'Neighbourhood First' and 'Act East' Policy**.



**Read more:** [India-Bhutan Relations](#)

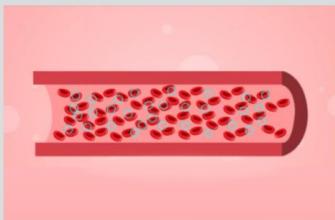
# International Thalassemia Day

## Source: PIB

Recently, **International Thalassemia Day was celebrated on 8<sup>th</sup> May**, to unite stakeholders to fight thalassemia through prevention, awareness, early diagnosis, and ensuring quality care for patients.

- The 2024 theme, "**Empowering Lives, Embracing Progress: Equitable and Accessible Thalassemia Treatment for All**," emphasizes on equality in access to comprehensive care.
- The need for **integration of compulsory Thalassemia testing** into the **Reproductive and Child Health (RCH)** program as a means to significantly alleviate the burden of Thalassemia was promoted during the celebration.
  - **RCH programme** is a **comprehensive flagship programme** launched in 2005, under the umbrella of the **National Health Mission (NHM)** to deliver the RCH targets for the **reduction of maternal and infant mortality** and **total fertility rates**.
- The event emphasized that there are nearly **1 lakh Thalassemia patients** in India, with around **10,000 new cases being reported annually**. It is crucial to raise widespread awareness about Thalassemia among the general population.





# World Thalassemia Day



## Definition

Thalassemia (thal-uh-SEE-me-uh) is an inherited blood disorder. It affects your body's ability to produce normal hemoglobin. If you have thalassemia, your body produces fewer healthy hemoglobin proteins, and your bone marrow produces fewer healthy red blood cells.

## Types

- **Alpha Thalassemia:** Four genes are inherited, two from each parent, that make alpha globin protein chains. When one or more genes are defective, alpha thalassemia is developed.
- **Beta Thalassemia:** Two beta-globin genes, one from each parent are inherited. Your anemia symptoms and how severe your condition is depends on how many genes are defective and which part of the beta globin protein chain contains the defect.

## Symptoms of Thalassemia

### Asymptomatic

- (no symptoms)

### Mild to Moderate Symptoms

- Growth problems
- Delayed puberty
- Bone abnormalities, such as osteoporosis
- An enlarged spleen

## Statistics Around Thalassemia

Thalassemia affects approximately **4.4** out of every **10,000** live births throughout the world.

### Severe Symptoms

- Poor appetite.
- Pale or yellowish skin (jaundice).
- Urine that's dark or tea-colored.
- Irregular bone structure in your face.



Read more: [Casgevy Therapy for Sickle Cell Disease and Thalassaemia](#)

## Catatumbo Lightning

Source: TOI

**Catatumbo lightning** is a natural phenomenon that occurs over the **Catatumbo River** in **Venezuela**, where **lightning strikes** almost continuously.

- The strikes occur for up to **160 nights in a year**, with an average of **28 lightning strikes per**

**minute** at its peak.

- This phenomenon primarily happens at the **mouth of the Catatumbo River**, where it meets **Lake Maracaibo**, the **largest lake in Latin America**. It is also among the oldest water bodies on the planet.
- Warm, moist air from the **Caribbean Sea** is pushed towards the **Andes mountains**, where it collides with cooler air descending from the peaks.
- This collision creates a **perfect storm of sorts**, as the **warmer air** is forced to rise rapidly by the shape of the **local landscape**.
- It cools and condenses, forming towering **cumulonimbus clouds**. The combination of **strong winds** and **temperature differentials** generates electrical charges within these clouds.
- The cumulonimbus clouds **sometimes reach heights of more than 5 km** loaded up on static electricity. When the electrical potential within the clouds becomes too great, it **discharges in the form of lightning**.



**Read more:** [Report on Lightning Strikes](#)

## Oleander Flowers

**Source:** [IE](#)

Kerala has banned the use of **Oleander flowers** (*Nerium Oleander*) (**locally known as Arali**) in temple offerings after a woman died from accidentally chewing poisonous oleander leaves.

- Oleander, also called **rosebay**, is a widely cultivated plant found in **tropical**, **subtropical**, and **temperate** regions around the world.
  - It is popular for its ability to **withstand drought** and is commonly used for **landscaping** and **ornamental purposes**.
- Oleander as a Traditional Medicine:
  - **Ayurveda** prescribes this for treating **chronic and obstinate skin diseases**, including **leprosy**.
  - The **Bhavaprakasha** (a renowned treatise on Ayurveda) has mentioned it as a **poisonous plant** and recommended its use in the treatment of infected wounds, skin diseases, microbes and parasites, and itching.

- The plant contains **cardiac glycosides** (a type of chemical), including **oleandrin, folinerin, and digitoxigenin**, which can have **pharmacological effects** on the heart.
  - **Symptoms of oleander toxicity include** nausea, diarrhea, vomiting, rashes, confusion, dizziness, irregular heartbeat, slow heartbeat, and in extreme cases, death.



**Read More:** [Types of Forests in India](#)