

11-01-2023

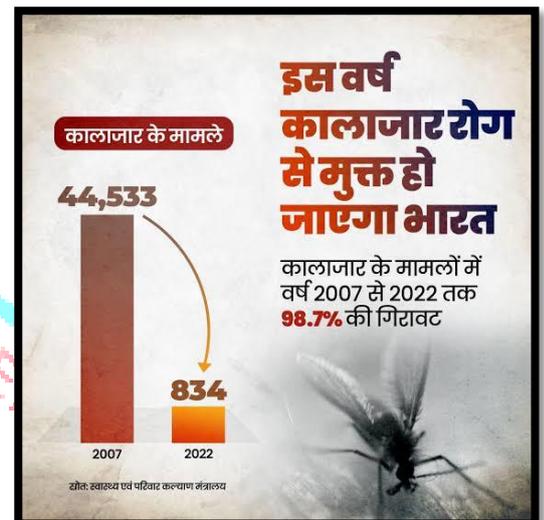
India's Kala-azar cases declined

Why in Newspapers?

Between 2007 and 2022, there has been a reduction of **98.7 percent** in the cases of **Kala-azar in the country**. In the year 2007, its number was forty thousand five hundred thirty three, which decreased to eight hundred thirty four in 2022. There are **632 such blocks across the country**, where **there have been less than one Kala-azar cases per 10,000 population**.

Quick Issue?

- Union Health and Family Welfare Minister **Mansukh Mandaviya** has said that **the government has intensified the campaign against Kala-azar**.
- He expressed confidence that **this disease would be completely eradicated from the country by the end of this year**.



Historical Background?

- Kala-azar disease**: - is also known **Visceral leishmaniasis** or **black fever** or **Dumdum fever**.
- There are three types of leishmaniasis:-
 - Visceral leishmaniasis**: It affects multiple organs of the body and is the most severe form of the disease.
 - Cutaneous leishmaniasis**: This disease causes skin lesions and is the most common form of the disease.
- Mucocutaneous leishmaniasis**: This disease causes **skin and mucosal lesions**.
- It is a **fatal parasitic disease** caused by **the protozoan parasite Leishmania** and mainly affects people living in **Africa, Asia and Latin America**.
- If not treated on time, this disease can cause death.
- According to the **World Health Organization (WHO)**, Kala-azar is the **second deadliest parasitic disease** in the world and by **November 2022**, eight countries – Brazil, Eritrea, Ethiopia, India, Kenya, Somalia, South Sudan and Sudan – have about **89% Global cases have been seen**.
- India accounts for about **11.5% of the total cases of Kala-azar reported globally**.
- More than **90% of Kala-azar cases in India are reported from Bihar and Jharkhand**, while **Uttar Pradesh and West Bengal have achieved their elimination target** at the block level.
- It is transmitted to humans through the bite of an **infected female phlebotomine sandfly**.

- **Symptoms :-** Fever, weight loss, anaemia and enlargement of liver and spleen.
- Kala-azar prevention includes **measures to reduce sandfly breeding sites** and protect people from sandfly bites.
- This disease can be prevented through the use of insecticides, mosquito nets and repellents as well as through cleanliness of the house, clean water and sanitation.
- WHO also recommends **Mass Drug Administration (MDA)** in areas where the disease is endemic.
- Treatment of Kala-azar includes the **use of drugs like sodium stibogluconate and Meglumine antimoniate.**
- WHO recommends a combination of two or more drugs for the treatment of Kala-azar, as monotherapy carries a high risk of treatment failure and drug resistance.

WHAT IS KALA-AZAR

<ul style="list-style-type: none"> ▪ A slow progressing indigenous disease 	<p>Signs & Symptoms</p> <ul style="list-style-type: none"> ➔ Recurrent fever ➔ Loss of appetite ➔ Weakness ➔ Spleen enlargement ➔ Anaemia
<ul style="list-style-type: none"> ▪ Caused by protozoan parasite of genus <i>Leishmania</i> 	
<ul style="list-style-type: none"> ▪ In India, <i>Leishmania donovani</i> is the only parasite causing the disease 	
<ul style="list-style-type: none"> ▪ The parasite primarily infects reticuloendothelial system 	

Transmission

- Sandfly of genus *Phlebotomus argentipes* only known vector of kala-azar in India



- Indian kala-azar has a unique epidemiological feature of being anthroponotic
- Female sandflies pick up parasite while feeding on infected human host
- Development and multiplication in the gut of sandflies and move to mouthparts

- Parasite undergoes morphological change to become flagellate

- Healthy human hosts get infection when an infective sandfly vector bites them



Other Key Facts?

Global Initiative

- **WHO's new roadmap for 2021-2030:** 2030 aims to **prevent, control, eliminate** 20 diseases, which are called **neglected tropical diseases**.
- WHO has also established the **Global Program to Eliminate Lymphatic Filariasis (GPELF)**, which aims to eliminate lymphatic filariasis, onchocerciasis and Kala-azar by MDA.
- In the year 2000, **GPELF had set a target of eliminating these diseases globally by the year 2020**, which could not be completed.
- Despite the setbacks of Covid-19, WHO will accelerate the work to achieve this goal by the **year 2030**.

Initiatives of India

- The Central Government has taken several steps to achieve its goal of eliminating Kala-azar from India by the year 2023, which includes **building pucca houses through Pradhan Mantri Awas Yojana, rural electrification, testing, treatment**, timely high Includes peer review and award distribution.
- The Centre is also assisting the States in **active case detection, surveillance, treatment and supply of diagnostic kits, medicines and sprays**.

National Kala-azar Eradication Program

- The **National Health Policy-2002(NHP)** had set a target of eradicating Kala-azar in **India by the year 2010, which has been revised to 2015**.
- **India, Bangladesh and Nepal** have signed a **tripartite Memorandum of Understanding (MoU)** for the elimination of Kala-azar from the South-East Asia Region (SEAR).
- Presently all the program related activities are being implemented through the **National Vector Borne Disease Control Program (NVBDCP)**, which is an umbrella program and comes under the **National Health Mission (NHM)**.

Pravasi Bhartiya Divas (PBD) Convention

Why in Newspapers?

Prime minister addressed the **17th Pravasi Bharatiya Divas** convention in Indore. During this, he spoke about India's development works in the conference. PM Modi also mentioned about the **chairmanship of G20 during the conference**. On this occasion, he said that **this year India is also presiding over the G20 group of the world**. India is seeing this responsibility as a big opportunity. This is an opportunity for us to tell the world about India.

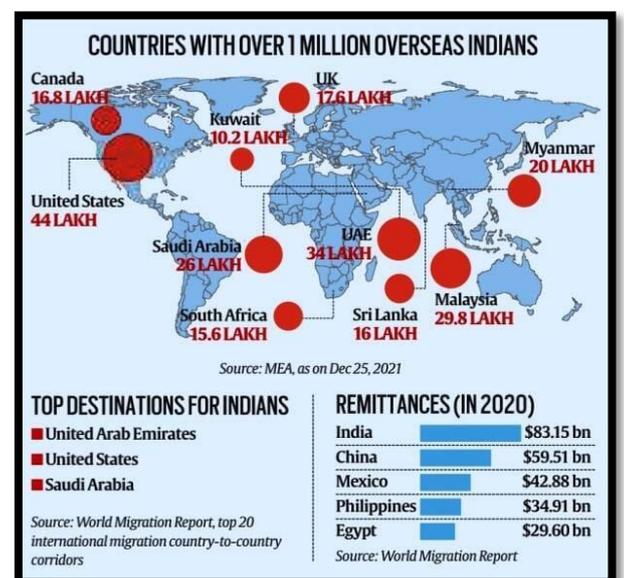
Quick Issue?

- According to the **World Migration Report, 2022**, India has the **largest migrant population in the world in 2020**, making it the **top country of origin globally**, followed by **Mexico, Russia and China**.
- The data shared by the government in Parliament in the year 2022 showed that the **Indian diaspora has a vast geographical spread**.
- Countries with over 1 million Indian diaspora include: - **United States, United Kingdom, United Arab Emirates, Sri Lanka, South Africa, Saudi Arabia, Myanmar, Malaysia, Kuwait and Canada**.



Historical Background?

- Started in the year 2003**, the conference has grown in size and scope over the years, especially since 2015 when the annual conference became biennial.
- The word 'diaspora' is derived from the Greek word dispersion, which means 'dispersal'.
- The Indian diaspora has grown manifold since the first batch of Indians were taken to the islands of the East Pacific and Caribbean as indentured labour under the indentured system.
- NRI: NRIs are Indians who are residents of foreign countries**. A person is considered to be an NRI if:
 - he has **not stayed in India for 182 days or more during the financial year or**;
 - If he has stayed in India for less than 365



days during the 4 years preceding that year and for less than 60 days in that year.

- **Persons of Indian Origin (PIO):** PIO refers to a **foreign national** (except citizens of Pakistan, Afghanistan, Bangladesh, China, Iran, Bhutan, Sri Lanka and Nepal)
- A person who holds an Indian passport or either of his parents/grandparents/great-grandparents was born and permanently resided in Indian territory as defined by the **Government of India Act, 1935** or who is **married to an Indian citizen or PIO**.
 - PIO category was **abolished in the year 2015** and merged with OCI category.
- **Overseas Citizens of India (OCIs):** A separate category of OCIs was created in the year 2005.
- **OCIs card is given to a foreign national who:**
 - Was eligible to be a citizen of India on **January 26, 1950**.
 - Was a citizen of India at any time on or after **January 26, 1950** or belonged to the territory which became part of India after **August 15, 1947**.
 - Minor children of such persons, except those who are citizens of Pakistan or Bangladesh, are also eligible for OCIs card.
- According to the World Bank Migration and Development Brief released in the year 2022, for the first time India is on track to receive over US\$ 100 billion in annual remittances.
- The **World Migration Report** states that **India, China, Mexico, Philippines and Egypt** are the **top five remittance receiving countries** (in descending order).

Other Key Facts?

Importance of Indian Diaspora

- **Enhancing India's soft power:** - The Indian diaspora is **one of the richest minorities in many developed countries**. They are benefiting through "**diaspora diplomacy**", whereby they act as "**bridge-builders**" between their home and diaspora countries.
- The Indian diaspora is not only a part of India's soft power but also a **fully transferable political vote bank**.
- Additionally, a large number of persons of Indian origin occupy prominent political positions in various countries, which strengthens **India's political influence in multilateral organizations** such as the United Nations.
- **Economic Contribution:** Remittances sent by the Indian diaspora have a **positive impact on the balance of payments, helping to reduce the widening trade deficit gap**.
- Migration of low skilled workers (especially to West Asia) has helped reduce disguised unemployment in India.
- In addition migrant workers facilitated the **flow of information, commercial and business ideas and technologies** into India.

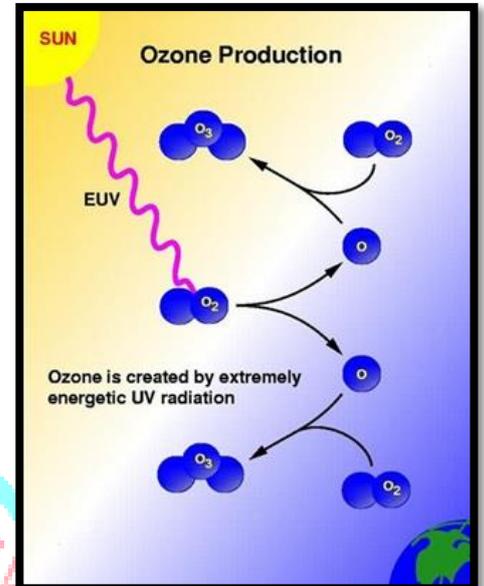
Ozone Depletion

Why in Newspapers?

A recent UN report states that the ozone layer is slowly recovering, with the hole over Antarctica expected to heal completely in about 43 years.

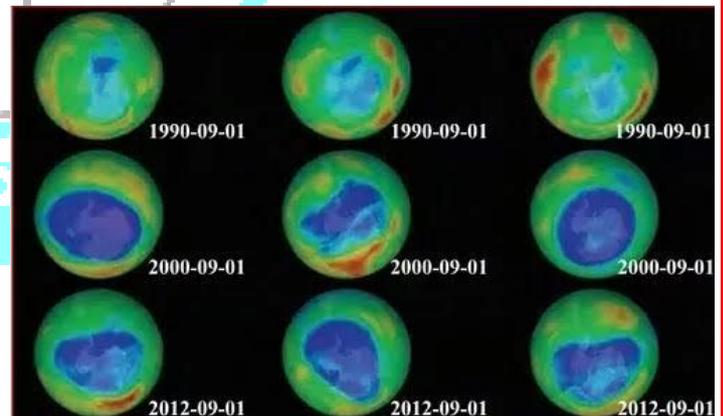
Quick Issue?

- The scientific assessment conducted every four years found that almost all the countries of the world have agreed to stop producing chemicals that damage the ozone layer in the Earth's atmosphere. It is likely to be correct by the year 2066.



Historical Background?

- Ozone gas is **not a permanent gas** but a **temporary gas** because on one hand it is formed and on the other hand it is also disintegrated and destroyed, that is, the formation and destruction of ozone is a gradual and permanent natural process.
- The ozone layer is located approximately between **15 and 35 km** above the Earth's surface.
- It is a region of the upper atmosphere with a relatively **high concentration of ozone molecules**.
- About 90 percent of the ozone in the atmosphere is found in the **stratosphere**. It **protects the Earth from the harmful ultraviolet (UV) radiation of the Sun**.
- **Ozone hole**; - Due to the emission of chemical compounds containing chlorine or bromine gas from industry and other human activities, the concentration of ozone layer in the upper atmosphere decreases, called **ozone depletion**. This depletion condition is called **ozone hole**.
- Ozone depletion is caused by human-related emissions of ozone-depleting substances (ODS) into the stratosphere.
- ODS include **chlorofluorocarbons (CFCs)**, brominated halons and methyl bromide, HCFCs, **carbon tetrachloride (CCl₄)** and **methyl chloroform**.
- The **severe depletion of the Antarctic ozone layer**, known as the "**ozone hole**", is caused by the **special atmospheric and chemical conditions present there**.
- The low temperature of the Antarctic stratosphere in winter creates favourable conditions for the formation of polar stratospheric clouds (PSCs).





- These polar stratospheric clouds act as a medium for the reactions of chlorine and bromine, resulting in the formation of ozone holes in the Antarctic region in the spring.

Other Key Facts?

Global Initiative to Stop Ozone Depletion

Vienna Convention

- It was an **international agreement** signed in the year **1985** for the protection of the ozone layer.
- In this the members of the United Nations recognized the fundamental importance of preventing damage to the stratospheric ozone layer.

Montreal Protocol

- It is a **1987 treaty to control substances that destroy the ozone layer**.
- Protocol **signed by 197 parties in 1987** to control the **production and use of ozone-depleting substances**, mainly **chlorofluorocarbons (CFCs)**.

Kigali Protocol

- It was adopted in the **year 2016** with the **aim of amending the Montreal Protocol**. This amendment came **into force in 2019**.
- This will reduce the **production and consumption of HFCs** and avoid the increase in projected global warming and associated climate change.



Gay Marriage Controversy

Why in Newspapers?

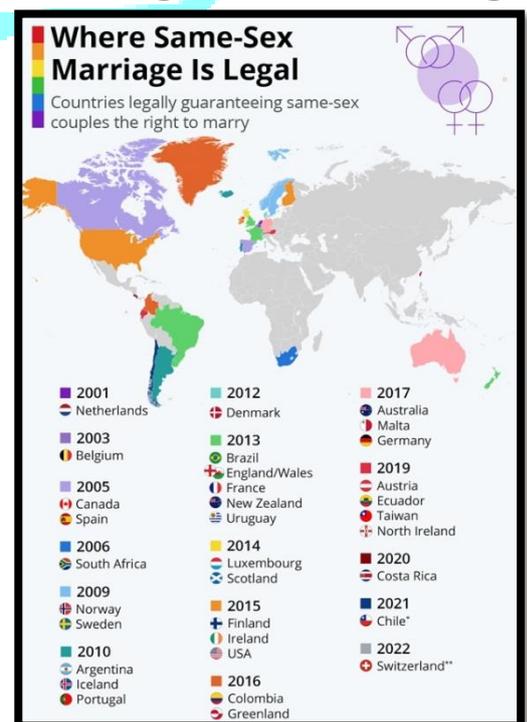
Recently, the Supreme Court transferred to itself petitions pending in various High Courts relating to legal recognition of same-sex marriages under the Special Marriage Act (SMA) 1954.

Quick Issue?

- A three-judge bench headed by Chief Justice of India DY Chandrachud said that there is a broad consensus among the petitioners to transfer these petitions to the Supreme Court for an official decision on the issue.

Historical Background?

- The Supreme Court has asked the parties to submit a common compilation of arguments and judgments that they wish to place before the court for an expeditious decision.
- The Supreme Court has also directed the Central Government to present its stand on these petitions before 15 February.
- Supreme Court issues notice in another petition challenging the mandatory issue of public notice and objection for marriages contemplated under the Special Marriage Act and the Foreign Marriage Act.
- According to the Supreme Court, this provision increases the risks of rudeness, harassment and violence for same-sex couples.
- According to the petitioners, the case is a sequel to the 2018 Constitution Bench judgment in the Navtej Johar case, which decriminalized homosexuality.
- The Special Marriage Act of 1954 should be made gender-neutral and the Act should apply to marriages between any two persons, regardless of gender identity and sexual orientation.
- The petitions argued that non-recognition of same-sex marriage amounts to discrimination affecting the dignity of the LGBTQ+ community.





- **Same-sex marriage** – Same-sex marriage can refer to a marriage between two persons of the same sex (two men or two women).
- **Arguments in favor of gay marriage**
 - The right to marry the person of one's choice is a **fundamental right** given to every individual under the Constitution of India.
 - Preventing a person from marrying is a violation of his right to equality.
 - **By 2022, same-sex marriage is legal in more than 30 countries.**
- **Arguments against gay marriage**
 - Marriage in India can be recognized only if it is between a **biological man and a biological woman.**
 - According to the central government, any **interference by the court in matrimonial law based on personal laws will create imbalance in the society and may also act contrary to the intention of the Parliament** to make the law.
 - The **fundamental right to marry is not an unconstrained right and cannot override other constitutional principles.**

Other Key Facts?

Same-sex marriage provisions in other countries

- The **US legalized same-sex marriage in 2015**, finding that restricting marriage to only heterosexual couples violates the **14th Amendment**, which guarantees **equal protection under the law.**
- Following a referendum, **Australia's parliament** passed a law recognizing **same-sex marriage.**
- **Ireland and Switzerland** have also given **formal recognition to LGBTQ marriages.**
- South Africa became **the first African country to legalize same-sex marriage in 2006.**
- Taiwan has become the **first Asian country to recognize same-sex marriage.**
- **Argentina is the first Latin American country to allow same-sex marriage.**
- Canada passed a law in **2005 to recognize same-sex marriage.**

Expected Questions for Preliminary Exam

Que. Malaria and Kala-azar are caused by which of the following?

- | | |
|--------------|-----------|
| (a) Bacteria | (b) Fungi |
| (c) Protozoa | (d) Virus |

Answer (c) Protozoa

Q. Consider the following statements:

1. In tropical regions, Zika virus disease is transmitted by the same mosquito that transmits dengue.
2. Sexual transmission of Zika virus disease is possible.

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) both 1 and 2

Q. When was the first Pravasi Bharatiya Divas celebrated?

(a) 9 January 2000

(b) 9 January 2001

(c) 9 January 2002

(d) 9 January 2003

Answer (d) 9 January 2003

Q. What is the main reason for the destruction of the ozone layer?

(a) Chlorofluoro carbon

(b) Carbon dioxide

(c) Sulfur dioxide

(d) Ammonia

Ans (a) Chlorofluorocarbon

Q. Which of the following gas contributes maximum to the increase in global warming?

(a) Carbon dioxide

(b) Chloro-fluoro carbon

(c) Nitrous oxide

(d) Methane

Answer is (a) carbon dioxide

Q. Which of the following is "NOT" the correct way to prevent gender inequality?

(a) Promoting human rights

(b) Creating equal employment opportunities

(c) Stopping child marriage

(d) Prescribing different gender roles and responsibilities

Ans (d) by assigning different gender roles and responsibilities

