



DAILY CURRENT AFFAIRS 04-07-2025

GS-1

1. Polar Anticyclone
2. Alaknanda River
3. Girmitiyas

GS-2

4. Overseas Citizen of India (OCI)

GS-3

5. Garcinia Kusumae

Polar Anticyclone

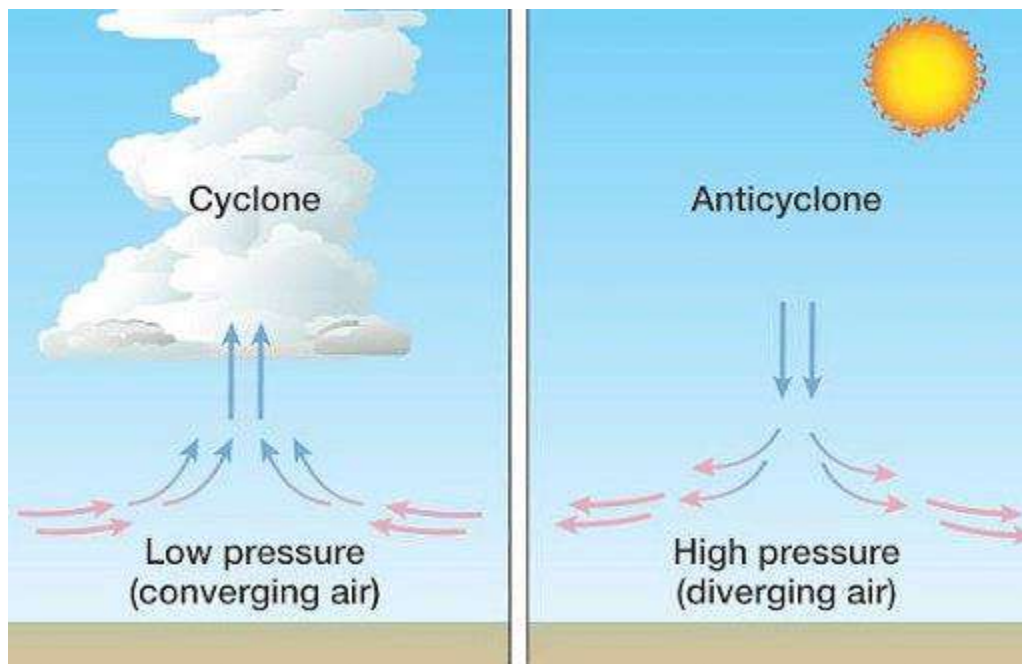
Syllabus: GS-1; Geography

Context

- Chile and Argentina among coldest places on Earth as polar anticyclone grips region.

1. Definition

- A **polar anticyclone** is a high-pressure system that develops over polar regions (Arctic & Antarctica) due to intense cold and subsiding air.
- It is a **permanent or semi-permanent** feature, especially strong during winters.



2. Formation & Characteristics

- **Thermal High Pressure:** Caused by extreme cooling of the surface, leading to dense, cold air sinking (subsidence).
- **Shallow but Intense:** Unlike subtropical anticyclones, polar highs are shallow but exert strong pressure due to cold air density.
- **Weak Winds:** Due to low temperature gradients (Coriolis effect is weak near poles).
- **Inversion Layer:** Cold surface air creates a temperature inversion, preventing cloud formation.

3. Location & Seasonality

- **Arctic High:** Strongest over Siberia (Asian Pole of Cold—Verkhoyansk/Oymyakon) and Canada in winter.
- **Antarctic High:** More persistent and stronger due to the continent's ice cover and elevation.
- **Seasonal Variation:** Strongest in **winter** (due to extreme cold), weakens in summer.

4. Weather Conditions

- **Clear Skies:** Subsidence prevents cloud formation.
- **Extreme Cold:** Leads to record low temperatures (e.g., -89.2°C in Antarctica).
- **Calm Winds:** Light winds due to weak pressure gradients.
- **Frost & Ice Fog:** Common in polar regions.

5. Impact on Global Climate

- **Polar Vortex Interaction:** Influences mid-latitude weather (cold waves in USA/Europe).
- **Katabatic Winds:** Cold, dense air flows outward, creating fierce winds in Antarctica.
- **Ocean Currents:** Affects formation of cold ocean currents (e.g., Labrador Current).

6. Recent Case Study: Polar Anticyclone in South America

- On **30 June 2024**, Chile and Argentina experienced some of the coldest temperatures outside polar regions due to a **polar-origin anticyclone**.
- Governments issued **cold-weather alerts** as temperatures dropped **10°C–15°C below seasonal averages**.
- **Unusual Impacts:**
 - **Natural gas shortages** in Argentina forced businesses and schools to close.
 - **Record snowfall** in the Atacama Desert (driest place on Earth) after a decade.
 - **Severe frost** damaged crops in Chile and Argentina.
 - **Air pollution spiked** in Santiago due to stagnant cold air.

- **Climate Change Link:** Contrasts with extreme heat in the Northern Hemisphere, highlighting global weather disruptions.

7. Difference from Subtropical Anticyclone

Feature	Polar Anticyclone	Subtropical Anticyclone
Cause	Thermal (cold air subsidence)	Dynamic (Hadley Cell descent)
Location	Poles (Arctic/Antarctica)	25°-35° N/S (e.g., Azores High)
Depth	Shallow	Deep
Temperature	Extremely cold	Warm to hot

8. Relevance to India

- **Western Disturbances:** Polar anticyclones influence cold waves in North India.
- **Climate Change:** Weakening polar highs may alter jet streams, affecting monsoon patterns.

Previous Year Questions (PYQs)

1. **UPSC 2019:** Explain the origin and weather conditions associated with anticyclones.
2. **KPSC 2020:** Differentiate between polar and subtropical high-pressure belts.

Alaknanda River

Syllabus: GS-1; Geography-Rivers

Context

- At least three people have died and nine others are missing after a bus with 20 people onboard fell into the Alakananda river in Uttarakhand's Rudraprayag district.

About

- The **Alaknanda River** is one of the two main headstreams of the **Ganges (Ganga)**, the other being the **Bhagirathi River**.

Key Facts about Alaknanda River

1. Origin:

- a. Forms at the confluence of **Satopanth Glacier** and **Bhagirathi Kharak Glacier** near **Badrinath** in Uttarakhand.
- b. The **official source** of the Ganges is considered to be **Devprayag**, where Alaknanda meets Bhagirathi.

2. Course & Tributaries:

- a. Flows **190 km** before merging with Bhagirathi at **Devprayag**.
- b. Major tributaries:
 - i. **Mandakini** (joins at **Rudraprayag**)
 - ii. **Dhauliganga** (joins at **Vishnuprayag**)
 - iii. **Nandakini** (joins at **Nandprayag**)
 - iv. **Pindar** (joins at **Karnaprayag**)

3. Panch Prayag (Five Sacred Confluences):

- a. **Vishnuprayag** (Alaknanda + Dhauliganga)
- b. **Nandprayag** (Alaknanda + Nandakini)
- c. **Karnaprayag** (Alaknanda + Pindar)
- d. **Rudraprayag** (Alaknanda + Mandakini)
- e. **Devprayag** (Alaknanda + Bhagirathi → Forms Ganga)



4. **Religious Significance:**

- a. Flows past **Badrinath Dham** (one of the Char Dham pilgrimage sites).
- b. Considered holier than Bhagirathi in Hindu tradition.

5. **Hydropower Projects & Environmental Concerns:**

- a. **Srinagar Hydroelectric Project** (330 MW)
- b. **Vishnuprayag Hydroelectric Project** (400 MW)
- c. **Environmental issues:** Deforestation, landslides, and ecological damage due to dam construction.

Wildlife Sanctuaries & Biodiversity in the Alaknanda River Basin

1. **Nanda Devi National Park & Biosphere Reserve**

- a. Location: Chamoli district (near Alaknanda basin).
- b. Significance:
 - i. UNESCO World Heritage Site (1988) & Biosphere Reserve (2004).
 - ii. Home to snow leopards, Himalayan musk deer, Himalayan tahr, and bharal (blue sheep).
 - iii. The Alaknanda River flows near its periphery.

2. **Valley of Flowers National Park**

- a. Location: Chamoli district (close to Alaknanda's tributaries).
- b. Significance:

- i. UNESCO World Heritage Site (2005) – known for alpine flowers and medicinal plants.
- ii. Key fauna: Asiatic black bear, red fox, and numerous butterfly species.
- iii. Fed by streams merging into the Alaknanda river system.

3. Kedarnath Wildlife Sanctuary

- a. Location: Rudraprayag & Chamoli districts (along Mandakini, a tributary of Alaknanda).
- b. Significance:
 - i. Protects Himalayan monal (state bird of Uttarakhand), snow leopards, and Himalayan brown bears.
 - ii. Major rivers: Mandakini (joins Alaknanda at Rudraprayag).

4. Govind Pashu Vihar Wildlife Sanctuary

- a. Location: Uttarkashi district (near Bhagirathi, but ecologically linked to Alaknanda's basin).
- b. Significance:
 - i. Part of the Western Himalayas Endemic Bird Area.
 - ii. Protects migratory birds and high-altitude species like the Himalayan griffon.

Girmitiyas

Syllabus: GS-1; Society

Context

- The journey of the Indian community in Trinidad and Tobago is one of courage, Prime Minister Narendra Modi said, emphasising that the hardships their ancestors endured could have "broken even the strongest spirits".



1. Who Were the Girmitiyas?

- The term "**Girmitiya**" comes from the word "**Agreement**" (distorted as *Girmit*), referring to the **indenture contracts** signed by Indian laborers.
- They were **Indian indentured laborers** transported by British colonial authorities to work in plantations across **British colonies** (1834–1920) after the abolition of slavery.
- Major destinations included:
 - **Fiji** (largest population of Girmitiyas)
 - **Mauritius, Trinidad & Tobago, Guyana, Suriname, South Africa, Jamaica, and other Caribbean islands.**

2. Historical Background

- **Abolition of Slavery (1833–34):** British needed cheap labor for sugar, tea, and rubber plantations after slavery was abolished.
- **Indentured Labor System (1834–1920):** Indians were recruited (often forcibly or through deceit) under a **5-year contract** (extendable).
- **Recruitment Areas:** Mostly from **Bihar, Eastern UP, Tamil Nadu, Andhra Pradesh, and Bengal.**
- **Conditions:** Harsh working conditions, cultural displacement, and minimal wages.

3. Key Features of the Girmit System

- **Recruitment:** Laborers were often misled by **Arkatis (recruiters)** with false promises of good pay and living conditions.
- **Journey:** Called "**Kala Pani**" (**crossing the black waters**), as it involved a long sea voyage under terrible conditions.
- **Contract Terms:** 5 years of mandatory labor; failure to complete led to imprisonment or extended contracts.
- **Living Conditions:** Poor housing, racial discrimination, and lack of legal rights.

4. Abolition & Legacy

- **Abolition (1920):** Due to protests by Indian nationalists (**Gandhi, Gopal Krishna Gokhale**) and international pressure.
- **Legacy:**
 - Formation of **Indian diaspora communities** in Fiji, Mauritius, Caribbean nations.

- **Cultural Retention:** Preserved Indian traditions (Holi, Diwali, Bhojpuri songs).
- **Struggle for Rights:** Many Girmitiyas later fought for civil rights in host countries.
- **Modern Recognition:**
 - **Indian Arrival Day** (celebrated in Fiji, Trinidad, Guyana).
 - **International Girmit Remembrance Day (May 14).**

5. Important Personalities & Movements

- **Mahatma Gandhi:** Fought for the rights of indentured laborers in South Africa.
- **Totaram Sanadhya (Fiji):** A Girmitiya who wrote about exploitation in "**Fiji Mein Mere Ekkis Varsh**".
- **Manilal Doctor:** Lawyer who advocated for Girmitiya rights in Fiji.

Prelims Practice Questions

Q. The term 'Girmitiya' refers to:

- (a) Indian soldiers in British Army
- (b) Indian indentured laborers in British colonies
- (c) Indian traders in Southeast Asia
- (d) Indian migrants to the USA

Answer: (b)

Overseas Citizen of India (OCI)

Syllabus: GS-2; Polity- Citizenship

Context

- India announces to issue OCI cards up to sixth generation of Indian diaspora of Trinidad and Tobago.

1. What is OCI?

- **OCI (Overseas Citizen of India)** is a form of **permanent residency** for **foreign nationals of Indian origin**.
- It provides **lifelong visa-free travel** to India and certain economic, educational, and cultural benefits.

- **OCI is not dual citizenship**; India does not allow dual citizenship under the **Citizenship Act, 1955**.

2. Eligibility for OCI

An applicant is eligible if they:

- Were a **citizen of India on or after 26th January 1950**.
- Were **eligible for Indian citizenship on 26th January 1950** (e.g., from undivided India).
- Are a **child/grandchild of an Indian citizen**.
- Are a **spouse of an Indian citizen or OCI holder** (subject to certain conditions).
- **Exclusions**: Citizens of **Pakistan & Bangladesh** are **not eligible**.

3. Benefits of OCI Status

- **Multiple-entry, multipurpose lifelong visa** to visit India.
- **Exemption from registering with FRRO (Foreigners Regional Registration Office)** for any length of stay.
- **Parity with NRIs** in:
 - Economic, financial, and educational fields (e.g., property ownership, investments).
 - Admission in educational institutions under NRI quota.
 - Professional practice (doctors, lawyers, etc., subject to regulations).
- **No voting rights** or eligibility for **government jobs, constitutional posts (MP, MLA, etc.), and agricultural land purchase**.

4. Restrictions on OCI

- **Cannot vote** in elections.
- **Cannot hold constitutional posts** (President, Vice-President, Judge of SC/HC, etc.).
- **Cannot buy agricultural land** (except in some states under specific conditions).
- **Cannot get an Indian passport** (must use foreign passport for travel).

5. OCI vs PIO vs NRI

Category	OCI	PIO (Now Merged with OCI)	NRI
Visa	Lifelong visa-free entry	15-year visa (now merged with OCI)	No special visa

Category	OCI	PIO (Now Merged with OCI)	NRI
Registration	No FRRO registration required	Earlier required, merged with OCI	now Not applicable
Land Purchase	No agricultural land	Same as OCI now	Can buy property
Citizenship Rights	No political rights	No political rights	Full rights if citizen

(PIO card was merged with OCI in **2015** under the **Citizenship Amendment Act, 2015**.)

7. How to Apply for OCI?

- Apply online through the **Indian government's OCI portal**.
- Submit documents like:
 - Proof of Indian origin.
 - Foreign passport copy.
 - Renunciation certificate (if applicable).
- Processing time: **6-8 weeks**.

8. Cancellation of OCI

The **Indian government can cancel OCI** if:

- The registration was obtained **fraudulently**.
- The holder **violates Indian laws** (e.g., anti-national activities).
- The holder **engages in activities detrimental to India's sovereignty**.

Previous Year Questions (PYQs)

1. **UPSC 2019**: "Discuss the significance of the OCI scheme for the Indian diaspora."
2. **KPSC 2020**: "What are the differences between NRI and OCI?"

Garcinia Kusumae

Syllabus: GS-3; Biodiversity

Context

- Assam has yielded a new-to-science tree species belonging to the genus *Garcinia*, commonly referred to as thoikora in Assamese.



1. Overview

- **Scientific Name:** *Garcinia kusumae*
- **Family:** Clusiaceae (Mangosteen family)
- **Common Names:** Thoikora (Assamese)
- **Type:** Evergreen, dioecious tree (up to 18 meters tall)
- **Discovery:** Newly described species from Assam (2024)
- **Named After:** Kusum Devi, mother of botanist Jatindra Sarma

2. Distribution & Habitat

- **Endemic to:** Bamunbari, Baksa district (Assam)
- **Habitat:** Tropical forests of Assam, part of the Eastern Himalayan biodiversity hotspot
- **Flowering Season:** February–April
- **Fruiting Season:** May–June

3. Key Features

- **Morphology:**
 - **Leaves:** Glossy, leathery, elliptical

- **Flowers:** Up to 15 staminate flowers per fascicle, fewer stamens compared to related species
- **Fruit:** Berry-like, exudes blackish resin; used in traditional medicine and cuisine
- **Distinct from:** *Garcinia assamica*, *G. cowa*, and *G. succifolia* due to unique floral and resin characteristics

4. Economic & Medicinal Uses

- **Culinary Use:**
 - Sun-dried pulp used in sherbet (to prevent heatstroke)
 - Added to fish curries
 - Seed aril eaten raw with salt, chillies, and mustard oil
- **Medicinal Value:**
 - Traditional remedy for **diabetes and dysentery**
 - Resin may have pharmacological potential (similar to other *Garcinia* species like *G. cambogia*)

5. Conservation & Significance

- **Conservation Status:** Not yet evaluated (likely rare due to endemism)
- **Threats:** Deforestation, habitat loss in Assam
- **Botanical Importance:**
 - **4th species** named by Jatindra Sarma after family members (*Amomum pratisthana*, *Syzygium nivae*, *Garcinia sibeswarii*)
 - Adds to Assam's **12 documented *Garcinia* species** (out of 33 in India)

6. Related Species

- *Garcinia indica* (Kokum) – Used in Ayurveda and cooking.
- *Garcinia cambogia* – Known for weight-loss supplements.
- *Garcinia assamica* – Another Assam-endemic species.