



DAILY CURRENT AFFAIRS 27-03-2024

GS-1

1. Atlantic “Ring of Fire”

GS-2

2. India-Mozambique Tanzania (IMT) maritime trilateral exercise

GS-3

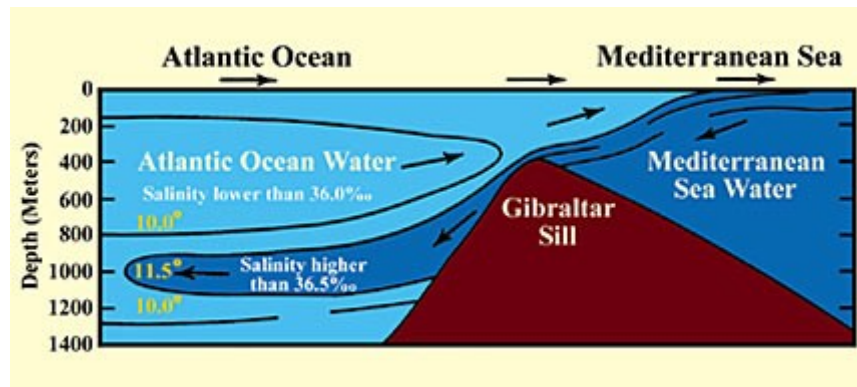
3. Robusta coffee
4. Bugun Liocichla
5. National Disaster Response Fund (NDRF)

Atlantic “Ring of Fire”

Syllabus: GS-1; Physical Geography

Context

- A recent study done by a group of scientists in Portugal has located a subduction zone which could potentially swallow the entire water body in the coming future.



What does the study says?

- According to a report by Unilad, the research has identified such a place in the **Atlantic beneath the Gibraltar Strait between Spain and Morocco.**
- Here, the **African plate has been pushing below the Eurasian plate.**
- They have confirmed that the process is “very very slow” at this moment and may take approximately 20 million years to come to its final position.
- As per the results of the technological assessment, when the African plate would have completely subducted below the Eurasian plate, the zone would start moving westwards.
- It would have led to the birth of a new **Atlantic subduction system named the “Ring of Fire.”**
- The researchers believe the process has already begun below the Gibraltar Strait, which stretches about 125 miles.
- According to the prediction, the length could eventually breach the 500-mile mark in the next 20 million years and close up the Atlantic.

To know

- The “Ring of Fire” is a **chain of colliding tectonic plates.**
- **Subduction zones** mark the junctions on Earth where one crustal plate meets with another.

India-Mozambique Tanzania (IMT) maritime trilateral exercise

Syllabus: GS-2: Multilateral Relations – Military exercises.

Context:

- *INS Tir and INS Sujata are set to partake in the upcoming India Mozambique Tanzania (IMT) TriLateral (TRILAT) Exercise.*

About IMT Trilateral Exercise:

- *A joint maritime exercise scheduled from 21-29 Mar 24.*
- *The inaugural edition occurred in Oct 22, featuring INS Tarkash alongside the Tanzanian and Mozambique Navies.*

The current edition will unfold in two phases:

- *Harbour Phase (21-24 Mar 24): Naval ships Tir and Sujata will engage with respective Navies at the ports of Zanzibar (Tanzania) and Maputo (Mozambique).*
- *Activities include a Planning Conference and joint harbour training sessions covering:*
 - *Damage Control*
 - *Fire Fighting*
 - *Visit Board Search and Seizure procedures*
 - *Medical Lectures*
 - *Casualty Evacuation*
 - *Diving operations*

Sea Phase:

- *Focuses on practical aspects of countering asymmetric threats, Visit Board Search and Seizure procedures, boat handling, manoeuvres, and firing exercises.*
- *Joint EEZ surveillance is planned.*
- *The exercise culminates with a joint debriefing session scheduled at Nacala (Mozambique).*

Harbour Stay Activities:

- *Indian Naval ships will be open for visitors during their harbour stay.*
- *They will engage in sports and cultural exchanges with host Navies.*

Robusta coffee

Syllabus: GS-3; Agriculture

Context

- *Robusta coffee price touches all-time high amid global shortage*
- *Price of Robusta coffee has spiked due to drastic fall in traditional growing regions - Vietnam and Indonesia*

What are robusta coffee beans?

- *A bean derived from the **coffea canephora plant** native to Sub-Saharan Africa, robusta coffee contains twice as much caffeine as arabica coffee.*
- *While an arabica coffee bean typically contains around 1.2-1.5% caffeine, a robusta coffee bean generally contains around 2.2-2.7% caffeine.*

Where is it grown?

- *Robusta coffee (*Coffea canephora* var. *Robusta*) is grown in **Africa, Asia, and parts of tropical America, including India, Vietnam, Indonesia, and Uganda.***

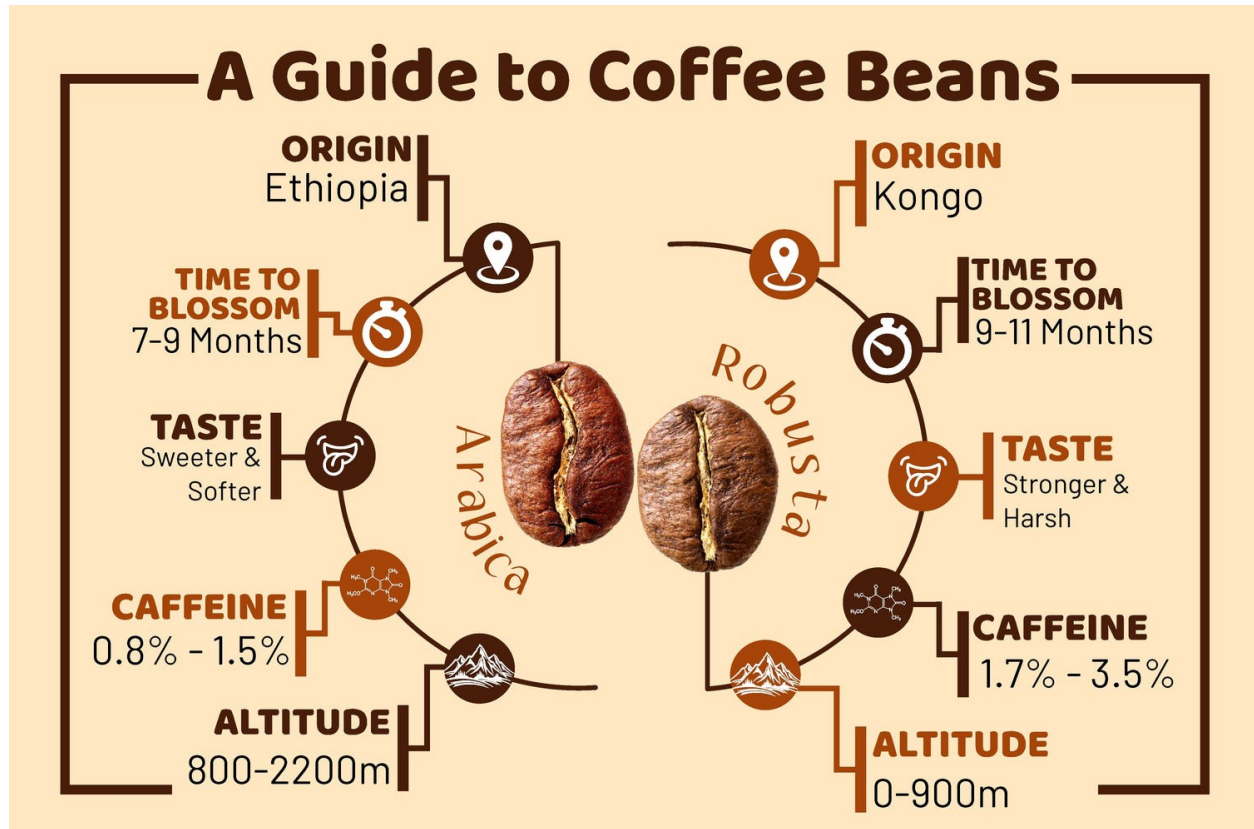
Conditions to grow

- *Robusta coffee plants can grow up to **10 meters tall** if not pruned, and prefer **warm, humid weather** between 22°C and 30°C (72°F and 86°F).*
- *They also need **lots of rain**, usually 1,500 to 3,000 millimeters yearly, and perform best in well-drained, **fertile soils** with a pH range of 5.5 to 7.0.*
- *Young plants are spaced in rows to create a density of 1,200 to 1,800 plants per hectare (500 to 750 plants per acre).*
- *Seedlings are raised in nurseries and carefully planted at the beginning of the rainy season.*
- *For the first three to four years, the plants are mainly trimmed to give them a strong, balanced framework and to stimulate fruiting.*
- *The plants depend on cross pollination, and after each flower is fertilized, cell division occurs and the fruit remains as a pin head for a period dependent on the climate.*
- *Robusta coffee is grown in cleared forestland or modified forests.*

Robusta coffee production in India

- *In 2022–2023, India produced 4,420,000 60 kilogram bags of Robusta coffee, which is **72% of the total coffee production in India.***
- ***Karnataka is the largest producer of Robusta coffee in India**, growing 70.5% of the country's total, on around 2.4 lakh hectares.*

- Other states that produce Robusta coffee include Kerala (20.6%), Tamil Nadu (5.3%), Andhra Pradesh (3.5%), and Odisha (0.1%).
- Robusta coffee is grown in elevated areas, such as **Chikkamagaluru, Hassan, and Kodagu** in Karnataka, because it prefers a slightly higher temperature than arabica, at 27°C compared to arabica's 22°C.



Bugun Liocichla

Syllabus: GS-3; Biodiversity

Context

- **The Buguns, a major tribe living near Eaglenest Wildlife Sanctuary in Arunachal Pradesh, have generously donated 1,470 hectares of land to conserve the Bugun Liocichla bird.**



About

- *The Bugun liocichla (Liocichla bugunorum) is a passerine bird species from the family **Leiothrichidae** closely related to the **Emei Shan liocichla**.*
- *First spotted in 1995 in Arunachal Pradesh, India, it was described as a new species in 2006.*
- *The description was made without the collection of a type specimen as they were too few to risk killing one.*
- *It is thought to be an endangered species, with a small population, and a very restricted distribution range within which commercial development threatens the habitat.*
- *The species was described in 2006 after being discovered in Eaglenest Wildlife Sanctuary in Arunachal Pradesh, India, by an astrophysicist, Ramana Athreya.*
- *The species' scientific and common names are derived from the Bugun tribe in whose communal forests the species was discovered.*
- *The species is a sister of *Liocichla omeiensis* and the speciation may have been caused by the isolating geographic barrier of the **Hengduan mountains**.*

- *The International Union for Conservation of Nature (IUCN) classifies the Bugun liocichla as **Critically Endangered**.*
- *The primary threats to the Bugun liocichla's survival are **habitat loss and fragmentation**.*

Eaglenest Wildlife Sanctuary

- *Eaglenest Wildlife Sanctuary, also known as Eagle's Nest, is a protected area in the Himalayan foothills of **Arunachal Pradesh, India**.*
- *It was established in 1989 and is located in the West Kameng District.*
- *The sanctuary is named after the Red Eagle Division, an Indian Army regiment that was stationed there decades ago.*
- *It has been declared an **Important Bird Area (IBA)** and is home to almost 500 species of birds.*
- *It connects to **Sessa Orchid Sanctuary** to the northeast and **Pakhui Tiger Reserve** to the east.*
- *The area is drained by the **Kameng River** and its tributaries, **Tipi, and Sessa**.*
- *It also has **coniferous temperate and subtropical forests, broadleaf subtropical forests, tropical wet evergreen, and semi-evergreen forests**.*

National Disaster Response Fund (NDRF)

Syllabus: GS-3: Disaster Management.

Context:

- *Karnataka government has **approached the Supreme Court** against the Union government.*
- *They demand the release of drought relief under the **National Disaster Response Fund (NDRF)**.*
- *The state is **facing water shortages** with a dry summer ahead.*
- *Chief Minister states that the government had **to resort to legal action** after waiting **five months for the NDRF claim**.*

What is the extent of drought and water scarcity in Karnataka, currently?

According to a memorandum submitted by Karnataka to the Central government:

- *223 out of 236 taluks (sub-districts) were declared drought-hit.*
- *Crop loss was reported on 48 lakh hectares of cultivated land.*
- *An **Inter-Ministerial Central Team (IMCT)** visited Karnataka in October 2023 to assess the damage.*

Drought as per IMD:

- According to the **India Meteorological Department (IMD)**, a drought year is when an area experiences a rainfall deficiency of more than 10% of its long average value (LPA) and more than 20% of the area is affected by drought conditions.
- **The IMD defines drought as a condition** that occurs when the mean annual rainfall is less than 25% of the average rainfall.
- The IMD further divides **droughts into two major categories**: moderate drought, which occurs when rainfall varies between 25 and 50%, and severe drought, which occurs when the deficiency is more than 50%.

What does the writ petition say?

- The writ petition filed by the Karnataka government **seeks relief under Article 32 of the Constitution**, which provides a constitutional remedy for citizens who believe their fundamental rights have been violated.
- The petition is **against the inaction of the Union of India** in providing financial assistance for drought management under the **Disaster Management Act, 2005**, and the Manual for Drought Management.
- The delay in acting on the **Inter-Ministerial Central Team (IMCT)** report and deciding to release financial assistance is deemed **illegal, arbitrary, and a violation of fundamental rights** guaranteed under **Articles 14 and 21 of the Constitution**.
- **Article 14** guarantees the right to equality under the law, while Article 21 ensures the protection of life and personal liberty.
- **Chief Minister Siddaramaiah** stated that the state government did not wish to engage in a legal battle but felt compelled to do so **due to the lack of response from the Centre**.

How is disaster relief deployed for Indian states?

- **The 2005 Disaster Management Act** doesn't provide a specific definition of disasters but encompasses events, whether natural or man-made, that severely disrupt people's lives beyond their coping capacity.
- **States have State Disaster Relief Funds**, where the Centre contributes 75% of the funds (90% for Himalayan and northeastern states), and states contribute the remainder, with the total amount decided through budgetary allocations and periodically released by the Centre.

When a state requires assistance from the Centre:

- It must **submit a memorandum** detailing the extent of the damage.

- *If acknowledged by the Centre, an **Inter-Ministerial Central Team (IMCT)** conducts on-ground inspections to assess the damage.*
- *A **National Executive Team** analyzes the IMCT report.*
- *Based on recommendations, a **High-Level Committee** approves the release of immediate relief.*
- *The **Union Ministry of Home Affairs** oversees the utilization of National Disaster Response Fund (NDRF) releases.*

About NDRF:

- *The **National Calamity Contingency Fund (NCCF)** underwent a name change and is now known as the **National Disaster Response Fund (NDRF)** since the implementation of the Disaster Management Act in 2005.*
- ***Defined in Section 46** of the Disaster Management Act, 2005 (DM Act).*
- ***Positioned within the "Public Account"** of the Government of India under "**reserve funds not bearing interest**".*

Public Accounts:

- ***Established under Article 266 (2) of the Constitution**, encompassing transactions where the government acts as a banker, such as provident funds and small savings.*
- *These funds are **not government-owned** and must be repaid at a later date.*
- *Expenditures from the NDRF **do not require parliamentary approval**.*

Role:

- *Managed by the Central Government **to cover expenses for emergency response, relief, and rehabilitation** in the event of threatening disaster situations.*
- *Complements the **State Disaster Response Fund (SDRF)** during severe disasters if sufficient funds are lacking in the SDRF.*
- *The SDRF serves as the **primary fund for State governments** to respond to notified disasters and cover immediate relief expenses.*
- *The **Central Government contributes 75%** of the SDRF allocation for general category States and Union Territories, and 90% for special category States/UTs (northeast States, Sikkim, Uttarakhand, Himachal Pradesh, and Jammu & Kashmir).*

Financing:

- *Supported through the imposition of a cess on certain items subject to excise and customs duties, **annually approved through the Finance Bill**.*
- *Currently, the **National Calamity Contingent Duty (NCCD)** finances the NDRF, supplemented by additional budgetary support when necessary.*
- *NCCD is imposed on goods **specified in the Seventh Schedule** (manufactured or produced goods).*

Significance:

Significance	Description
<i>Financial Preparedness</i>	<i>Dedicated pool of funds for immediate access during disasters, ensuring timely response without budgetary delays.</i>
<i>Rapid Response</i>	<i>Enables quick mobilization of resources (rescue teams, supplies) to affected areas, crucial for saving lives.</i>
<i>Risk Reduction and Mitigation</i>	<i>Encourages proactive measures to reduce vulnerability, such as early warning systems and infrastructure resilience.</i>
<i>Capacity Building</i>	<i>Supports training, equipment, and infrastructure development for enhancing disaster management capabilities.</i>
<i>Supplementary Assistance</i>	<i>Provides additional support when local resources are insufficient to cope with the scale of a disaster.</i>
<i>Resilience Building</i>	<i>Supports recovery and reconstruction efforts, contributing to long-term resilience and community preparedness.</i>

Practice Question

Q. Analyse the implications of delayed National Disaster Response Fund (NDRF) relief on Karnataka's drought crisis, considering constitutional provisions and disaster management mechanisms. (10 marks, 150 words)