DAILY CURRENT AFFAIRS 14-12-2024

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1. **WHO Predicts 55% Chance of La Niña Formation**

GS-2

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GS-3

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WHO Predicts 55% Chance of La Niña Formation

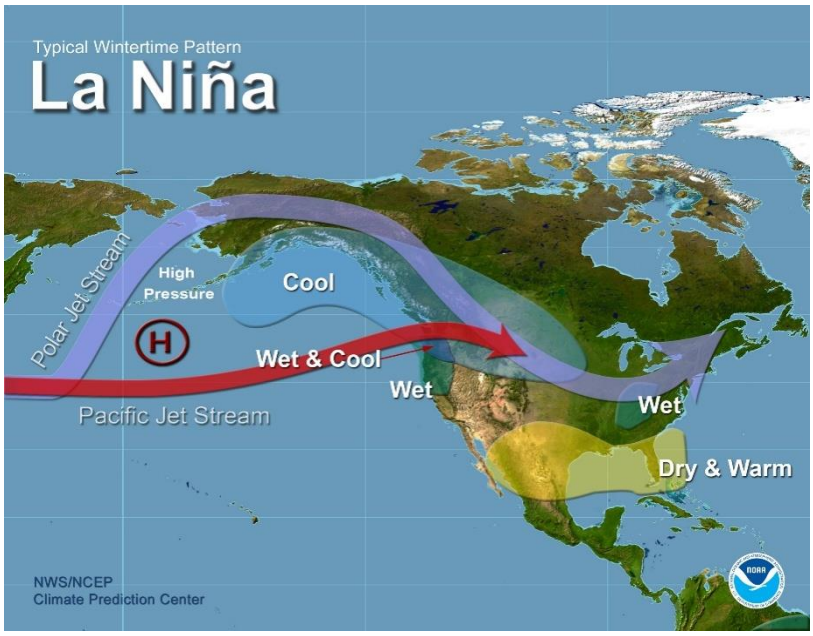
Syllabus: GS-1: World Geography – Climatology.

Context:

- Forecasts show that there is a 55% likelihood of a transition to La Niña between December 2024 and February 2025, the WMO said in a statement sent to journalists.

What is La Niña?

- **Definition**: La Niña is a climatic phenomenon characterized by cooler-than-average sea surface temperatures in the central and eastern Pacific Ocean.



- **Impact**: It influences global weather patterns, typically causing:
    - Increased rainfall in regions like Southeast Asia and northern Australia.
    - Drought conditions in areas such as the southern United States and parts of South America.

Current La Niña Forecasts

- **Probability**:
    - The World Meteorological Organization (WMO) forecasts a **greater than 50% probability** of La Niña developing within the next three months.
    - A **55% chance** is predicted for its occurrence between December 2024 and February 2025.

- **Intensity and Duration**:
  - The anticipated La Niña is expected to be **weak and short-lived**.
  - Minimal cooling effects are likely, leading to limited influence on global climate systems.

Relationship with Global Warming

- **Ongoing Warming Trends**:
  - Despite La Niña's cooling tendencies, its weak intensity will not counteract the impact of rising greenhouse gas concentrations.
  - Global temperatures remain on an upward trajectory, with **2024 projected to be among the hottest years on record**.

Implications for Climate Policy

- **Need for Action**:
  - The potential formation of a weak La Niña underscores the urgency for **comprehensive climate policies**.
  - Governments must prioritize reducing **greenhouse gas emissions** to mitigate long-term climate risks.
- **Policy Recommendations**:
  - Strengthening international climate agreements.
  - Accelerating the transition to renewable energy.
  - Enhancing adaptive measures for regions vulnerable to La Niña-induced weather variability.

National Panchayat Awards 2024

Syllabus: GS-2: Local Self Governments.

Context:

- The National Panchayat Awards 2024 honored 45 exceptional Panchayats for their contributions to sustainable and inclusive development in rural India.

Overview

- **Event Date and Venue:** December 11, 2024, Vigyan Bhawan, New Delhi.
- **Presiding Dignitaries:**
  - Hon'ble President of India, Smt. Droupadi Murmu.
  - Hon'ble Union Minister of Panchayati Raj, Shri Rajiv Ranjan Singh.
- **Focus:** Recognition of Panchayats for contributions to **sustainable and inclusive rural development.**
- **Achievements Recognized:** Poverty reduction, health, water conservation, sanitation, and climate sustainability.
- **Key States Honored:** Tripura and Odisha received the highest accolades with a total prize allocation of ₹46 crore.

Award Categories and Achievements

1. Carbon Neutral Vishesh Panchayat Puraskar

- **Recognized States:** Maharashtra, Odisha, and Uttar Pradesh.
- **Focus:** Panchayats achieving net-zero carbon emissions.
- **Significance:** Highlights climate sustainability efforts in rural governance.

2. Gram Urja Swaraj Vishesh Panchayat Puraskar

- **Recognized States:** Maharashtra, Odisha, and Tripura.
- **Focus:** Adoption of renewable energy at the grassroots level.
- **Impact:** Promotes sustainable energy practices in Panchayats.

3. Deen Dayal Upadhyay Panchayat Satat Vikas Puraskar (DDUPSVP)

- **Recipients:** 27 Panchayats from states like Andhra Pradesh, Bihar, Kerala, and Maharashtra.
- **Key Areas:** Health, education, water conservation, sanitation, and governance.
- **Purpose:** Encourages excellence in various developmental sectors.

4. Panchayat Kshamta Nirmaan SarvottamSansthanPuraskar

- **Recognized Institutions:** Kerala, Maharashtra, and Odisha.

- **Focus:** Institutional support to Panchayats for achieving Sustainable Development Goals (SDGs).
- **Outcome:** Enhances capacity-building for rural governance.

5. Nanaji Deshmukh Sarvottam Panchayat Satat Vikas Puraskar

- **Recipients:** Nine Panchayats.
- **Focus:** Overall excellence in implementing SDG themes.
- **Recognition:** Demonstrates holistic development at the grassroots.

Significance

- **Encourages Panchayati Raj Empowerment:** Highlights the role of Panchayats in grassroots development.
- **Inspires Sustainable Governance:** Promotes climate-friendly, inclusive, and innovative rural governance.
- **Aligns with SDGs:** Strengthens efforts to meet Sustainable Development Goals in rural India.

India and Nicaragua Sign Impactful Agreement

Syllabus: GS-2: IR - Bilateral Relations.

Context:

- India and Nicaragua have entered into an agreement to implement **Quick Impact Projects (QIPs)** to enhance community development in Nicaragua.
- The agreement was signed in **Managua, the capital of Nicaragua**, by Indian Ambassador Sumit Seth and Nicaragua's Foreign Minister ValdrackJaentschke.

Key Highlights

Purpose of the Agreement

- **Community Development**: Focus on critical areas like roads, community centers, education, healthcare, and sanitation.
- **Immediate Benefits**: Projects aim to address urgent community needs and provide visible improvements swiftly.

Funding Mechanism

- **Grants from India**: India will provide financial support to ensure effective and rapid implementation.
- **Emphasis**: Projects are designed for high-impact outcomes in a short timeframe.

Diplomatic Importance

- **Strengthening Bilateral Relations**: Reflects India's growing commitment to global development and closer ties with Nicaragua.
- **India's Active Role**: Demonstrates India's leadership in fostering cooperation and development through grassroots initiatives.

Historical Ties Between India and Nicaragua

- **Establishment of Relations**: Diplomatic relations established in 1983.
- **Embassy Representation**:
  - **India**: The Indian Embassy in Panama manages relations with Nicaragua.
  - **Nicaragua**: The Embassy in Tokyo oversees ties with India.

Strategic Significance

- This agreement marks a step forward in reinforcing trust and collaboration between the two nations.
- India's involvement in global development through QIPs highlights its soft power diplomacy and commitment to supporting developing nations.

Conclusion

- The QIPs agreement symbolizes the shared vision of India and Nicaragua to uplift local communities through impactful initiatives. It reflects India's expanding global outreach and its role in promoting sustainable and inclusive development in the Global South.

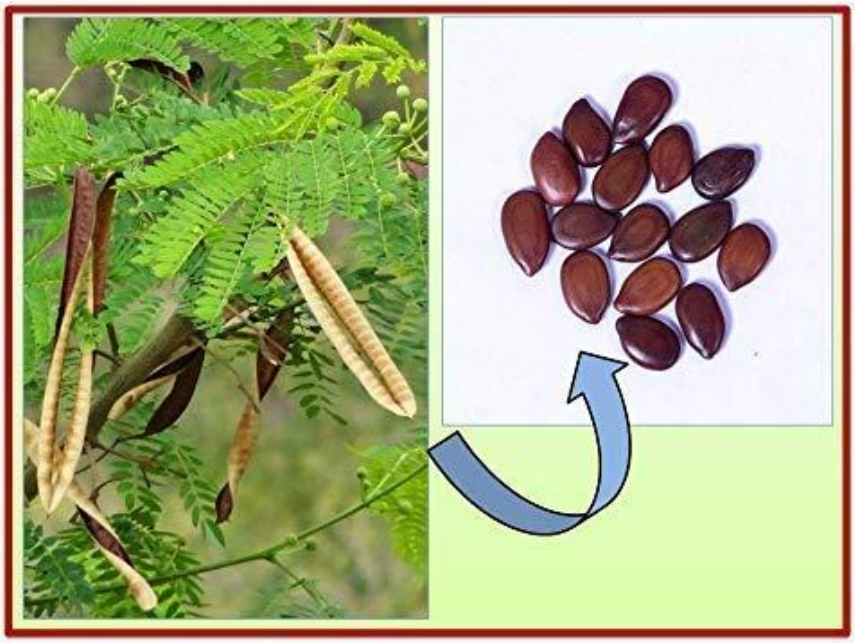
Prelims Bits

Subabul Tree

Syllabus: GS-3; Environmental Ecology

Context

- Researchers have identified the therapeutic potential of the seedpods from the traditional medicinal plant Subabul in managing insulin resistance related to type II diabetes and developed a marker-assisted fraction and four active compounds from it.



About

- The **Subabul tree** (*Leucaena leucocephala*), also known as "Wild Tamarind" or "Ipil-ipil," is a fast-growing, nitrogen-fixing tree that holds significant ecological, economic, and environmental value.

Botanical and General Information:

- **Scientific Name**: *Leucaena leucocephala*.
- **Family**: Fabaceae (Legume family).
- **Origin**: Native to Central America and Mexico; widely introduced in tropical and subtropical regions worldwide.

Key Features:

- **Growth**:
  - Subabul is a fast-growing, drought-tolerant tree.
  - It grows well in a variety of soils, including degraded and low-fertility lands.
- **Nitrogen Fixation**:
  - It has symbiotic relationships with Rhizobium bacteria, making it beneficial for soil fertility and agroforestry.
- **Height**:
  - It typically grows to about 3–15 meters, depending on climatic conditions.
- **Leaves and Pods**:

- Its leaves are compound, feathery, and highly palatable to livestock.
- The tree produces elongated pods containing seeds.

Uses:

- **Fodder**:
  - Subabul leaves are rich in protein and are widely used as animal fodder.
  - Caution: Overconsumption may lead to toxicity in livestock due to mimosine (a toxic amino acid).
- **Agroforestry**:
  - Used for alley cropping, intercropping, and windbreaks.
  - Improves soil fertility through nitrogen fixation and leaf litter.
- **Wood**:
  - Provides durable timber for furniture, construction, and fuelwood.
- **Paper and Pulp Industry**:
  - Subabul wood is a preferred raw material for the pulp and paper industry.
- **Soil Erosion Control**:
  - Its extensive root system helps stabilize soil and prevent erosion.
- **Bioenergy**:
  - Used for biomass energy production due to its high calorific value.

Ecological Significance:

- **Carbon Sequestration**:
  - Subabul plays a role in combating climate change by acting as a carbon sink.
- **Restoration of Degraded Lands**:
  - Helps rehabilitate wastelands and enhances soil quality.
- **Support for Biodiversity**:
  - Provides shade and shelter for other plant and animal species.

Challenges:

- **Invasive Nature**:
  - In some regions, Subabul is considered invasive due to its rapid growth and ability to outcompete native vegetation.
- **Mimosine Toxicity**:
  - This compound in Subabul leaves can affect livestock health if not supplemented correctly.
- **Fire Hazard**:
  - Dense plantations may pose fire risks in dry regions.

Madhav Gadgil Receives Champions of the Earth Award

Syllabus: GS-3: Environmental Conservation.

Context:

- Indian ecologist Madhav Gadgil received the UN's 'Champion of Earth' award for his contributions to environmental protection.
- His 2011 Gadgil Report advocated safeguarding the Western Ghats by declaring them ecologically sensitive and prioritizing community-driven conservation efforts.

Background of the Western Ghats

- **Location:** Span six Indian states (Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, and Gujarat).
- **Significance:** A biodiversity hotspot and UNESCO World Heritage Site (2012).
- **Threats:** Urbanization, climate change, industrial activities, and population pressure.

Madhav Gadgil's Role and Recommendations

- Chaired the **Western Ghats Ecology Expert Panel (WGEEP)**.
- Proposed declaring the **entire Western Ghats** as an **Ecologically Sensitive Area (ESA)** in 2011.
- Suggested a **zoning system** with three levels of sensitivity:
    1. **High-sensitivity zones** – Ban on mining, quarrying, and new thermal plants.
    2. Moderate and low-sensitivity zones with regulated activities.
- Advocated for community participation and sustainable development.

Opposition to Gadgil's Recommendations

- Resistance from:
    - **State governments and industries** due to potential restrictions on economic development.
    - **Local communities** due to fears of losing livelihood opportunities.
- Concerns: Balance between conservation and developmental priorities.

Public Awareness and Accessibility

- Emphasized **transparent communication** and factual reporting to encourage informed debates.
- Advocated leveraging **digital tools and translations** to make environmental data accessible to all.

Ongoing Developments

- 2013: The **K. Kasturirangan Committee** designated 37% of the Western Ghats as ESA, adopting a more moderate approach.
- Post-2014: Draft ESA notifications remain unresolved due to **state-level objections**.
- 2022: **Sanjay Kumar-led expert panel** was constituted to find a balanced solution, addressing ecological and developmental challenges.