



*For success in a changing world*

## **DAILY CURRENT AFFAIRS 14-09-2024**

### **GS-1**

- 1. Amazon Rainforest**

### **GS-2**

- 2. Preventive detention**
- 3. PMAY-Gramin**
- 4. US Announces Semiconductor Partnership With India**

### **GS-3**

- 5. Anusandhan National Research Foundation**

## **Amazon Rainforest**

**Syllabus: GS-1; Geography, GS-3; Environment and Ecology**

### **Context**

- *Nearly 40% of Amazon rainforest most vital to climate left unprotected, data show*



### **Geographical Significance**

- **Location:** The Amazon Rainforest, also known as the Amazon Basin, spans across 9 countries in South America: Brazil (holds 60% of the forest), Peru, Colombia, Venezuela, Ecuador, Bolivia, Guyana, Suriname, and French Guiana.
- **Size:** It covers an area of around 5.5 million square kilometers, making it the largest tropical rainforest in the world.
- **Rivers:** The Amazon River, the second longest in the world, flows through the forest, with over 1,100 tributaries.

### **Ecological Importance**

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- **Biodiversity:** *The Amazon is home to about 10% of the world's known species, including:*
  - *Plants: 40,000 plant species.*
  - *Animals: 2.5 million insect species, 2,000 birds and mammals, and numerous species of fish and amphibians.*
- **Carbon Sink:** *It acts as one of the planet's most important carbon sinks, absorbing large amounts of CO<sub>2</sub>, thus playing a crucial role in combating climate change.*
- **Climate Regulation:** *The Amazon influences global weather patterns by releasing large amounts of water vapor into the atmosphere. It helps to stabilize local and global climate conditions, including rainfall patterns.*

## Economic Importance

- **Timber:** *The Amazon has vast quantities of timber, making logging a significant economic activity.*
- **Minerals and Oil:** *The forest holds significant reserves of minerals such as iron, copper, and oil.*
- **Agriculture:** *Deforested parts of the forest have been converted into farmland, growing soybeans, and raising cattle, contributing to the economies of Brazil and other Amazonian countries.*

## Human Interaction and Indigenous Communities

- *The forest is home to around 400–500 indigenous tribes, many of which live in relative isolation. These communities depend on the forest for their livelihood, culture, and traditions.*
- **Threats to Indigenous People:** *Deforestation, land encroachment, mining, and illegal logging threaten the existence of these tribes.*

## Deforestation

### Causes:

- **Agriculture:** *The demand for arable land for crops like soybeans and cattle ranching is the largest driver of deforestation.*
- **Logging:** *Both legal and illegal logging activities degrade vast areas.*
- **Mining:** *Mineral extraction also leads to land degradation.*
- **Infrastructure Development:** *The construction of roads, dams, and cities leads to forest fragmentation.*

### Impacts:

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- *Loss of biodiversity.*
- *Reduced ability to sequester carbon, contributing to global warming.*
- *Displacement of indigenous populations.*
- *Current Situation: Despite efforts to curb deforestation, recent years have seen a rise in forest fires and land clearing, especially in Brazil.*

## Conservation Efforts

### National and International Initiatives

- **Brazil's Action:** *Brazil has established protected areas and forest reserves and is part of the REDD+ initiative (Reducing Emissions from Deforestation and Forest Degradation).*
- **International Support:** *The Amazon Fund, supported by countries like Norway and Germany, provides financial aid to projects that fight deforestation.*
- **Environmental NGOs:** *Various non-governmental organizations, like WWF and Greenpeace, work toward protecting the rainforest through activism, research, and awareness campaigns.*
- **Amazon Summit (2023):** *Countries that share the Amazon Basin convened to discuss sustainable development and conservation efforts.*

### Environmental Issues

- **Climate Change:** *The Amazon plays a vital role in mitigating global warming by absorbing CO<sub>2</sub>. Its destruction leads to the release of stored carbon, worsening climate change.*
- **Biodiversity Loss:** *The Amazon's rich biodiversity is under threat due to deforestation, poaching, and habitat destruction.*
- **Forest Fires:** *The forest experiences frequent wildfires, especially during the dry season, which contribute to its degradation.*

## Preventive detention

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## Syllabus: GS-2: Indian Polity – Preventive Detention.

### Context:

- *The Supreme Court emphasized that all material relied upon by detaining authorities to order preventive detention must be supplied to the detained person (detenu).*
- **A Bench of Justices BR Gavai, Prashant Mishra, and KS Viswanathan delivered this ruling.**

### Procedural Compliance Under Article 22(5):

- **Article 22(5) of the Constitution of India mandates that the grounds of detention must be supplied to the detenu to allow them to make a proper representation.**
- *The Court held that while detaining authorities may not need to provide documents referred to in passing, they must provide all material relied upon to order detention.*

### Right to Representation:

- *The detenu has the right to challenge their detention through representation. The callous or negligent approach of jail authorities in handling this cannot be used to deny the detenu's right.*
- *The Court stressed that in the era of technology, representations can be sent instantly, and each day's delay can severely impact the detenu's case.*

### Case Background:

- *The ruling came in an appeal challenging the Kerala High Court's decision under the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974 (COFEPOSA Act).*
- *The detenu was detained following a raid where unaccounted foreign currency, gold biscuits, and silver were discovered.*
- *The detaining authorities relied on WhatsApp chats and witness statements, accusing the detenu of being an unauthorised foreign currency dealer.*

### Supreme Court's Key Observations:

- *The Supreme Court held that non-supply of a witness statement relied upon by the detaining authorities violated the detenu's right under Article 22(5).*
- *It further ruled that the detention order was quashed due to the negligent attitude of jail authorities, leading to a delay of 9 months in forwarding the detenu's representation.*

### Conclusion:

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- *The ruling highlights the importance of procedural fairness in preventive detention cases and underscores the detenu's constitutional rights under Article 22(5).*

## **PMAY-Gramin**

### **Syllabus: GS-2; Social Justice, Government policies and Interventions**

#### **Context**

- *The Centre has relaxed the "automatic exclusion" criteria under the Pradhan Mantri Awas Yojana-Gramin (PMAY-G), allowing families owning "two-wheelers, motorised fishing boats, refrigerators, landline phones" and earning "up to Rs 15,000 per month" to now avail the rural housing scheme.*

#### **About**

- *PMAY-G is the restructured version of the Indira Awaas Yojana (IAY), launched to fulfill the government's vision of "Housing for All" by 2022.*
- *It aims to provide pucca houses (permanent) with basic amenities to the rural poor.*

#### **Objectives**

- *Provide housing to the homeless and those living in kuccha (inadequate) houses.*
- *Deliver affordable and quality housing to rural households.*
- *Improve living standards in rural areas by ensuring access to basic amenities like electricity, sanitation, and drinking water.*

#### **Features**

##### **1) Target Beneficiaries:**

- Beneficiaries are identified using the Socio-Economic and Caste Census (SECC)-2011 data.*
- Priority is given to those in kuccha houses (houses made of non-durable materials) or without housing.*

##### **2) House Unit Size and Amenities:**

- Each house under PMAY-G will be 25 square meters in size, including a dedicated space for sanitary toilets.*
- Houses are designed to be disaster-resilient and accommodate local climatic conditions.*

**3) Financial Assistance:**

- a. *Financial assistance is provided as per the following:*
- b. *Plain areas: ₹1.20 lakh per household*
- c. *Hilly states, difficult areas, and IAP (Integrated Action Plan) districts: ₹1.30 lakh per household*

**4) The funding pattern is:**

- a. *60:40 ratio between the Centre and the States in plain areas.*
- b. *90:10 ratio in hilly states, North-Eastern states, and Himalayan regions.*

**5) Convergence with Other Schemes:**

- a. *PMAY-G converges with schemes like the Swachh Bharat Mission-Gramin for sanitation, Saubhagya Yojana for electricity, and the MGNREGA for wage employment to ensure holistic development of rural housing.*

**6) Additional Incentives:**

- a. *Beneficiaries can avail loans up to ₹70,000 under PMAY-G to enhance their housing needs.*

**7) Role of Gram Sabha:**

- a. *The Gram Sabha plays a crucial role in verifying and selecting the list of beneficiaries, ensuring transparency and accountability.*

## Implementation Process

### Selection of Beneficiaries:

- *Beneficiaries are selected based on SECC data and verified by the Gram Sabha to avoid any duplication or discrepancies.*

### Direct Benefit Transfer (DBT):

- *Financial assistance is transferred directly to the beneficiaries' bank accounts through DBT to eliminate corruption and ensure that funds reach the intended recipients.*

### Use of Technology:

- *PMAY-G employs advanced technology like geo-tagging for real-time monitoring of house construction, ensuring timely completion and compliance with set standards.*

## Monitoring and Evaluation

### ➤ MIS (Management Information System):

- *A robust MIS system is in place to track the progress of house construction, fund disbursement, and completion rates.*

### ➤ Third-Party Evaluation:

- *To ensure quality and timely execution, PMAY-G is regularly reviewed through third-party evaluations by independent agencies.*

## Achievements

- *PMAY-G has achieved significant milestones since its inception, with millions of rural households being provided pucca houses.*
- *The scheme has played a vital role in improving rural living standards by ensuring access to basic amenities and contributing to rural development.*

## Challenges

- **Land availability:** *In some regions, especially hilly and remote areas, finding adequate land for house construction has been a challenge.*
- **Coordination with multiple schemes:** *Convergence with other schemes like MGNREGA and Swachh Bharat Mission sometimes causes delays in implementation.*

## US Announces Semiconductor Partnership With India

**Syllabus: GS-2: India – US Bilateral Relations.**

### Context:

- *The US and India announced a partnership to strengthen the semiconductor supply chain.*
- *Focuses on assessing India's semiconductor manufacturing capabilities.*
- *Highlights the global importance of the semiconductor industry.*

### What is the Semiconductor Ecosystem?

- **Definition:** *Semiconductors are essential components found in products like cars, computers, and medical devices.*
- **Key components of the ecosystem:**
  - **Regulatory framework:** *Laws and policies supporting the industry.*
  - **Workforce skills:** *Availability of skilled labor.*
  - **Infrastructure:** *Facilities, power, and resources needed for semiconductor production.*

- *The partnership will evaluate India's infrastructure, workforce, and regulatory framework to support semiconductor manufacturing.*

### **The Role of the CHIPS Act**

- **Signed by President Biden in August 2022:** *The CHIPS Act provides \$52 billion to boost US semiconductor production.*
- **International Technology Security and Innovation (ITSI) Fund:**
  - *A component of the CHIPS Act.*
  - *Focuses on securing supply chains by collaborating with allies like India.*
  - *Aims to reduce dependence on semiconductor suppliers from Taiwan and China.*
- **Significance:** *The pandemic and geopolitical tensions with China have exposed vulnerabilities in global semiconductor supply chains.*

### **India's Semiconductor Mission**

- **Launched in 2021:** *A government initiative to build a domestic semiconductor industry.*
- **Key aspects:**
  - **Financial incentives:** *Large subsidies and grants to attract global manufacturers.*
  - **Partnerships:** *Deals with companies like Taiwan's Powerchip Semiconductor Manufacturing Corporation.*
- **Goal:** *Create a sustainable semiconductor sector in India.*

### **Importance of the US-India Partnership**

- **Strategic objectives:**
  - *Strengthen India's economy through semiconductor development.*
  - *Secure and stabilize global semiconductor supply chains.*
- **Benefits:**
  - *Reduces reliance on major suppliers like Taiwan and China.*
  - *Addresses supply chain vulnerabilities exposed by the pandemic.*

- **Future potential:** *Lays the groundwork for future collaborations between the two countries.*

## **Anusandhan National Research Foundation**

**Syllabus:** GS-3; Science & Technology, GS-2; Government policies and Interventions

### **Context:**

- *The meeting marked the first convening of the Governing Board of the Anusandhan National Research Foundation (ANRF).*

### **Prime Minister's Remarks:**

- **New Beginning:** *PM Modi emphasized that the meeting represented a significant new phase for India's research ecosystem.*
- **Challenges in Research Ecosystem:** *PM highlighted the need to identify and remove obstacles in India's research environment.*
- **Ambitious Goals:** *He encouraged the setting of big targets and the pursuit of path-breaking research.*
- **Localized Solutions:** *PM stressed that while problems may be global, their solutions should be tailored to India's needs.*
- **Focus on Solutions:** *He advocated for research aimed at solving existing problems through innovative approaches.*

### **Composition of the Governing Board:**

- **Governing Board Members:** *A 15-member body, as notified by the Ministry of Science and Technology.*
  - **Industry Participation:**
    - *The governing body currently lacks wider representation from Indian industry and State universities.*
    - *Romesh Wadhwani, an American billionaire of Indian origin, is the only industrialist in the board.*
  - **Notable International Members:**
    - **Manjul Bhargava** – *Professor, Princeton University, U.S.*
    - **Subra Suresh** – *Professor at Large, Brown University and former head of the U.S. National Research Foundation (inspiration for ANRF).*

- **Provisions for Future Inclusion:** *There are provisions to include more members in the future, but the board remains unchanged as of the latest meeting.*

### **Concerns Raised:**

- **Lack of Indian Industry and State University Representation:** *The absence of broader participation from Indian industry and State universities was a point of concern, previously highlighted by The Hindu.*

### **ANRF's Significance:**

- **Inspiration:** *ANRF draws inspiration from the U.S. National Research Foundation, aiming to bolster India's research capabilities and foster innovation.*