



## **DAILY CURRENT AFFAIRS 01-06-2024**

### **GS-2**

1. HC wants heat waves to be declared as National Calamity
2. Digital Monopoly

### **GS-3**

3. RudraM-II
4. *Stellaria mcclintockiae*
5. Cybercrimes from Southeast Asia

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## **HC wants heat waves to be declared as National Calamity**

**Syllabus: GS-2; Judicial Interventions, GS-3: Disaster management- heat waves.**

### **Context:**

- *The single-judge bench of Justice Anoop Kumar Dhand said that now the time has come when **heat waves and cold waves should be declared as national disaster.***

### **More about news:**

- **Rajasthan High Court (HC) took initiative** regarding deaths from heat waves, suggesting it be declared a national calamity.
- *Currently, five deaths have occurred due to **heat wave conditions in Rajasthan.***
- *It instructed the state government to provide compensation for heat wave-related deaths and issued guidelines.*
- *Referring to previous legislation, the HC highlighted the importance of **taking action on climate-related issues.***
- *The court instructed **authorities to take various measures** including sprinkling water on roads, providing cooling spaces, and issuing alerts through various media channels.*
- *Legislation is urged to **address pollution and the consumption** of adulterated food items, aiming to protect human health from climate-related diseases and food safety issues.*

### **Heat Waves**

- **Heat Wave:** *A prolonged period of excessively hot weather, which may be accompanied by high humidity.*
- **IMD Criteria:** *Heat waves are declared when the maximum temperature of a station reaches at least 40°C for plains, 37°C for coastal areas, and 30°C for hilly regions, with a departure from normal of at least 4.5-6.4°C.*

### **Causes**

#### **Meteorological Factors:**

- *High atmospheric pressure trapping warm air.*
- *Lack of cloud cover increasing solar radiation.*
- *Warm, dry winds from desert areas.*

#### **Geographical Factors:**

- *Continental interiors experiencing more extreme temperatures.*
- *Urban heat islands increasing local temperatures.*

### **Human Factors:**

- *Deforestation reducing cooling through evapotranspiration.*
- *Urbanization increasing heat absorption by concrete and asphalt.*

### **Impacts**

#### **Health:**

- *Heat exhaustion, heatstroke, dehydration.*
- *Increased mortality and morbidity, especially among vulnerable groups (elderly, children, outdoor workers).*

#### **Environment:**

- *Forest fires due to dry conditions.*
- *Impact on biodiversity and agriculture, reducing crop yields.*

#### **Economy:**

- *Increased energy demand for cooling.*
- *Disruption of work and productivity, particularly in outdoor sectors.*

#### **Infrastructure:**

- *Damage to roads, railways due to expansion.*
- *Stress on water supply systems.*
- *Mitigation Measures*

#### **Preparedness and Awareness:**

- *Early warning systems and public advisories.*
- *Education campaigns on heat-related health risks.*

#### **Urban Planning:**

- *Increasing green spaces and tree cover.*
- *Promoting cool roofs and reflective materials in construction.*

#### **Health Interventions:**

- *Establishing cooling centers.*
- *Providing emergency medical services and hydration points.*

#### **Policy and Governance:**

- *Integrating heat wave action plans into disaster management frameworks.*
- *Developing climate-resilient infrastructure.*

## Provisions to Classify a National Calamity

### Current Framework:

- *There is no provision, executive or legal, to declare a natural calamity as a national calamity in India.*
- *Existing guidelines under the **State Disaster Response Fund (SDRF)** and the **National Disaster Response Fund (NDRF)** do not include criteria for such a declaration.*

### Earlier Attempts and Discussions:

#### 10th Finance Commission (1995-2000):

- *Proposed terming a disaster a "**national calamity of rarest severity**" if it affects one-third of the population of a state.*
- *Did not define "**calamity of rare severity**" explicitly.*

#### Suggested a case-to-case basis evaluation considering:

- *Intensity and magnitude of the calamity.*
- *Level of assistance needed.*
- *State's capacity to address the problem.*
- *Available alternatives and flexibility within existing plans for relief.*

#### National Committee on Disaster Management (2001):

- *Chaired by the then Prime Minister, it aimed to establish parameters for defining a national calamity.*
- *Did not recommend any fixed criteria.*

### Implications of Declaration:

#### Support to State Governments:

- *When a calamity is declared of "**rare severity**" or "**severe nature**," national-level support is extended to the affected state.*
- *The Centre may consider additional assistance from the NDRF.*

#### Financial Arrangements:

- *A **Calamity Relief Fund (CRF)** is established with contributions shared in a 3:1 ratio between the Centre and the state.*
- *If CRF resources are insufficient, additional assistance is considered from the **National Calamity Contingency Fund (NCCF)**, which is funded entirely by the Centre.*

### Loan Relief:

- *Relief in repayment of existing loans or the granting of fresh loans on concessional terms for affected persons is considered once a calamity is declared "severe".*

## Digital Monopoly

### Syllabus: GS-2; Government policies and Interventions

#### Context

- *The current hot topic on the internet is whether or not to use services like WhatsApp, due to their updated terms and conditions.*
- *WhatsApp, owned and managed by Facebook, is one of the biggest cross-platform messaging services across the globe with billions of active users.*



#### About

- *Digital Monopoly refers to the concept that **Digital forms of media** (particularly on the internet) **are growing to replace all other forms of media.***
- *The differences in transparency and the advancing modalities of digital media allow them to become the dominating sources of information and entertainment.*

#### Characteristics of digital monopolies

- **Network effects**

*The value of the service increases as more people use it.*

*For example, the more participants in a social network or online file-sharing platform, the more attractive it is for people to join.*

➤ **Data control**

*Companies can accumulate and control vast amounts of user data.*

*They can then use this data to create different services for their users, such as user-initiated search and per-member news feeds.*

**Consequences**

- *Digital monopolies can have **negative consequences for consumers.***
- *Without competition, monopolists may demand higher prices and have no need to improve quality or lower prices.*
- *They may also coerce users into accepting unfair conditions, such as juxtaposing content with advertisements or providing access only within a pay-to-play "**walled garden**".*

**RudraM-II**

**Syllabus: GS-3: Science and Technology – Missiles.**

**Context:**

- *The Indian Air Force (IAF) tested the **RudraM-II missile on May 29, 2024.***





### More about the Missile:

- The test was **conducted from a Su-30 MK-I aircraft** off the coast of Odisha.
- RudraM-II is an **air-to-surface missile** designed in India.
- It aims to **neutralize enemy targets**.
- The missile uses **solid propellants and indigenous technologies**.
- It is designed for **high precision and control**.
- The test validated its propulsion system and control and **guidance algorithm**.
- This successful test is a key achievement for the IAF.
- The missile will **enhance India's air security and defense capabilities**.

### Air-to-surface missiles developed by India:

SI No.	Missile Name	Type	Features
1	RudraM-II	Air-to-Surface	<ul style="list-style-type: none"> <li>- Indigenous design</li> <li>- Solid propellants</li> <li>- High precision and control</li> <li>- Validated propulsion system and control and guidance algorithm</li> <li>- Enhances air security and defense capabilities</li> </ul>
2	BrahMos-A	Air-Launched Supersonic Cruise Missile	<ul style="list-style-type: none"> <li>- Jointly developed with Russia</li> <li>- Supersonic speed (Mach 2.8 to 3)</li> <li>- Can be launched from aircraft</li> <li>- Precision strike capability</li> <li>- Nuclear-capable</li> </ul>
3	Nirbhay-A	Air-Launched Subsonic Cruise Missile	<ul style="list-style-type: none"> <li>- Long-range (over 1,000 km)</li> <li>- Low-altitude flight</li> <li>- Terrain-hugging capability</li> <li>- High precision</li> </ul>
4	SANT (Stand-off Anti-tank Missile)	Air-to-Surface Anti-Tank Missile	<ul style="list-style-type: none"> <li>- Developed by DRDO</li> <li>- Long-range (up to 10 km)</li> </ul>

Sl No.	Missile Name	Type	Features
			- Laser-guided - High penetration capability against armoured targets
5	HELINA (Helicopter-launched Nag)	Air-to-Surface Anti-Tank Missile	- Developed by DRDO - Range of 7-10 km - Infrared imaging seeker - High precision and penetration capability against tanks and armoured vehicles

## **Stellaria mcclintockiae**

**Syllabus: GS-3: Biodiversity – Fauna.**

**Context:**

- New plant species from **Kerala's Nelliampathy** named after Nobel laureate Barbara McClintock.

**About Stellaria mcclintockiae:**

- *Stellaria mcclintockiae* is a newly discovered species within the *Stellaria* genus (family Caryophyllaceae).

**Features:**

- An annual herb, reaching heights of up to 15 cm.
- Currently restricted to the **Nelliampathy hills**, specifically at elevations ranging between 1,250 to 1,400 metres.
- Distinguishes itself from other species in the genus through unique characteristics of its **petals, pollen morphology, bracts, sepals, and seed architecture**.
- Notably, this marks the **first species of the Stellaria genus** documented in southern India.



- *Researchers advocate for the classification of *Stellaria mcclintockiae* as critically endangered according to the criteria set forth by the **International Union for Conservation of Nature (IUCN)**.*

## **Cybercrimes from Southeast Asia**

**Syllabus: GS-3: Internal Security –Cybersecurity.**

**Context:**

- *How criminals based in southeast Asia are trapping **through Indians online scams**.*

**More about news:**

- *Many Indians are becoming victims of **financial fraud over the Internet**.*
- *The frauds are allegedly carried out by criminals in **Myanmar, Laos, and Cambodia**.*
- *From January to April, 46% of reported frauds, causing losses of Rs 1,776 crore, originated from these countries.*
- *The Indian Cybercrime Coordination Centre (I4C) analyzed these trends.*
- *The National Cybercrime Reporting Portal (NCRP) received:*
  - *7.4 lakh complaints from January 1 to April 30 this year.*
  - *15.56 lakh complaints in all of 2023.*
  - *9.66 lakh complaints in 2022.*
  - *4.52 lakh complaints in 2021.*
  - *2.57 lakh complaints in 2020.*
  - *26,049 complaints in 2019.*

**Types of Cybercrime Identified by I4C:**

**Trading Scam:**

- *Fraudsters post ads on social media offering free trading tips.*
- *They use pictures of well-known stock market experts and fake news articles.*
- *Victims are asked to join WhatsApp groups or Telegram channels for investment tips.*
- *Victims are directed to install specific trading apps for further guidance on making profits.*
- *These apps are not registered with the Securities and Exchange Board of India (SEBI).*

**Scam Execution:**

- *Victims deposit money in bank accounts to **"buy shares."***
- ***They see fake profits** in their digital wallets.*

- *When attempting to withdraw money, they are told they need to accumulate a larger amount (e.g., Rs 30-50 lakh).*
- *Victims continue to "invest" more and pay "taxes" on supposed profits.*

### **Impact:**

- *Indians lost Rs 1420.48 crore in the trading scam in the first four months of this year.*

### **Digital Arrest:**

- *Potential victims receive calls claiming they sent or received parcels **with illegal items**.*
- *Relatives or friends are told the victim is involved in a crime.*
- *Criminals contact the target via **Skype or video call**, posing as law enforcement officials in uniform and from realistic settings.*
- *Demand money for a "**compromise**" and case closure.*
- *Victims may be "**digitally arrested**," forced to stay visible to criminals until demands are met.*
- *Indians lost Rs 120.30 crore to this scam from January to April.*

### **Investment Scam (Task-Based):**

- *Victims receive messages offering **work-from-home opportunities** with high earnings.*
- *Initially asked to **boost social media ratings** and share codes with an admin.*
- *Receive small sums for initial tasks.*
- ***Later asked to deposit money** for higher returns in "pre-paid" tasks.*
- *If refused, victims are blocked; if participated, they are told they need to improve their performance to receive money.*
- *Indians lost Rs 222.58 crore from January to April.*

### **Romance/Dating Scam:**

- ***Victims, typically males**, are lured by people posing as foreign women online.*
- ***"Women" propose relationships** or marriage and plan to meet in person.*
- *Victims receive calls claiming the "woman" is detained at the airport and needs money.*
- ***Con artists** are skilled at **appearing genuine** and quickly gaining trust.*
- *Indians lost Rs 13.23 crore in these scams from January to April.*

### **Why Southeast Asia:**

#### **Focused Countries:**

- *Myanmar, Laos, and Cambodia were identified by I4C as primary sources of these cybercrimes.*

**Analysis and Inputs:**

- *I4C analyzed data from the National Cybercrime Reporting Portal (NCRP).*
- *Inputs were received from various states and Union Territories.*
- *Open-source information was also used to zero in on these countries.*

**Deceptive Strategies:**

- *Cybercrime operations in these countries use a range of deceptive methods.*
- *Recruitment efforts exploit social media to **lure Indians with fake job offers.***

**Possible Connections:**

- *Many web applications used in the scams **contained Mandarin** characters.*
- *There might be some involvement or **connection with Chinese entities.***

**Key Points:**

- **Target Countries:** *Myanmar, Laos, and Cambodia.*
- **Data Sources:** *NCRP, state and Union Territory inputs, open-source information.*
- **Methods:** *Deceptive strategies, fake job offers via social media.*
- **Language Clue:** *Mandarin characters in web applications suggest possible Chinese involvement.*