

A research titled, 'Global food security threatened by potassium neglect' was published

➤ Potassium (K), alongside nitrogen (N) and phosphorus (P), is a vital nutrient for plant growth.

⊕ In India, **NPK ratio of 4:2:1 is considered ideal for macro-level monitoring of consumption of plant nutrients.**

⊕ Potassium in soil can exist in four pools based on its availability for uptake by plant roots, namely, **Soil solution K, Exchangeable K, Nonexchangeable K and Mineral K.**

- ◆ Largest pool of these is the **mineral pool (e.g. feldspars and micas)**, but it is unavailable for plant use.

➤ **Key Findings of the research**

⊕ An estimated 20% of global agricultural soils face **severe potassium deficiency.**

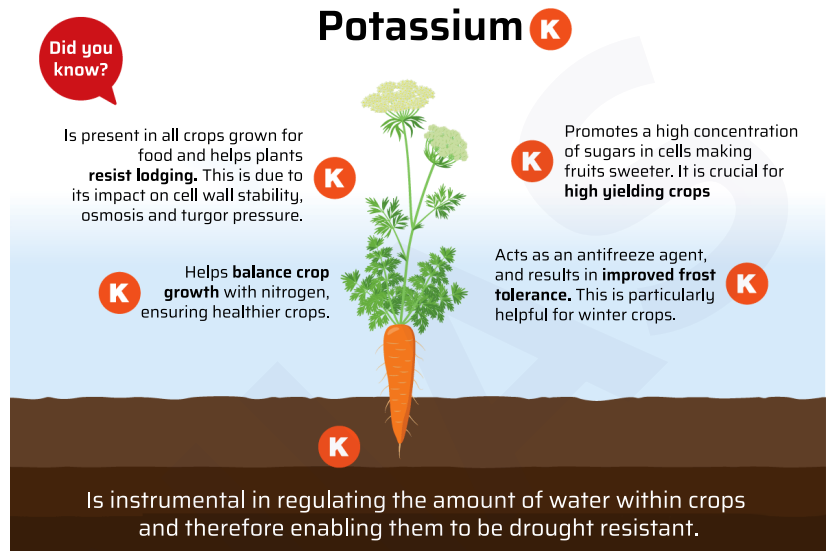
⊕ **Negative soil potassium balances:** More potassium is removed by crops than applied as inputs in the soil.

- ◆ E.g. In India, despite the perception of potassium-rich soils, negative soil potassium balances are causing crop yield losses.

⊕ **Limited geological reserves:** E.g. Canada, Belarus and Russia possess approximately 70% of the world's potash reserves.

⊕ Current **shortages of potash fertilizers** are driven by increased fertilizer demand, post-COVID-19 recovery, Russia-Ukraine conflict etc.

⊕ **Substantial environmental impacts:** For each tonne of potassium extracted, around three tonnes of **mine waste is generated** which is washed by rains into surrounding rivers and groundwaters.



A study titled "Triple dip La-Nina, unorthodox circulation and unusual spin in air quality of India" was conducted.

➤ The study was conducted by National Institute of Advanced Studies and Indian Institute of Tropical Meteorology.

➤ **Key-highlights**

⊕ Indian region encountered a mysterious trend reversal in pollution (**PM2.5**) during the winter of 2022–23.

⊕ The unusually worst air quality over **South-Western India**, whereas relatively **cleaner air** over the **highly polluted North India** was observed.

⊕ **Factors Responsible:**

- ◆ **Winter in 2022** coincided with the last phase of an unusual **triple-dip** (or three consecutive years) **La Nina** event.

- ◆ **The change in the normal wind direction**

» During normal time, the wind blows in the north-westerly direction (from Punjab towards and Gangetic plains) which is responsible for stubble burning pollutants to flow in Delhi.

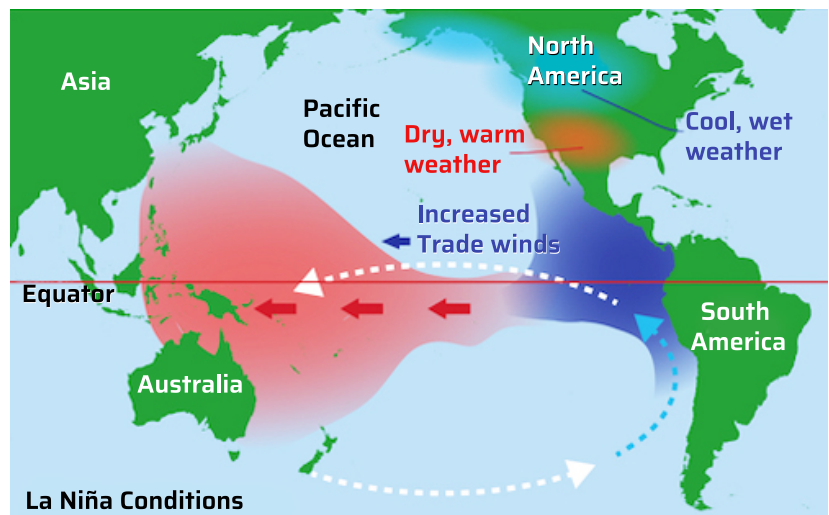
- ◆ However, in the **winter of 2022** the wind circulation was in the **north-south direction.**

» Air pollutants being carried from Punjab and Haryana bypassed Delhi (lesser pollution) and surrounding areas and flew over western and southern regions.

➤ **La-Nina** refers to the **periodic cooling of ocean surface** temperatures in the central and east-central equatorial Pacific.

⊕ Typically, occurs every **3 to 5 years** or so.

⊕ It positively impacts the Indian Monsoon.



Maharashtra Assembly unanimously passes Bill to provide 10% Reservation to Maratha Community

- Bill seeks to provide reservation to Maratha community in **educational institutions and government jobs**, based on a **comprehensive survey report** submitted by **Maharashtra State Backward Class Commission**.
- Previously in **2021**, **Supreme Court struck down a similar Act** that sought to provide reservation to Maratha Community in educational institutions and State public services, with **following observations**:
 - ⊖ **No extraordinary circumstances** were made out in granting separate reservation to Maratha Community by exceeding the **50% ceiling limit of reservation**.
 - ◆ **9-judge Bench of the Supreme Court in Indira Sawhney Case (1992)** set a **ceiling of 50%** on reservations under **Article 16(4)**.
 - ◆ **Article 16(4)** enables the State to make provisions in favor of backward classes of citizens in public employment.
 - ⊖ Exceeding ceiling limit without there being any exceptional circumstances clearly violates **Article 14 and 16**.
 - ⊖ **Changing 50% limit** is to have a **society which is not founded on equality but on caste rule**.
 - ⊖ Court also held that **criteria for reservation under Article 16(4)** should **not be proportionate representation but adequate representation**.
- **Concerns related to the bill**: Boost to 'Sons-of-the-soil' movement promoting regionalism, rise of similar demands from other communities affecting social cohesion, etc.

200 years of Rani Chennamma's rebellion against the British East India Company (EIC)

- Commemorating the event, several social groups such as **National Federation of Indian Women** are organizing national campaign, **Naanoo Rani Chennamma (I am Rani Chennamma too)** in Kittur.
- **About Rani Chennamma (1778-1829)**
 - ⊖ Born in Kakati village in Belagavi district of Karnataka.
 - ⊖ Became **queen of Kitturu** (now in Karnataka) when she married **Raja Mallasarja of Desai family**.
 - ⊖ **Adopted a child**, Shivalingappa, after death of her son and made him heir to the throne.
 - ◆ British East India Company did not accept this under the **Doctrine of Lapse**.
 - ⊖ **Values**: Courage, Perseverance, Leadership, Selflessness, etc.
- **Kittur Revolt (1824-29)**
 - ⊖ Regarded as the **first Indian armed rebellion against British EIC**.
 - ⊖ Rani Chennamma defied British order to exile adopted child and sent letter against the order to Lord Elphinstone, the then **Lieutenant-Governor of Bombay**, which was turned down.
 - ◆ It was the **first instance of imposition Doctrine of Lapse**, even before officially articulated by Lord Dalhousie.
 - ⊖ Though **British lost First battle in 1824**, Rani Chennamma was later captured and imprisoned at **Bailhongal Fort**, till her death in 1829.

Doctrine of Lapse

- It was **one of the three major annexation policies** of British EIC.
 - ⊖ Other two were – **Ring Fence Policy** and **Subsidiary Alliance**.
- Under this, **any princely state or territory under the paramountcy of British EIC would automatically be annexed** if the ruler was either "manifestly incompetent or died without a male heir".
- **Made official by Lord Dalhousie in 1848**.

Draft Guidelines on Prevention and Regulation of Greenwashing

- **Central Consumer Protection Authority (CCPA)** has sought public comments on the proposed guidelines, which shall be issued under **Consumer Protection Act, 2019**.
- **Greenwashing**: Means any **deceptive or misleading practice**, which includes concealing, omitting, or hiding relevant information, by exaggerating, making **vague, false, or unsubstantiated environmental claims**.
 - ⊖ Also includes use of misleading words, symbols, or imagery, placing **emphasis on positive environmental aspects while downplaying or concealing harmful attributes**.
- **Key highlights of the Draft Guidelines**
 - ⊖ **Applicability**: On all advertisements regardless of form, format, or medium.
 - ◆ **Also applicable on service provider, advertiser, endorser, etc.**, of the advertisement.
 - ◆ **Excludes advertisement/ communication not specific to any product or service**.
 - ⊖ **Prohibition**: No person to whom guidelines apply shall engage in Greenwashing.
 - ⊖ **Substantiation of Environmental Claims**: Generic terms such as 'clean', 'green', 'eco-friendly', 'eco-consciousness', 'carbon neutral', etc., shall not be used without **adequate qualifiers and substantiation**.
 - ⊖ **Adequate Disclosure**: All environmental claims in ads or communications shall be fully disclosed.
 - ◆ **Comparative environmental claims** that compare one product/ service to another must be based on verifiable and relevant data that is disclosed to consumers.
 - ◆ Disclosures should be **easily accessible to consumers** and not contradict relevant claims.
 - ⊖ **Aspirational or futuristic environmental claims** may be made **only when clear and actionable plans has been developed** detailing how those objectives will be achieved.

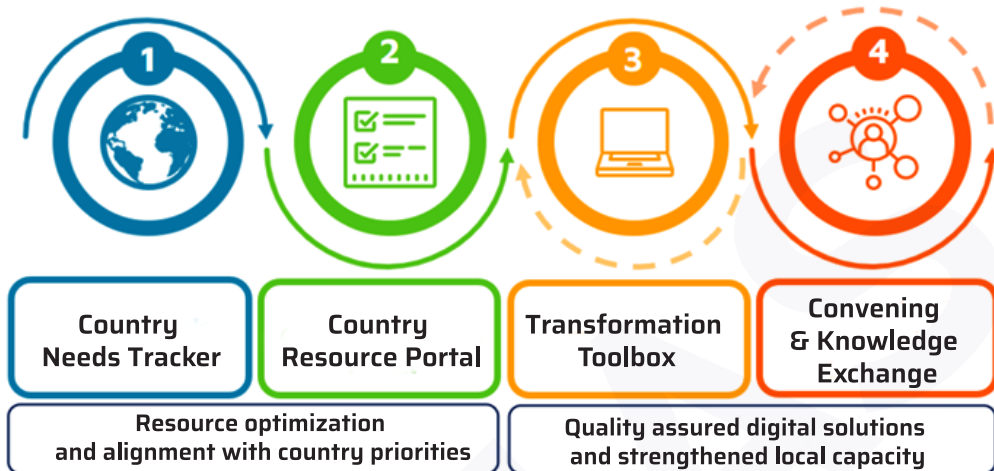
WHO launched Global Initiative on Digital Health (GIDH)

- The initiative was earlier announced at the G20 Health Ministers meeting in India.
- The GIDH will be a **WHO Managed Network of stakeholders** to address challenges such as duplication of efforts and “products-focused” digital health transformation.

⊕ **GIDH Secretariat** will be hosted in **WHO Headquarters (Geneva)**.

➤ Objective:

- ⊕ **Align efforts** to support of the **Global Strategy on Digital Health 2020–2025**
- ⊕ **Support quality** technical assistance to develop and strengthen standards
- ⊕ **Facilitate the use of digital transformation tools**



➤ Foundational Pillars of GIDH

- ⊕ **Country Needs Tracker** to facilitate digital health investments
- ⊕ **Country Resource Portal** to identify traditional as well as innovative resource opportunities
- ⊕ **Transformation Toolbox** for quality-assured tools to strengthen country capacity to manage the national digital health transformation.
- ⊕ **Convening and Knowledge Exchange** to promote strengthened collaboration and knowledge exchange

➤ Digital Health initiatives of India

⊕ **Ayushman Bharat Digital Mission, launched in 2021**

- ◆ It aims to establish a **National Digital Health Ecosystem** by creating an **online platform** enabling interoperability of **health data** within the health ecosystem
- ◆ Through components like **Ayushman Bharat Health Account (ABHA) Number, Health Facility Registry, Healthcare Professionals Registry** etc.

Also in News



Indian Renewable Energy Development Agency Limited (IREDA)

- IREDA has indicated plans for establishing a subsidiary to cater to **retail projects**, e.g. Rooftop Solar, PM-KUSUM, Electric Vehicles, and other Business-to-Consumer (B2C) segments.

➤ About IREDA

- ⊕ **Mini Ratna (Category – I) Public Limited** Government Company established as a **Non-Banking Financial Institution in 1987**.
- ⊕ Under the administrative control of the **Ministry of New and Renewable Energy (MNRE)**.
- ⊕ Engaged in promoting, developing and extending financial assistance for setting up **projects relating to new and renewable energy sources and energy efficiency/conservation**.
- ⊕ **Motto:** “Energy for Ever.”
- ⊕ **Registered and Corporate office:** New Delhi



Henley Passport Index (HPI)

- India slipped to 85th position in the recently released Henley Passport Index for 2024.

➤ About HPI

- ⊕ Released by **Henley & Partners**.
- ⊕ Ranks according to number of destinations holders of a passport can access without a prior visa.
- ⊕ Based on data from **International Air Transport Association (IATA)**.
- ⊕ Compares visa-free access of **199 different passports to 227 travel destinations**.
- ⊕ 6 countries – **France, Germany, Italy, Japan, Singapore, Spain** – are ranked 1st in 2024.



IBSA facility for poverty and hunger alleviation (IBSA Fund)

- India has contributed \$ 1 Mn to the IBSA Fund.
- **About the IBSA Fund**
 - ⊕ It was jointly established by **India, Brazil and South Africa** in 2004 and became **operational in 2006**.
 - ⊕ **Fund-supports projects in Global south** to achieve their national priorities, as well as all other internationally agreed development goals.
- **About IBSA**
 - ⊕ Forum comprises **India, Brazil and South Africa**.
 - ⊕ Formalised and named the **IBSA Dialogue Forum in 2003**.



Shivneri Fort

- Maharashtra Chief Minister paid **tribute to Chhatrapati Shivaji Maharaj on his birth anniversary at Shivneri Fort**.
- **About Shivneri Fort**
 - ⊕ In 1595, **King Bahadur Nizam II conferred the fort to Maloji Bhonsale**.
 - ⊕ **17th-century military fortification** located in Pune (Maharashtra).
 - ⊕ Birthplace of **Chhatrapati Shivaji Maharaj**.
 - ⊕ One of the 12 component parts of **"Maratha Military Landscapes of India"** nominations for recognition as **UNESCO World Heritage List for 2024-25**.
- **Other important Maratha forts: Raigad, Rajgad, Lohagad, Sindhudurg, Torna, Devgad, etc.**



X-Ray Binary Stars

- An international team of scientists studied a **transient X-ray binary system** named **MAXI J1820+070**, using **AstroSat's full multi-wavelength capabilities**.
- **About X-ray Binary Stars**
 - ⊕ **Special class of binary stars which emit X-rays**.
 - ◆ **Binary star systems contain two stars that orbit around their common centre of mass**.
 - ⊕ Made up of a **normal star and a collapsed star (a white dwarf, neutron star, or black hole)**.
- **AstroSat is first dedicated Indian astronomy mission to study celestial sources in X-ray, optical and UV spectral bands simultaneously**.



Blended Finance

- State Government of Goa and Power Finance Corporation signed an **MoU to support state's climate ambitions through sub-national Blended Finance Facility (BFF)**.
 - ⊕ BFF will be utilized to **fund key climate projects such as green hydrogen, waste-to-wealth technology, nature-based solutions, etc.**
- **Blended finance is the strategic use of development finance for mobilisation of additional finance towards sustainable development**.
 - ⊕ It uses **concessional finance (i.e. a subsidy) to reduce perceived risk of an investment**.
 - ⊕ Seen as a tool to **leverage additional private investment**.



Human - Animal conflict

- Kerala has allocated **Rs.13 Crore** to address the issue of man-animal conflict in the **Wayanad District**
- **Man-Animal Conflict in India**
 - ⊕ Earlier the **Ministry of Environment** had released 14 specific guidelines for mitigating the conflict.
 - ⊕ The conflict is normally dealt through coordinated interdepartmental action, identification of conflict hot spots, establishment of rapid response teams etc.
 - ⊕ An **ex-gratia payment in case of Human-Wildlife conflict** is offered to the tune of **Rs. 10 Lakhs** in case of deaths and **Rs. 2 Lakhs** in case of grievous injury.



Green Anaconda

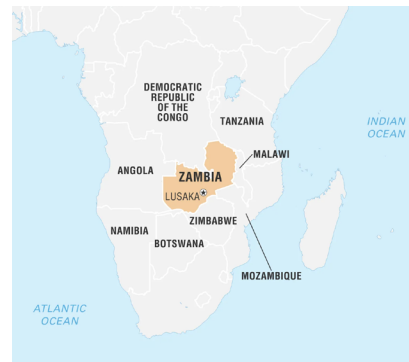
- Researchers found that green anacondas are actually two genetically distinct species.
- **About Green Anaconda (Eunectes murinus)**
 - ⊕ A member of the **boa family (Nonvenomous snake)**
 - ⊕ It is the **heaviest snake in the world, weighing more than 550 pounds**.
 - ⊕ **Females** are significantly larger than males.
 - ⊕ **IUCN status: Least Concern**
 - ⊕ **Habitat:** live in swamps, marshes, and slow-moving streams, mainly in the tropical rain forests of the **Amazon and Orinoco basins**.
 - ⊕ **Lifespan:** in the wild is about 10 years.

Places in News



Zambia (Capital: Lusaka)

- India has sent medical assistance to Cholera hit Zambia.
- **Political Features**
 - ⊕ **Land-locked country in South Central Africa**.
 - ⊕ Bordered by **Tanzania (North), Malawi (East), Mozambique (South-East), Zimbabwe (South), Botswana and Namibia (South-West), Angola (West) and Democratic Republic of Congo (North-West)**.
- **Geographical Features**
 - ⊕ **Topography is mostly high plateau** with some hills and mountains.
 - ⊕ **Vegetation is mostly savannah**, with areas of tropical grassland and woodland.
 - ⊕ **Major Rivers:** Zambezi, Kafue, Luangwa, etc.
 - ⊕ **Lakes:** Lake Tanganyika, etc.
 - ⊕ **Highest Point:** Mafinga Hills.



AHMEDABAD



BHOPAL



CHANDIGARH



DELHI



JAIPUR



JODHPUR



GUWAHATI



HYDERABAD



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI



SIKAR