

## UPSC CURRENT AFFAIRS NOTES 07-04-2024

### GLACIAL LAKE OUTBURST FLOOD (GLOF)

Uttarakhand government is evaluating the Glacial Lake Outburst Flood (GLOF) risk due to climate change-induced glacial melt, leading to the formation and expansion of unstable permanent lakes.

Rising surface temperatures globally, including in India, have accelerated glacier melting, leading to the formation and expansion of glacial lakes.

As glaciers sink, they leave behind depressions that fill with meltwater, forming potentially hazardous lakes. With continued global warming, the risk of GLOFs is expected to increase, necessitating comprehensive risk assessments to identify vulnerable areas.

#### Glacial Lake Outburst Floods (GLOFs)



Glacial Lake Outburst Floods (GLOFs) are sudden and often devastating events triggered by the breach or collapse of natural barriers, such as moraines or ice dams, which contain water from glacial melt. These floods occur when large volumes of water are released rapidly downstream, posing significant risks to communities, infrastructure, and ecosystems located in the path of the floodwaters.

GLOFs occur when water stored in glacial lakes is released suddenly due to the failure of natural dams holding back the water. Glacial lakes form as glaciers retreat and leave behind depressions that fill with meltwater. The increased



volume of water in these lakes can overwhelm the natural barriers, leading to a catastrophic release of water downstream.

**Human Impact:** GLOFs can result in loss of life, injuries, and displacement of populations. Communities located downstream of glacial lakes are particularly vulnerable to these sudden floods.

**Infrastructure Damage:** Floodwaters carrying debris, rocks, and ice can cause extensive damage to roads, bridges, hydropower facilities, and other infrastructure along river valleys.

**Economic Losses:** The destruction of infrastructure and disruption of economic activities can result in significant economic losses for affected regions.

**Environmental Consequences:** GLOFs can alter river courses, deposit sediments, and impact habitats and biodiversity downstream. They can also contribute to water quality degradation.

**Remote Locations:** Glacial lakes are often located in remote and rugged mountainous areas, making access and monitoring difficult.

**Limited Data and Monitoring:** Gathering accurate data on glacial lakes and their behaviour requires specialized equipment and expertise, which may be lacking in remote regions.

**Climate Change:** Accelerated glacier retreat due to climate change is leading to the formation of new glacial lakes and increasing the frequency of GLOF events.

**Complex Terrain:** The steep and unstable terrain of mountainous regions complicates the implementation of mitigation measures and emergency response efforts.

### **Steps Taken to address the risks associated with GLOFs**

**Monitoring and Research:** India has invested in monitoring technologies, including satellite imagery and remote sensing, to track changes in glacial lakes and assess potential GLOF hazards.

**Early Warning Systems:** The installation of early warning systems in vulnerable areas to provide timely alerts to downstream communities in the event of a GLOF.



**Infrastructure Development:** Constructing protective measures such as debris dams, reservoirs, and embankments to mitigate the impact of GLOFs on downstream areas.

**Capacity Building:** Conducting training programs, workshops, and awareness campaigns to enhance the preparedness and response capabilities of local communities and authorities.

**Enhanced Monitoring and Research:** Continued investment in monitoring technologies and research to better understand glacial dynamics, lake formation, and GLOF triggers.

**Improved Early Warning Systems:** Strengthening and expanding early warning systems to ensure timely alerts and evacuation of at-risk populations.

**Infrastructure Investment:** Prioritising investments in infrastructure projects that mitigate GLOF impacts, such as flood protection structures and hazard mapping.

**Community Engagement:** Engaging local communities in risk reduction efforts, including land-use planning, evacuation drills, and awareness campaigns.

Glacial Lake Outburst Floods (GLOFs) are complex natural hazards exacerbated by climate change and glacier retreat. Addressing the risks associated with GLOFs requires a comprehensive and multi-faceted approach involving scientific research, monitoring, early warning systems, infrastructure development, and community engagement. By adopting proactive measures and building resilience, India and other vulnerable regions can reduce the impacts of GLOFs and safeguard human lives and livelihoods in mountainous areas prone to glacial lake formation.

## World Health Day

**World Health Day 2024 is celebrated every year on April 7.**

It is aimed at raising awareness about global health issues and encouraging people to live healthier.

### History



The origin of World Health Day goes back to 1948 when First Health Assembly was held by the organisation, where it was decided to commemorate April 7 as World Health Day and it came into effect in 1950.

Over the years, the celebrations have aimed to create awareness around a specific health theme to highlight a priority area of concern for the World Health Organization.

The theme of 2024 World Health Day is 'My health, my rights'.

This year's theme was chosen to champion the right of everyone, everywhere to have access to quality health services, education, and information, as well as safe drinking water, clean air, good nutrition, quality housing, decent working and environmental conditions, and freedom from discrimination.

It is a specialized agency of the United Nations which was established in 1948, that connects nations, partners and people to promote health, keep the world safe and serve the vulnerable – so everyone, everywhere can attain the highest level of health.

## **Azad Hind Government**

Bollywood actor-turned-politician Kangana Ranaut recently stirred up a storm after she claimed that Netaji Subhas Chandra Bose was the first prime minister of India by citing a news article clipping that purportedly mentioned that Bose had declared himself the PM of 'Azad Hind' in 1943.

### **About Azad Hind Government**

In 1943, on October 21, Netaji Subhash Chandra Bose announced the formation of the 'Arzi Hukumat-e-Azad Hind' or the provincial government of free India in Singapore and declared war on the British Empire.

Under the provisional Government, Bose was the Head of State, Prime Minister, and Minister of War.

Captain Lakshmi headed the women's organisation while SA Ayer headed the publicity wing in the newly formed government.

Revolutionary leader Ras Behari Bose was designated as the supreme adviser by Netaji Subhash Chandra Bose.

The government was supported by the Axis powers of Imperial Japan, Nazi Germany, the Italian Social Republic, and their allies.



## Significance of the Azad Hind government

Soon after the formation of the government, the Azad Hind government proclaimed authority over Indian civilian and military personnel in Southeast Asian British colonial territory and prospective authority over Indian territory to fall to the Japanese forces and the Indian National Army during the Second World War.

The provisional government not only enabled Bose to negotiate with the Japanese on an equal footing but also allowed him to mobilise Indians living in East Asia to join and support the Indian National Army (INA).

The Indian National Army drew ex-prisoners and thousands of civilian volunteers from the Indian expatriate population in Malaya (present-day Malaysia) and Burma (now Myanmar).

The provisional government was also formed in the Japanese-occupied Andaman and Nicobar Islands. The islands were reoccupied by the British in 1945.

The Azad Hind government under Bose had in fact started its own bank, currency, civil code, and stamps.

Bose had even formed the first women's regiment of the INA, the Rani Jhansi Regiment, thus laying the foundation for equal opportunity for women in armed forces.

The INA was formed during World War II by Indian nationalists and prisoners of war dedicated to winning India's independence from the British Empire. The first Indian National Army (INA) was formed in September 1942 under Captain Mohan Singh. It comprised around 12,000 Indian prisoner of wars (PoWs) willing to secure independence from British rule in alliance with Japanese assistance. Supported by the Japanese army and led by Subhas Chandra Bose, the INA established its own provisional government and initiated an attack against the British in India. After limited success, however, they were defeated during the battle of Imphal in 1944 and disbanded altogether after the defeat of Japan in 1945.

## **Agnibaan SOrTeD**

For the second time, the launch of AgniKul 'Agnibaan SOrTeD' has been postponed.

## About Agnibaan SOrTeD



Agnibaan SubOrbital Technological Demonstrator (SOrTeD) is a single-stage launch vehicle powered by AgniKul's patented Agnilet engine.

It is an entirely 3D-printed, single-piece, 6 kilonewton (kN) semi-cryogenic engine.

It is the world's first single piece 3D printed semi-cryogenic rocket engine.

It will be launched from India's first private launchpad, ALP-01, located inside the Indian space agency ISRO's Sriharikota spaceport.

### Features

It is India's first ever vehicle equipped with a semi-cryogenic engine, the Agnilet, a subcooled liquid oxygen-based propulsion system developed indigenously.

The rocket engine will burn kerosene in liquid oxygen and can be directly used in the rocket.

It stands 18 meters tall and is 1.3 meters in diameter.



It has the capability to carry a 100-kg payload up to a height of 700 km with a lift of mass of 14,000 Kgs.

It can access both low- and high-inclination orbits and is completely mobile.

It will also have the first ever Ethernet-based avionics architecture and fully in-house developed autopilot software from India.

The rocket is also designed for launch from more than 10 different launch ports.

To ensure its compatibility with multiple launch ports, AgniKul has built a launch pedestal named 'Dhanush' that will support the rocket's mobility across all its configurations.

### **Points to Remember**

**AgniKul Cosmos is an IIT Madras incubated space start up based in Chennai.**

**It was established in 2017.**

It became the first company in the country to sign an agreement with ISRO under the IN-SPACE initiative to have access to the space agency's expertise and its facilities to build Agnibaan in December 2020.

In 2022, Agnikul inaugurated India's first private launchpad and mission control centre at Satish Dhawan Space Centre.

It is a single-window, independent, nodal agency that functions as an autonomous agency in the Department of Space (DOS). It is formed following the Space sector reforms to enable and facilitate the participation of private players. The agency acts as an interface between ISRO and Non-Governmental Entities (NGEs) and assesses how to utilize India's space resources better and increase space-based activities.

## **S.A.R.A.H.**



The World Health Organization (WHO) introduced S.A.R.A.H. (Smart AI Resource Assistant for Health), a digital health promoter.

**Purpose:** To provide accurate health information and support users in optimizing their health and well-being journey.

**Technology:** Powered by generative AI, S.A.R.A.H. engages users in dynamic conversations mirroring human interactions.

## Features

**Language Support:** Available 24/7 in 8 languages for global accessibility.

**Health Topics:** Covers major health topics, including healthy habits, mental health, and risk factors for leading causes of death.

**Engagement:** Offers personalized and empathetic responses to users' queries and concerns.

**Accessibility:** Accessible on any device, enabling users to engage with health information conveniently.

## Significance

**Empowering Users:** Supports users in understanding risk factors and accessing up-to-date health information.

**Future of Health:** Represents a shift towards digital health promotion and accessibility.

**WHO's Vision:** Reflects WHO's commitment to leveraging digital technologies for public health advancement.

**Equitable Access:** WHO emphasizes the need for equitable access to AI-powered health information.

**Privacy and Data Protection:** Addresses concerns related to privacy, safety, accuracy, and bias in AI technologies.

**Continuous Evaluation:** Emphasizes the importance of ongoing evaluation and refinement to ensure ethical and evidence-based content delivery.

## Project Evolution

**Continuous Learning:** The S.A.R.A.H. project prioritizes continuous learning and development to inspire reliable, responsible, and accessible health information.





Previous Iterations: Previously used during the COVID-19 pandemic under the name Florence to disseminate critical public health messages.

## KOSOVO

Kosovo is situated in Southeast Europe, specifically in the central Balkans.

It is a landlocked country bordered by

Serbia to the north and east

North Macedonia to the southeast

Albania to the southwest

Montenegro to the west

The landscape of Kosovo is diverse, featuring plains in central areas such as the Kosovo field, and mountainous regions like the Accursed Mountains in the southwest and the Sar Mountains in the southeast.

Kosovo declared independence from Serbia in 2008, following a period of conflict and international intervention, particularly during the Kosovo War of 1998-1999. As of now, Kosovo has been recognized as an independent state by over 100 countries, including many European and North American nations. However, Serbia and some other countries do not recognize Kosovo's sovereignty.

Kosovo operates as a parliamentary democracy with a multi-ethnic population, predominantly consisting of Albanians and Serbs, as well as other minority communities.

Kosovo is classified as a developing country with an upper-middle-income economy. Kosovo is a member of the International Monetary Fund (IMF), World Bank, European Bank for Reconstruction and Development (EBRD), and other international organisations.

## Basel III Endgame Proposal



The U.S. Federal Reserve's recent announcement of significant changes to the "Basel III endgame" proposal marks a pivotal moment in the ongoing debate surrounding bank capital requirements.

This proposal holds profound implications for the banking sector, particularly for Wall Street banks in the United States.

What is Basel III and why is it contentious?

Formation of Basel Committee:

Originating from the Basel Committee on Banking Supervision, convened by the Bank for International Settlements (BIS) in Basel, Switzerland.

Its primary aim is to ensure global financial stability through consistent minimum capital standards for banks worldwide.

### **Basel III Standards:**

Emerged in response to the 2007-09 global financial crisis, Basel III introduced comprehensive reforms to enhance the resilience of the banking sector.

These reforms encompassed capital, leverage, and liquidity requirements, reflecting a concerted effort to prevent future crises and mitigate systemic risks.

In 2017, the Basel Committee reached an agreement on the final iteration of Basel III, often referred to as the "endgame." This proposal seeks to refine the regulatory framework, particularly concerning the assessment of risk and capital adequacy.

### **Proposed Changes and Implications**

**Credit Risk:** The proposal aims to curtail banks' reliance on internal risk models for determining capital reserves, advocating for more standardized approaches to prevent the underestimation of risk.

**Market Risk:** Addressing concerns regarding the underestimation of market risks, the proposal seeks to establish more stringent requirements for assessing and provisioning for potential losses.

**Operational Risk:** Introducing standardized methodologies to assess operational risks, encompassing various sources of potential losses such as management errors, litigation costs, and external events.

### **Response from Banks and Regulators**



**Bank's Concerns:** Wall Street banks have vehemently opposed additional capital requirements, arguing that they are already well-capitalized and that further increases could stifle economic growth. They have mounted an unprecedented lobbying effort to influence the outcome of the proposal.

**Regulator's Stance:** Regulatory authorities, including the U.S. Federal Reserve, stress the importance of maintaining vigilance and resilience in the banking sector, particularly in light of recent economic challenges such as the COVID-19 pandemic. They argue that additional capital is necessary to safeguard against future crises.

### Expected Changes and Challenges Ahead

**Regulatory Response:** In response to industry feedback and criticism, regulatory agencies are expected to revise the proposal, likely reducing its overall impact. However, the timeline for completing these revisions remains uncertain, with potential implications for regulatory leadership and broader economic stability.

**Path Forward:** The rule-writing process involves ongoing review and analysis of public comments, presenting challenges and opportunities for refining the proposal to address stakeholders' concerns while upholding financial stability.

## Global indices measuring democracy

V-Dem Institute's recent democracy index termed India "one of the worst autocratisers"

### The Democracy Report

V-Dem provides a multidimensional and disaggregated dataset that reflects the complexity of the concept of democracy as a system of rule that goes beyond the simple presence of elections.

'Democracy Report 2024' was released by the Gothenburg-based V-Dem Institute.

V-Dem distinguishes between five high-level principles of democracy:

Electoral,

Liberal,



Participatory,

Deliberative, and

Egalitarian, and collect data to measure these principles.

Components of the Liberal Democratic Index (LDI) as per the V-Dem's  
'Democracy Report 2024'

Liberal Component Index (LCI):

It measures aspects such as the protection of individual liberties and legislative constraints on the executive branch of government.

Electoral Democracy Index (EDI):

This index considers indicators that ensure free and fair elections, such as freedom of expression and association.

Egalitarian Component Index:

It assesses the extent to which different social groups within a country are equal in terms of rights and opportunities.

Participatory Component Index:

This index evaluates the health and functionality of citizen groups and civil society organizations, reflecting the level of citizen participation in governance.

Deliberative Component Index:

Examines whether political decisions are made through public reasoning focused on the common good or through emotional appeals, solidarity attachments, or coercion.

V-Dem Report's Methodology

The report produces the largest global data on democracy and it is based on 31 million datasets that cover 202 countries from 1789 to 2023.

Different Attributes of Democracy are considered by including over 4,300 scholars from 180 plus countries and experts from various other countries.

V-Dem enables multiple ways to study the nature, causes, and consequences of democracy embracing its multiple meanings.



V-Dem's researchers code a series of indicators for 12 areas across media, civil society, political parties, and civil liberties, and each area is assigned five experts.

## Changpa Tribe

Climate activist Sonam Wangchuk and Leh Apex Body (LAB) decided to call off the Pashmina border march aimed at highlighting the plight of the Changpa nomadic tribes who are losing thousands of square kilometres of their land “due to Chinese incursion.

### About Changpa Tribe

The Changpa, or Champa, are semi-nomadic people found mainly in the Changtang plateau of southeastern Ladakh.

A smaller number resides in the western regions of the Tibet Autonomous Region in China.

They share linguistic and cultural affinities with Tibetans.

They are high-altitude pastoralists, raising mainly yaks and goats. They live at an average altitude of 4,500 metres above sea level.

Religion: All Changpa families profess Tibetan Buddhism as their religion.

They can be identified by their conical yak-skin tents called reboo.

Each reboo invariably accommodates the family deity, and a picture of their spiritual head, in most cases, the Dalai Lama.

### Semi-nomadic Lifestyle



The Changpa who live nomadic lives are known as Phalpa, while those who have settled down in fixed locations are called Fangpa.

For many Changpas, rearing of animals and consuming and selling their produce (milk and its products, hair, and meat) is the only means of livelihood.

They rear the highly pedigreed and prized Changra goats (*Capra Hircus*) that yield the rare Pashmina (Cashmere) fibre. It is the finest fibre of all goat hair.

Their Buddhist belief does not allow them to kill animals for meat. It is only when animals die a natural death that the carcasses can be used for meat and hide, which the Changpas use to line their huts and make garments.

In 1989, the Changpa were granted official status in India as a scheduled tribe.

The Wild yak (*Bos mutus*) is a large, wild cattle native to the Himalayas. Wild yaks are among the largest bovids and are second only to the gaur in shoulder height. Yaks can live at altitudes up to 20,000 feet--the highest of any land-dwelling mammal. Wild yaks are social animals that live in herds. Domestic yaks far outnumber wild ones and are bred for their tractability for plowing and threshing, high milk production, meat, hides, and fur.