



GS 1

## WARNING FROM SIKKIM: ADDRESSING GLACIAL LAKE FLOOD RISKS

- On October 4, a glacial lake flood occurred in Sikkim, causing significant damage to infrastructure and claiming lives.
- Glacial lakes, formed near glacier snouts, are increasing due to global warming, posing a potential risk.
- Glacial lakes have loose embankments made of glacier moraine, rocks, and boulders, making them vulnerable to failures.
- Climate change and extreme weather events can trigger glacial lake outbursts, threatening downstream areas.



### Addressing GLOF Risks:

- Intensive Monitoring: Continuous monitoring of meteorological conditions near vulnerable glacier lakes is crucial, with data gathered at observatories and processed in real-time for forecasting.
- River Water Levels: Ongoing monitoring of water levels in downstream rivers from vulnerable lakes is essential.
- Satellite and Drone Monitoring: Launching a nationwide program to monitor glacier lakes regularly through satellites and drones.
- Hydrometeorological Information: Combine data from monitoring with hydrometeorological information to issue forecasts and warnings.
- Infrastructure Quality Control: Strict quality control measures for infrastructure projects in mountainous areas like dams, bridges, and highways.
- Regulation of Construction: Careful regulation of construction near rivers, particularly in flood-prone areas.
- Scale Up Scientific Studies: Increase research on glaciers in the Himalayan region to better understand their response to climate change.

### GLOF Threat in India:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed mauris mi, sodales sed scelerisque ac, aliquet at tortor.

- The Sikkim State Disaster Management authority has identified over 300 glacial lakes in the state, with 10 being vulnerable to outburst floods.
- The Geological Survey of India identified 13 out of 486 glacial lakes in Uttarakhand as vulnerable to GLOFs.
- Different studies may use varying data and methodologies, but the overall GLOF threat is increasing in India.
- ris mi, sodales sed scelerisque ac, aliquet at tortor.

### Comprehensive Risk Assessment:

- Conduct a comprehensive risk assessment that considers projected temperature increases, changes in precipitation patterns, and land-use changes.
- Use this assessment to inform disaster risk reduction strategies for the Himalayan region.

# UNDERSTANDING LOW LABOR FORCE PARTICIPATION RATES IN INDIA

## Current LFPR in India:

- India's labor force participation rate (LFPR) dropped to 39.5% in the fiscal year 2022–2023, as reported by the Centre for Monitoring Indian Economy (CMIE).
- This means that only 39.5% of Indians aged 15 and above are actively seeking employment. Among men, 66% are part of the workforce, while for women, it's just 8.8%.
- In the past, it was commonly believed that women were absent from the labor force because they were primarily responsible for childcare and household duties. This perspective also contributed to the gender pay gap, as women were perceived to have lower education levels and, therefore, were paid less.

## Claudia Goldin's Contribution:

- Claudia Goldin, who won the Nobel Prize in Economics in 2023, challenged these traditional views. She argued that the reason for women's underrepresentation in the labor force and the persistent gender pay gap was not primarily due to their roles at home but rather structural factors in the labor market.
- Goldin observed that as economic production shifted from home-based to factory-based work, women were initially excluded from market activities. It was only when jobs in offices, schools, and hospitals began to outnumber factory jobs that women found employment opportunities.
- Despite entering the workforce, gaining higher educational qualifications, not concentrating in traditionally "female jobs," and not necessarily leaving work to have children, women continued to earn less than men.
- Goldin's explanation for this wage gap is rooted in women's challenges in taking on jobs with all-encompassing responsibilities, such as long hours and irregular work schedules. These demands often conflict with parental responsibilities.
- Gender ideologies often lead to the assignment of additional family duties to women, while men are expected to prioritize their careers.

## The Concept of "Greedy Work":

- Goldin introduced the concept of "greedy work," referring to jobs that demand extraordinary efforts and long hours, often rewarded with high salaries, bonuses, stock options, and rapid promotions.
- The pursuit of "greedy work" contributes to gender inequality as it is incompatible with raising children, and women often end up on the "mommy track," choosing slower career progression even if they initially pursued high-profile careers.
- Rising income inequality also prompts couples to prioritize family income over gender equality within the household, contributing to the gender pay gap.

## Solutions:

- Goldin's proposed solution to address these challenges is restructuring the workplace to reduce reliance on long and irregular work hours and implementing more predictable schedules.
  - The growth of the service sector, increased education, and declining fertility rates can provide more job opportunities for women. However, achieving gender equality in the workforce requires reshaping the work environment and social norms to create a work-life balance for both men and women.
  - This involves making work structures that respect workers' time and do not emphasize very long work hours.
  - Addressing the demands of various institutions, such as schools relying on parents for homework supervision and urban development affecting commute times, is also essential in achieving the "grand gender convergence" in labor market outcomes that Goldin advocates for.
-

# MINIMIZING CLIMATE RISK IN AGRICULTURE: A STRATEGY FOR INDIA

- World Food Day is observed on October 16, marking the founding of the United Nations Food and Agriculture Organisation (FAO) in 1945, with the primary aim of ensuring global food and nutrition security post-World War II.
- While there's enough food production to feed the world's population, access to it remains unequal across nations.
- India has made significant progress in food production, including exports of cereals and milk. However, challenges in ensuring access to nutritious food persist.

## Water Resources in Indian Agriculture:

- India's population share is about 18% of the world, but it possesses only 4% of global freshwater resources.
- A substantial portion of this water is utilized in agriculture, with varying estimates indicating it ranges from 78% to 90%.
- Given population growth and urbanization, there's a need to produce more food while conserving water for essential needs, manufacturing, and urban expansion.

## Two-Pronged Water Strategy:

- Supply Side: India should focus on augmenting water reserves during the monsoon season in reservoirs and recharge groundwater through check dams and watersheds.
- Demand Side: Rational allocation and efficient use of water across crops are essential, necessitating institutional reforms in irrigation and reevaluation of water and power pricing for irrigation.

## Challenges in Attracting Investment:

- India struggles to attract private sector investments in reservoirs and canal networks as water is often free.
- The government, already providing significant food and fertilizer subsidies, lacks the funds to invest in these projects.
- State governments hesitate to charge for power used in groundwater irrigation.

## Minimizing Climate Risk:

- To mitigate climate risk, India should shift its focus from land productivity to water productivity.
- This involves considering productivity in terms of grain output per unit of irrigation water.
- Identifying inefficiencies in water use is vital; for example, Punjab's high rice productivity is offset by low irrigation water productivity.
- A shift towards less water-intensive crops like millets, pulses, and oilseeds should be encouraged, possibly through incentives or subsidies.
- Practices such as direct-seeded rice, alternate wet and dry irrigation, zero till farming, and drip irrigation can be rewarded as they save water.
- Efficient water use is crucial for ensuring sustainable food security.



academias



PHONE +91 95966-06464  
+91 78383-55131

info@academias.co.in

ADDRESS 1-A Panchsheel Park Ext,  
Chakrata Road, Dehradun, Uttarakhand  
-248001.



© 2023 – ACADEMIA