

DAILY CURRENT AFFAIRS



22nd November, 2023



S.NO.	TOPIC
1.	THE OECD REPORT ON CLIMATE FINANCE
2.	STUBBLE BURNING
3.	PRELIMS POINTERS

THE OECD REPORT ON CLIMATE FINANCE

SOURCE: THE HINDU WHY IN NEWS?

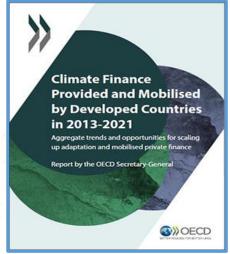
OECD report reveals **developed countries' failure to meet the \$100 billion/year** climate finance promise in 2021. Developed nations **mobilized \$89.6 billion in 2021**, **missing the 2020 deadline.**

ABOUT THE OECD REPORT ON CLIMATE FINANCE:

- Release Date and Authority:
 - ✓ The report was released on 16 November 2023 by the OECD Secretary-General, signifying the organization's commitment to transparency and accountability in reporting on climate finance.
- Objective and Scope:
 - ✓ The report aims to present aggregate trends in annual climate finance provided and mobilized by developed countries for developing nations from 2013 to 2021.
 - ✓ It offers insights into climate finance breakdowns by theme, sector, financial instrument, and region, focusing on the period from 2016 to 2021.
- Timeframe Consideration:
 - The analysis covers the period from 2013 to 2021, providing a comprehensive understanding of long-term trends in climate finance dynamics.

KEY FINDINGS OF THE REPORT:

- Total Climate Finance Increase:
 - ✓ In 2021, developed countries provided and mobilized USD 89.6 billion for climate finance in developing nations, reflecting a notable 7.6% increase from the previous year.
- Dominance of Public Climate Finance:
 - ✓ Public climate finance, encompassing bilateral and multilateral sources, nearly doubled from USD 38 billion in 2013 to USD 73.1 billion in 2021.
- Figure 1. Climate finance provided and mobilised in 2013-2021 (USD billion) 89.6 83.3 80.4 79.9 14.4 71.6 13.1 14.7 144 2.1 61.8 14.5 2.6 58.5 2.7 52.4 3.0 38.7 10.1 16.7 36.9 Data gap 12.8 30.5 34.7 1.5 1.6 2.5 27.2 1.6 18.9 16.2 20.4 155 2014 Multilateral public (attributed) Export credits Mobilised private (attributed)
- ✓ This sector accounted for the majority of the total USD 89.6 billion in 2021, showcasing the significant role of public funding in climate finance.
- Adaptation Finance Decline:
 - ✓ Adaptation finance experienced a decline of USD 4 billion (-14%) in 2021, resulting in a reduced share of total climate finance from 34% to 27%.





✓ This **decrease highlights challenges in sustaining adaptation** efforts amidst changing financial priorities.

➤ Rise in Cross-Cutting Finance:

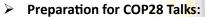
- ✓ Cross-cutting finance, addressing multiple climate-related aspects, witnessed a noteworthy increase from USD 6 billion in 2020 to USD 11.2 billion in 2021.
- ✓ The **surge in cross-cutting finance** underscores a broader approach to addressing diverse climate challenges.

Mobilised Private Climate Finance:

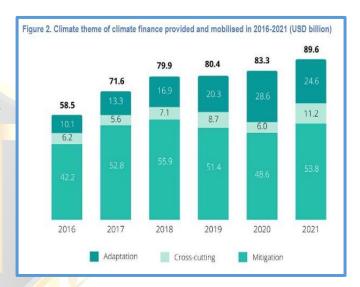
- ✓ Comparable data for mobilized private climate finance are available from 2016 onwards.
- ✓ In 2021, mobilized private climate finance amounted to USD 14.4 billion, constituting 16% of the total climate finance.
- ✓ This figure highlights the growing role of the private sector in contributing to climate action.

SIGNIFICANCE OF THE OECD REPORT ON CLIMATE FINANCE:

- Insight into Rich Countries' Approach:
 - The report provides a valuable insight into the perspectives and strategies of wealthy nations, including the U.S.,
 U.K., Germany, France, Switzerland, and Canada, regarding climate finance.



- The release of the report precedes the COP28 climate talks scheduled in the United Arab Emirates (UAE).
- ✓ It offers a preview of developed countries' positions on climate finance, setting the stage for discussions at the upcoming summit.



Evaluation of COP26 Pledge:

- Against the backdrop of the COP26 talks in Glasgow (2020), where developed nations pledged to double adaptation finance, the report evaluates the progress made.
- ✓ It addresses the shortfall in meeting the \$100 billion climate finance goal by 2020.

Impact on Developing Countries:

- ✓ The **failure to mobilize sufficient climate finance** has repercussions for developing countries.
- ✓ It hampers their capacity to address climate mitigation, such as reducing emissions through renewable energy, and adaptation needs, including building climate-resilient agriculture.

Trust and Credibility Concerns:

- ✓ Inadequate climate finance raises concerns about the commitment of developed nations to tackle the climate crisis.
- ✓ The **lack of financial support may erode trust among poorer countries**, questioning the seriousness of the developed world in addressing global climate challenges.

RECOMMENDATIONS:

Assessment of financial assistance needs for developing countries:

> \$100 Billion Goal Evaluation:

The report critically evaluates the \$100 billion goal set during COP15 talks.



It highlights that this **figure lacks a robust foundation**, emerging without a comprehensive assessment of the actual climate investment needs of developing countries.

Skepticism Regarding Goal Achievement:

- ✓ Despite preliminary claims in the **report suggesting the likely achievement of the \$100 billion goal in 2022,** it emphasizes the **need for skepticism**.
- ✓ The data is neither finalized nor published, urging caution in accepting the reported figures.

➢ Origins of the \$100 Billion Goal:

- ✓ The report underlines that the \$100 billion goal was not derived from a thorough assessment but emerged during COP15 talks without a concrete basis.
- ✓ This context raises questions about the adequacy and credibility of the goal.

Future Financial Requirements:

- ✓ Looking ahead, the **report indicates that developing countries may require substantial financial** assistance.
- ✓ By 2025, an estimated \$1 trillion annually will be needed for climate investments.
- ✓ This amount is **projected to increase significantly to approximately \$2.4 trillion per year** between **2026 and 2030**.

Unmet \$100 Billion Goal:

- ✓ The report emphasizes that the \$100 billion goal remains unmet, making it pale in comparison to the escalating financial needs predicted for developing countries.
- The unfulfilled goal raises concerns about the commitment of developed nations to adequately support climate actions in the global south.

WAY FORWARD:

Impact on COP28 Discussions:

- ✓ As the report provides insights into the climate finance stance of developed countries, it becomes crucial ahead of the COP28 climate talks in the UAE.
- ✓ Climate finance is **expected to be a key point of contention** during the discussions.

Private Sector Challenges:

- ✓ The report sheds light on challenges in private sector scaling for climate investments.
- ✓ Stagnation in private financing and the need for government intervention highlight obstacles in achieving climate action goals.

> Need for Clarity and Definitions:

- ✓ The report underscores the lack of a commonly agreed definition of climate finance, emphasizing the need for clarity.
- ✓ The vague definitions currently in **use create loopholes that may lead to arbitrary classification** of funding.

> Transparent Assessment:

- ✓ Conduct a transparent and comprehensive assessment of the actual climate investment needs of developing countries.
- ✓ This should form the basis for setting realistic and impactful financial goals.

> Reevaluation of \$100 Billion Goal:

- ✓ Reevaluate the \$100 billion goal, taking into account the evolving financial requirements of developing nations.
- ✓ Consider adjusting the target to align with the actual needs and challenges faced by countries combating climate change.

Long-Term Financial Planning:

✓ Develop long-term financial plans that go beyond the \$100 billion goal.



✓ Acknowledge that the financial needs of developing countries are **expected to rise significantly**, reaching **approximately \$2.4 trillion annually by 2030**.

> Focus on Adaptation Finance:

- ✓ Prioritize adaptation finance to build resilience in vulnerable regions.
- ✓ Counter the decrease in adaptation finance by **allocating sufficient resources to address the urgent needs of countries** dealing with the impacts of climate change.





STUBBLE BURNING

SOURCE: INDIAN EXPRESS

WHY IN NEWS?

The Supreme Court's recent intervention and discussions on stubble burning and agriculture in Punjab have garnered attention questioning why the Punjab government can't cover the expenses of crop residue management machines, making them 100% free for marginal farmers.

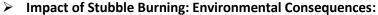
STUBBLE BURNING IN PUNJAB:

- Challenge of Paddy Straw Management in Punjab:
 - ✓ Farmers in Punjab grapple with the task of handling nearly 20 million tonnes of paddy straw, with an alarming 15 million tonnes being openly burnt in fields.
- **Rising Incidents of Stubble Burning in Punjab:**
 - The Punjab Pollution Control Board (PPCB) has recorded 656 cases of farm fires in the state by October 4, 2023, marking a significant increase from the 415 incidents reported during the same period last year.
- Government Commitment to Reduce Stubble **Burning:**
 - Punjab's State Action Plan underscores the government's dedication to cutting paddy stubble burning incidents by half.
- Legal Framework to Combat Stubble Burning in Punjab:
 - ✓ In Punjab, regulations and actions against individuals burning crop residue fall under the Air (Prevention and Control of Pollution) Act, 1981.

ABOUT STUBBLE BURNING:

- Stubble Burning: Agricultural Practice and Timing:
 - Stubble burning, a prevalent method of clearing paddy crop residues for wheat sowing, occurs from late September to November, aligning with the conclusion of the Southwest Monsoon.
- **Geographical Prevalence of Stubble Burning:**
 - Widespread in October and November, stubble burning is a customary practice in North West India, notably in Punjab,
 - Haryana, and Uttar Pradesh, particularly in regions employing the combined harvesting technique that leaves behind crop residue.

Impact of **Stubble Burning**



- Stubble burning releases substantial amounts of hazardous pollutants into the atmosphere, including methane (CH4), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and carcinogenic polycyclic aromatic hydrocarbons.
- These pollutants contribute to the formation of smog, adversely affecting human health.
- **Effects on Soil Fertility and Moisture:**





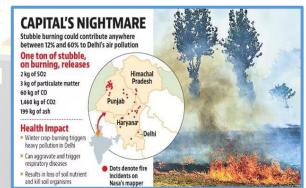
- ✓ The practice of burning husk on the ground results in the destruction of soil nutrients, diminishing fertility.
- ✓ Additionally, the heat generated permeates the soil, leading to moisture loss and a decline in beneficial microbes.
- Alternatives to Stubble Burning: Sustainable Practices:
 - ✓ In-Situ Stubble Treatment:
 - Utilizing zero-tiller machines for crop residue management and employing biodecomposers.
 - ✓ Ex-Situ Stubble Treatment:
 - Repurposing rice straw as cattle fodder to eliminate the need for burning.
 - ✓ Technological Solutions:
 - Embracing advanced machinery like the Turbo Happy Seeder (THS), capable of uprooting stubble while simultaneously sowing seeds.
 - The cleared stubble can be repurposed as mulch for the field.

CONCERNS & RECOMMENDATIONS OVER STUBBLE BURNING:

- Supreme Court's Inquiry on Crop Residue Management Costs:
 - ✓ Court questions why Punjab government cannot cover all expenses for crop residue management machines.
 - Emphasis on making these machines 100% free for marginal farmers.
 - ✓ Call to move beyond political debates on Minimum Support Price (MSP) and promote alternative crops.
- Concerns Over Subsidies and Implementation Challenges:
 - ✓ Subsidies provided for machine purchase, but no cost consideration for hiring from custom centers.
 - ✓ Court suggests state funding for manpower and fuel expenses.
 - ✓ Emphasis on the need for a comprehensive solution.
- Punjab's Response and Committee Consideration:
 - ✓ Punjab Advocate General acknowledges challenges and suggests committee consideration.
 - ✓ Committee chaired by the cabinet secretary urged to explore funding options.
 - ✓ Importance of learning from Haryana's financial incentives to deter stubble burning.
- Farmers' Perspective and Water Depletion Warning:
 - ✓ Court expresses concern over the disparity between official claims and on-ground reality.
 - ✓ Warning issued about potential water table depletion due to continued paddy cultivation.
 - ✓ Call for **measures to sensitize farmers** about consequences.
- MSP Complexities and Long-Term Solutions:
 - Acknowledgment of MSP complexities and encouragement to explore alternatives.
 - ✓ Emphasis on discouraging paddy cultivation and promoting alternative crops.
 - ✓ **Stakeholders urged to implement committee** resolutions for pollution control.

GOVERNMENT INITIATIVES:

- Crop Residue Management Guidelines:
 - ✓ Aims to address air pollution by subsidizing machinery required for in-situ crop residue management.





- ✓ Guidelines for efficient ex-situ management of paddy straw.
- ✓ **Surplus paddy straw to be collected**, and **biomass collection depots to be built** in Punjab, Haryana, Uttar Pradesh, and Madhya Pradesh.
- ✓ Aims to generate employment, reduce air pollution, and attract new investments in biomass, biofuel, and energy sectors.

Policy Interventions	Details	
National Policy for Management of Crop Residues	✓ Aims to control burning of crop residue by promoting in-situ management (incorporation in soil, mulching) of crop residue.	
Waste to Energy Programme	✓ Under the National Bioenergy Programme, supports Waste to Energy projects for generating biogas, bioCNG, power, and syngas from urban, industrial, and agricultural residues.	
$Promotion\ of\ Agricultural\ Mechanization$	✓ Focus on Punjab, Haryana, Uttar Pradesh, and NCT of Delhi.	

WAY FORWARD:

- > Implementation of Policies:
 - ✓ Ensure **effective implementation of existing policies** and initiatives for crop residue management.
 - ✓ Monitor and evaluate the outcomes to make necessary adjustments for improved results.

Awareness and Education:

- ✓ Conduct extensive awareness campaigns among farmers about the adverse effects of stubble burning on air quality, soil fertility, and human health.
- ✓ Educate farmers about alternative practices and the benefits of sustainable crop residue management.

Financial Support and Incentives:

- Provide financial support and incentives to farmers for adopting advanced machinery and technologies for in-situ crop residue management.
- ✓ Explore innovative financing models to make the transition more financially feasible for farmers.

Research and Development:

- ✓ Invest in research and development to identify and promote new technologies for efficient crop residue utilization.
- ✓ Collaborate with agricultural research institutions to develop and disseminate best practices.

> Strengthening Agricultural Mechanization:

- ✓ Continue promoting **agricultural mechanization**, especially in states with high stubble burning incidents.
- ✓ Ensure the availability and affordability of advanced machinery for farmers.

Incentivizing Biomass Utilization:

- ✓ Provide incentives for **industries to utilize collected biomass** for biofuel and energy production.
- Encourage public-private partnerships to create a market for biomass and its by-products.
- ✓ These incorporate agricultural microorganisms that enhance the Feed Conversion Ratio (FCR).
- ✓ An example includes the **application of the Pusa-bio-decomposer**, formulated by researchers at the **Indian Agricultural Research Institute**.

> Continuous Monitoring and Adaptation:

- ✓ Implement a robust **monitoring system to track stubble burning incidents** and air quality in real-time.
- ✓ Adapt policies based on evolving challenges and feedback from stakeholders.
- Farmer Collaboration and Support Centers:



- ✓ Establish support centers to **assist farmers in adopting sustainable practices** and provide technical guidance.
- ✓ Facilitate farmer collaboration for collective action in crop residue management.





PRELIMS POINTERS:

ANTICIPATORY BAIL

DISCRIPTION

WHY IN NEWS? High Courts, Session Courts Can Grant Interim/Transit Anticipatory Bail Even When FIR Is Registered in Another State: Supreme Court

BAIL:

- Judicial release of an accused from custody, conditioned on appearing in court later.
- Sections 436 to 439 of the Criminal Procedure Code (CrPC) govern the concept of bail.
- Can be granted by a police officer or judicial magistrate under CrPC.

ANTICIPATORY BAIL:

- Pre-emptive bail granted to an individual expecting arrest.
- Section 438 of CrPC allows individuals anticipating trial for a nonbailable offense to apply for anticipatory bail.
- Applied to the High Court or Sessions Court where the alleged crime occurred.
- Prevents arrest once court grants anticipatory bail, serving as protection against false accusations.

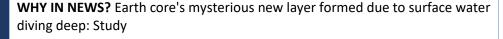
TRANSIT ANTICIPATORY BAIL:

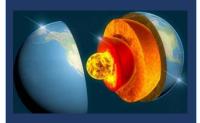
- Sought when a person faces or expects charges in a different state than the anticipated arrest.
- Aims to allow bail for approaching the appropriate court in the state where charges are filed.
- Procedure mirrors regular anticipatory bail despite lacking codification in Indian law.
- Developed through judicial practice and legal precedents.

DEFAULT BAIL (STATUTORY BAIL):

- Arises when police fail to complete an investigation within a specified period.
- Section 167(2) of CrPC grants this right when investigations can't be completed in 24 hours.
- Suspect presented in court for orders on police or judicial custody if investigation extends beyond the specified timeframe.

E PRIME LAYER





E Prime Layer:

- Initial belief: Core-mantle material exchange is minimal.
- Experiments revealed <u>water reaching the core-mantle boundary reacts</u> with silicon, forming silica.

Layer Development Process:

 Tectonic plates transport surface water into the Earth over billions of years.

53/1, Upper Ground Floor, Bada Bazar Road, Old Rajinder Nagar, New Delhi -110060 www.tathastuics.com 9560300770, 9560300554 enquiry@tathastuics.com



- Upon reaching the core-mantle boundary (1,800 miles below the surface), water triggers chemical changes, influencing the core's structure.
- Subducted water chemically reacts with core materials under high pressure, forming a hydrogen-rich, silicon-depleted layer resembling a film-like structure.
- Silica crystals produced ascend and integrate into the mantle, altering overall composition.
- Changes in the liquid metallic layer may lead to reduced density and altered seismic characteristics, aligning with anomalies detected by seismologists.

Significance:

- Discovery enhances understanding of Earth's internal mechanisms, revealing a more intricate global water cycle.
- Transformed core layer has significant implications for interconnected geochemical processes linking surface water cycles with the deep metallic core.

SEA BUCKTHORN

WHY IN NEWS? Ladakh Secures GI tag for Sea Buckthorn



Sea Buckthorn:

- Versatile plant found in Europe and Asia, particularly thriving in the Himalayan region in India.
- Natural habitat includes arid zones like Ladakh and Spiti.

Characteristics:

- Small orange or yellow berries with <u>high vitamin C</u> <u>content.</u>
- Drought-resistant, withstands temperatures from minus 43 to 40 degrees Celsius.

Significance:

- Medicinal use: Every part of the plant used for medicinal
 - purposes, nutritional supplements, fuel, and fencing.
- **Ecological impact:** Sustains bird species during food scarcity, provides protein-rich fodder for cold desert animals.

Popular Names:

Known as the <u>'Wonder Plant,' 'Ladakh Gold,' 'Golden Bush,' or the 'Gold</u>
 Mine' of cold deserts.

GEOGRAPHICAL INDICATION (GI) TAG:

- Used for products with specific geographical origin or qualities attributed to a region.
- Agricultural, natural, or manufactured products are eligible, administered by the Geographical Indications of Goods (Registration and Protection) Act of 1999 in India.
- ♣ GI tag validity: 10 years, renewable; prevents others from selling a similar item under the same name.