

## Loss and damage fund

### What is “loss and damage”?

The phrase refers to costs already being incurred from climate-fuelled weather extremes or impacts, like rising sea levels

■ Climate funding so far has focused on cutting CO2 emissions, while a third of it went towards helping communities adapt to future impacts

■ Loss and damage funding is expected to cover the cost of damage that countries cannot avoid or adapt to

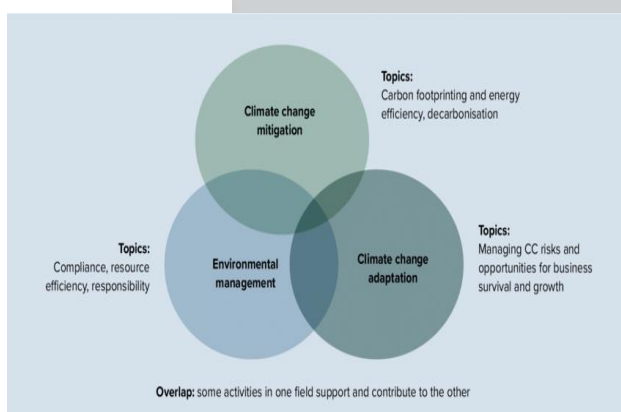
■ A report by 55 vulnerable countries estimated that their combined climate-linked losses in the last two decades totalled



\$525 billion, or 20% of their collective GDP. This could go up to \$580 billion per year by 2030

■ Vulnerable countries and campaigners argue that rich countries that caused the bulk of climate change with their historical greenhouse gas emissions should pay

Source: Reuters



Adaptation is the proactive response to climate change, the art of survival by which

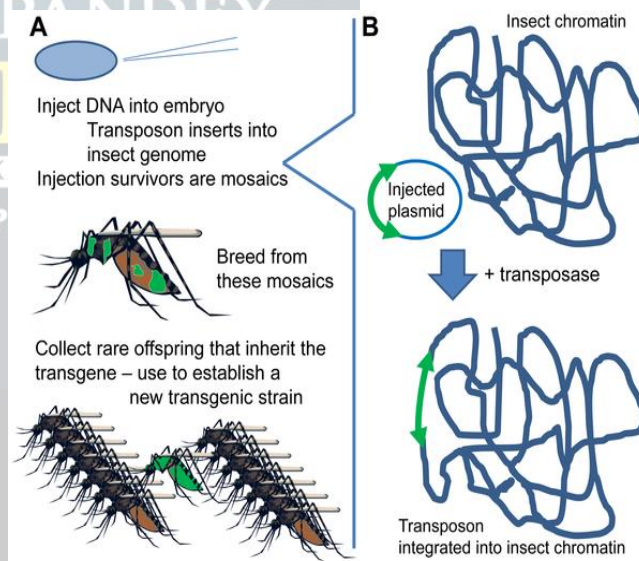
communities and countries make deliberate choices to prepare for and cope with climate related challenges.

- In contrast, L&D represents the irreversible consequences of climate change: impacts that can't be avoided or mitigated through adaptation efforts.
- They encompass the real losses that extend beyond monetary value and cut to the core of human rights and wellbeing.
- L&D includes economic losses, human casualties, and the degradation of ecosystems and cultural heritage.
- At the 19th Conference of the Parties (COP 19) to the United Nations Framework Convention on Climate Change (UNFCCC) in Warsaw, Poland, in 2013, representatives of member countries formally agreed to establish the L&D fund.
  - It was being created to provide financial and technical assistance to economically developing nations that were incurring L&D due to climate change.
- At COP 25, the Santiago Network for L&D was set up, but countries didn't commit any funds.
- Subsequently, at COP 26, the Glasgow Dialogue on finance for L&D was established to continue discussions over the next three years on the fund.
- Finally, at COP 27 in November 2022, after intense negotiations, representatives of the UNFCCC's member states agreed to set up the L&D fund and a Transitional Committee (TC) to figure out how the new funding mechanisms under the fund would operate

- The TC5 outcome highlights a profound lack of trust between affluent and emerging economies regarding their historical responsibilities, creating a substantial divide between wealthy and impoverished nations, particularly concerning climate reparations.
- The unwillingness of wealthy nations to fulfil intended commitments undermines faith in global climate negotiations and hampers the cooperative spirit necessary to address climate change.
- It represents a missed chance to take concrete steps to combat the escalating consequences of climate change on vulnerable communities and signifies a breakdown in diplomatic efforts, leading to doubts about nations' ability to collaborate effectively.
- The watering down of the L&D fund has wide reaching implications. It threatens climate justice and exacerbates the suffering of vulnerable communities in developing nations.
- These communities have contributed minimally to global emissions but today bear the brunt of climate change.
- The watering down can also increase the number of humanitarian crises, including via food shortage, people displacement, and conflict, and force communities to cope independently with a worsening climate and its consequences
- The L&D fund was conceived as a critical component of global climate action, recognizing that some of the consequences of climate change are irreversible and beyond the capacity of vulnerable nations to handle.
- So to achieve climate justice, rich countries must meet their obligations to reduce emissions and deliver finance in line with what is fair, and thus uphold the principles of equity, justice, and solidarity in the face of a changing climate.

The Hindu

## GM Insects



- India's bio economy contributes 2.6% to the GDP.
- In April 2023, the Department of Biotechnology (DBT) released its 'Bio economy Report 2022' report, envisioning

this contribution to be closer to 5% by 2030.

- This ambitious leap of \$220 billion in eight years will require aggressive investment and policy support.
- The bio economy, which the FAO defines as "knowledge-based production and the use of biological resources, processes and methods to provide goods and services in a sustainable manner in all economic sectors", becomes essential.
- According to the United Nations Food and Agriculture Organisation (FAO), the bio economy is "the production, use and conservation of biological resources, including related knowledge, science, technology, and innovation to provide information, products, processes and services to all economic sectors with the aim of moving towards a sustainable economy".
- The reduced funding is detrimental to India's national interests as well, considering the DBT is essential to any pandemic preparedness efforts.
- Further efforts are also needed to attract private funding in biotechnology research and development, a key area that industry representatives, investors, and government officials have highlighted multiple times.
- Funding aside, biotechnology policies also need to be aligned to the economic goals set out in the Bio economy report.
- In April 2023, the Department of Biotechnology (DBT) issued the 'Guidelines for Genetically Engineered (GE) Insects'. They provide procedural roadmaps for

those interested in creating GE insects. They have three issues, however

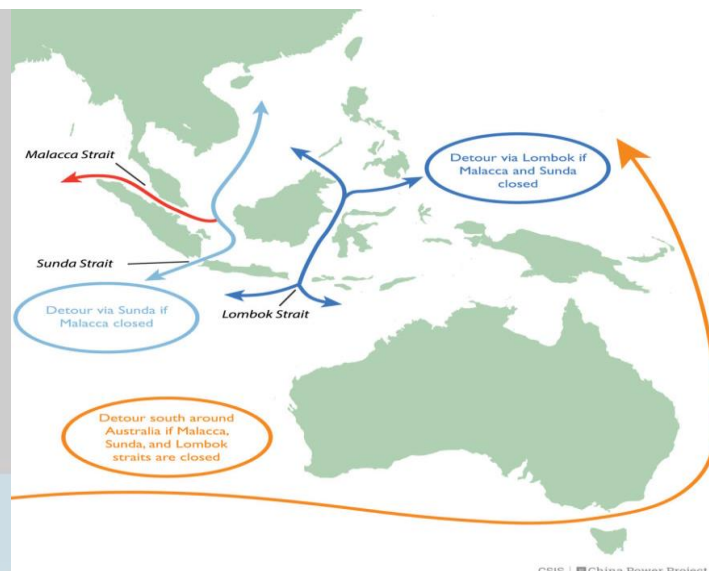
- First: Uncertainty of purpose
- The guidelines note that GE insects are becoming globally available and are intended to help Indian researchers navigate regulatory requirements.
- However, the guidelines don't specify the purposes for which GE insects may be approved in India or how the DBT, as a promoter of biotechnology, envisions their use
- Engineering honey bees to make better quality and/or quantities of honey will help reduce imports and also maybe facilitate exports.
- Similarly, GE silkworms may be used to produce finer and/or cheaper silk, affecting prices and boosting sales.
- But the guidelines and policy are both quiet on how GE insects can benefit the bio economy and for which purposes the government might approve the insects' release.
- Second: Uncertainty for researchers
- The guidelines are applicable only to research and not to confined trials or deployment.
- That is, once the insects are 'made' and tested in the laboratory, researchers can conduct trials with them on the approval of the Genetic Engineering Appraisal Committee (GEAC), of the Union Environment Ministry.



- Government authorities will also have to closely follow the deployment of these insects.
- Once deployed, GE insects can't be recalled, and unlike genetically modified foods, they are not amenable to individual consumer choice.
- Third: Uncertainty of ambit
- The guidelines offer standard operating procedures for GE mosquitoes, crop pests, and beneficial insects – but what 'beneficial' means, in the context of GE insects, is not clear.
- The lack of clarity about the insects and the modifications to them that are deemed 'beneficial' will impede funders and scientists from investing in this research.
- In a country with low public as well as private funding, the absence of a precise stance to identify and promote research priorities hampers progress.

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## Malacca strait /dilemma



- With China frequently intimidating Taiwan over the past year through deployment of its air force and navy in the surrounding areas, there is the oftposed question whether India would take action in the Strait of Malacca or the Andaman Sea in the event of a conflict between the United States and China over Taiwan.
- Any speculative action in the Strait of Malacca or the Andaman Sea would involve either a naval blockade against commercial shipping or China's key trade and energy sea lines of communication or military action against Chinese naval vessels.
- India's options, the constraints
- There are multiple constraints in regard to India's options in the Strait of Malacca.
- First, "distant blockades" away from a belligerent nation's geography can be challenged under international law.
- Second, the trade that passes through the Strait of Malacca is not just China's economic and energy lifeline. An overwhelming volume of the trade of

Japan, South Korea and even India itself passes through the same Strait.

- Third, the channel of the Strait of Malacca is long, nearly 500 miles, and involves the sovereignty of other states such as Indonesia, Malaysia, Thailand and Singapore who would all be affected adversely by a naval blockade. The affected countries are unlikely to support a naval blockade.
- Fourth, commercial shipping is extremely complex to identify in terms of the sovereignty of the vessel, flag, registration, insurance and ownership of cargo
- Fifth, apart from the fact that it is difficult to interdict China's trade and energy supplies, the additional reality is that even if the Strait of Malacca were "choked", shipping can take a detour either through the Sunda or the Lombok Straits to reach China.
- In any case, very large crude carriers carrying crude or natural gas to China do not use the Strait of Malacca which is shallower. They use the Sunda Strait.
- Sixth, China also has a huge onshore and floating Strategic Petroleum Reserves (SPR) which can help it tide over disruptions, especially with growing overland energy supplies from Russia and Central Asia.

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