



August 2025, Mumbai

Dear Leaders,

Welcome to the second edition of our bi-monthly Climate Briefing—a curated snapshot of developments shaping the global and Indian climate agenda. Each edition highlights key stories with a focus on what’s happening and why it matters, helping you navigate the risks, opportunities, and imperatives emerging from the sustainability transition

Some insights may align directly with your current business priorities; others may appear more distant. However, we hope they help you better understand how climate change impacts us in ways that are not always visible and spark inspiration for solutions that address the challenge

Japan’s rice crisis: Prices doubled in 1 year

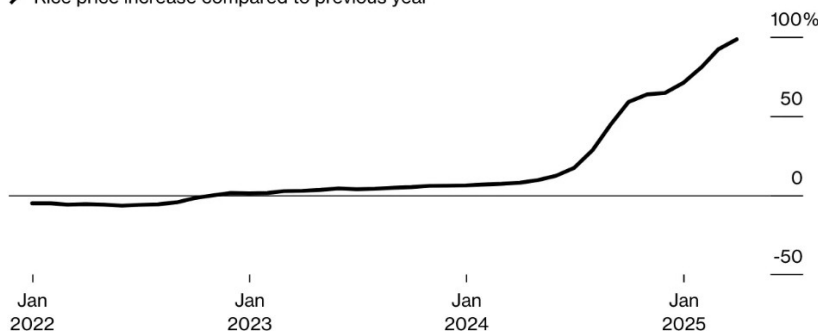
What’s happening in Japan?

- Japan is facing a “rice crisis” as the price of rice has almost doubled in the last 1 year
- Government data released in June shows the price of rice rose 98.4 % year-on-year in April. As of June, a 5-kilogram bag of rice cost on average ¥4223 (\$29.15)!

Sudden Jump

The cost of Japan's staple food has nearly doubled

✓ Rice price increase compared to previous year



Source: Ministry of Internal Affairs' CPI data

- In some cases, schools have cut back on the days they serve rice for lunch. Shops and restaurants have hiked the prices of their rice dishes.
- There are several factors at play, but it all goes back to the summer of 2023, when record-breaking heat damaged rice crops across Japan. 2023 and 2024 had seen record high temperatures across the globe driven by long term global warming and made worse by El Nino. The rice harvest that year hit its lowest level in more than a decade.
- Other factors that have made it worse include:
 - Earthquake warning in Aug 2024 led the public to stockpile essentials, especially rice
 - Post-pandemic tourism: Japan's hospitality sector saw a sharp rebound with a record 37 million tourists in 2024, creating additional pressure on rice stocks.
 - Long-term government policies that restrict production as well as imports meant that swiftly remedying the issue was difficult.

What does this mean for India?

- Heat stress has so far not shown up as a noticeable effect on rice yields in India.
- However, global studies show that heat stress impacts production of rice. At the seedling stage, it results in increased water loss, withered and yellow leaves, impaired seedling and root growth, and even death of seedlings. At later stages it results in leaf wilting, leaf curling and yellowing, and reduced biomass. [\[1\]](#)
- In India, a study published last year found that a 1% increase in maximum temperature during the autumn season was associated with a 1% per cent reduction in yield in the affected districts.[\[2\]](#) As average temperatures rise and heat waves become more intense and frequent, rice yields will likely be a potential area of concern for India.

On a related note,

- The Indian govt. is going to formalize the process for Emission Reduction through Improved Management Practices in Rice Cultivation under the Carbon Credit Trading Scheme (CCTS). Any innovations that allow for shorter flooding periods, moving away from continuous flooding, shifting from transplanted to direct seeded rice (DSR) and aerobic rice cultivation methods could be of interest.
- [Mahindra Agri's seed business](#) makes hybrid varieties of rice seed with 15-day early maturity that saves 2 out of 32 irrigation cycles and leads to less fertilizer use. They are currently widely adopted by farmers in Tamil Nadu.

Read more on this in this [Bloomberg report](#)

Global talks on plastic pollution end without a treaty; India prioritizes managing plastic waste and recycling

What's happening?

- After 10 days of negotiations in Geneva to develop a strategy to end plastic pollution, countries failed to reach a consensus on a treaty.
- The prominent issues of contention were putting limits on plastic production, the use of toxic chemicals, and the phase-out of single-use plastics.
- Where does India stand?
 - India is keen to focus on plastic waste management and go stricter on Extended Producer Responsibility.
 - However, India has opposed rules on limiting how much plastic is produced.

Why does this matter?

- Plastic waste management is a priority for the Indian government. India has had several changes and additions to its domestic policies on plastic waste management. Notable points include:
 - Ban on single-use plastics, increased minimum bag thickness.
 - Recycling targets for plastic producers
 - Added certification for biodegradable plastics, broadened definitions of manufacturers and importers.
- Manufacturers in India will need to adapt their supply chains, manufacturing processes and end of life management to comply with these regulations.
- From an economic point of view, India has a huge plastic manufacturing industry with emerging petrochemical hubs like Dahej with about 130,000 MSMEs employing millions & generating significant export revenue. So, this presents a tricky situation for India.

Other climate stories:

India eases Sulphur emission norms for 79% coal power plants

What's happening?

- In 2015, India had issued a mandate that needed all (540) coal power plants in the country to install a flue-gas desulphurisation (FGD) system by 2027.

- On July 11, the MoEFCC issued a notification exempting 79% of coal-fired power plants from this mandate citing reasons such as limited FGD technology availability, supply chain issues, and price escalations.

Why does this matter?

- The government has tried implementing this mandate for 10 years, however actually putting it into action has been a struggle.
- In multiple areas of addressing environmental damage and climate change, policy is moving fast, but it will need to be accompanied by innovation and availability of solutions if it must be implemented on ground.

Read more on this in this [Mongabay article](#)

France has passed a bill to regulate ultra-fast fashion

What's happening?

- The Upper house of the French parliament recently approved a bill that regulates fast fashion. It includes an environmental surcharge on fast fashion items, a complete ban on advertising ultra-fast fashion and penalties for not disclosing product information.

Why does this matter?

- Fast fashion has a massive environmental cost. It has resulted in people buying more clothes than ever and this means - more energy, water, material and carbon emissions during production. Fashion waste is also a major problem, filling up landfills where it's often burned in the open, releasing toxic fumes and endangering the lives of people who work or live nearby.
- This move by the French government will hopefully spark a conversation on the real cost of the consumerist culture that has become the norm.

Read more on this in this [here](#)

Climate change is making air travel more turbulent

What's happening?

- As climate change shifts atmospheric conditions, experts warn that air travel could become bumpier with climate change being a major factor in driving up both thunderstorms and clear-air turbulence.

- In India, the increase in flight turbulence could be felt most significantly during the pre-monsoon season, from March to May, when there will likely be 100-200% more clear air turbulence by the period 2050-2080.
- According to a 2023 study, from 1979 to 2020, severe turbulence in some locations increased by as much as 55%. ^[3]

Why does this matter?

- Turbulence can mean additional costs for the aviation industry due to airframe fatigue, higher maintenance costs and subsequent loss of productivity, as well as additional fuel spent due to rerouting.
- It also affects operations in air. For instance, last year, Korean Airlines decided to stop serving noodles to its economy passengers as it had reported a doubling of turbulence since 2019, which raised the risk of passengers getting burned.

Read more about it [here](#)

On a closing note, we bring to you a 4-part series on the public transportation infra of 3 major Indian cities, who fares out the best? Check it out – [Who's Winning the Public Transport Race?](#)

We'd love to hear your thoughts on this newsletter - what did you like and what could be better! Until next time!

This newsletter is a joint initiative by the Mahindra Group Sustainability team in collaboration with [Rainmatter Foundation](#). The newsletter is co-authored by Sailee Rane, strategy lead for ecosystem messaging at Rainmatter Foundation. The aim of this newsletter is to bring out climate news and its implications for corporates & employees in a simplified & fun manner! Do reach out with any feedback!