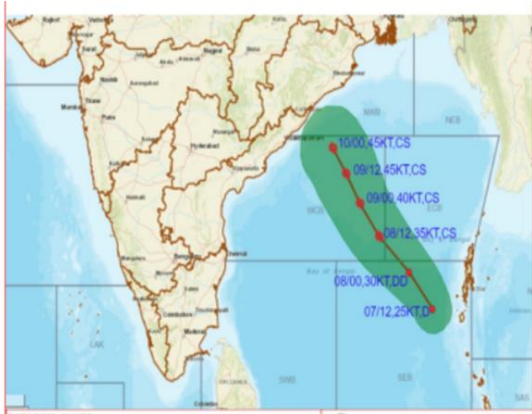


Asani-Naming of cyclone



- Severe cyclonic storm 'Asani', which is moving towards the east coast, packing winds above 105 kmph and setting off heavy rain, is likely to recurve in a north-eastward direction and weaken gradually into a cyclonic storm, the India Meteorological Department (IMD) said on Monday.
- According to the IMD, the storm, lying over west-central and adjoining South Bay of Bengal, moved nearly north-westwards with a speed of 16 kmph in six hours and lay centred over west-central Bay of Bengal.
- It is the first cyclonic storm of the season and was named by Sri Lanka.
- Asani means "wrath" in Sinhalese. A list of names for cyclones was released in 2020 with 169 names, including 13 names each from 13 countries
- The cyclone that will form after Asani will be called Sitrang, and the name has been given by Thailand.
- Ghurni, Probaho, Jhar and Murasu are the upcoming names from India.
- Other cyclonic storms' names include Biparjoy (Bangladesh), Asif (Saudi Arabia), Diksam (Yemen) and Toofan (Iran) and Shakhti (Sri Lanka)
- There is a process behind each cyclone's naming process. There are six Regional Specialised Meteorological Centres (RSMCs) worldwide and five regional Tropical Cyclone Warning Centres, which are mandated for issuing advisories and naming of cyclonic storms.
- The list is arranged according to names given by alphabetically-arranged countries that are neutral to gender, politics, religious beliefs and cultures. It is used sequentially, column wise.
- The designation should not be present in the existing list of the six RSMCs. The name of a storm that may pass on from one waterbody to another will not be changed.



- The name is never re-used again. All the names that are used can have a maximum eight-letters and should not offend any country or group of people or customs.
- The naming of cyclones in the Bay of Bengal and Arabian Sea started in September 2004.
- Before this, from the mid-1900s, feminine names were picked up for storms before switching to a list for a better organised process.

THE HINDU

Power crisis

- Under the Electricity Act, it is the responsibility of the Distribution Licensee/Company (Discom) to provide reliable quality and round-the-clock electricity to all consumers to meet full demand.
 - To do so, they enter into contracts with a number of generating companies in order to ensure adequate supply.
 - These Discoms work under the oversight of the State Electricity Regulatory Commissions.
 - With higher incomes and the consequent increase in the use of air-conditioners and other electrical appliances, the nature of electricity demand is undergoing a qualitative transformation with rising daily and seasonal peaks, and spikes on very hot or cold days.
- ### **Towards reliable supply**
- Whether Discoms have been making and updating their demand growth projections and scenarios over the medium term with adequate supply arrangements in a robust manner.
 - And whether State Regulatory Commissions have been demanding these and scrutinising them transparently.
 - This needs to become central to the regulatory process. Ensuring reliable supply to meet unanticipated peaks, as have occurred now, requires making supply arrangements with reserve margins that are adequate.
 - The Regulatory Commissions need to provide for such expensive peaking power arrangements in the tariffs they approve.
 - It is also time to move towards separate peaking power procurement contracts in addition to the present system of long-term thermal power contracts
 - Peak demand moderation and flattening of the demand curve through a change in consumer behaviour is feasible with smart meters.
 - But this would take place only with a strong price signal, a large

differential in peak and off-peak rates.

Subsidies and politics

- Free supply of electricity to farmers and households up to a specified level is not a problem as long as State governments pay for it as provided in the Act, and the Regulatory Commissions do not at the same time act from a political point of view and shy away from determining cost-reflective tariffs.
- The problem is the absence of meaningful political discussion on the relative benefits from subsidies in different areas and their affordability.
- While the problem of delayed payments by Discoms is getting highlighted and needs to be resolved with a sense of urgency, the coal supply problem is not due to this.
- Coal India is not short of cash to be able to increase production. It should do so faster.
- Coal India needs to create capacities to rapidly ramp up production; and the Railways need to carry larger quantities of coal when demand surges, as has happened now.
- Extreme weather events will increase in intensity and frequency due to climate change.

Some solutions

- There is idle but expensive generating capacity available about 15- 20 GW of gas-based power plants which can run on imported liquefied natural gas, and 6 GW-8 GW of thermal plants which can run on imported coal.
- The exercise of the option of buying electricity from these plants and having no power cuts would provide immediate relief.
- But where an across-the board increase in rates may not appear feasible, consumers who are willing to pay more could be kept free of power cuts with purchase and supply of more expensive electricity generated from imported coal and gas.

THE HINDU

India and Germany

- Its significant reliance on Russian gas and crude notwithstanding, condemnation of Moscow's moves in Ukraine is near unanimous in Europe.
- India's role as a major power and largest democracy are being brought to the forefront and there is a growing expectation that India needs to make a shift from its position on Russia and join hands

with the European countries and the U.S. in protecting democracy in need

- New Delhi has chosen to prioritise its interests over pursuing a policy that is shaped by common democratic values that define Germany, Japan and India.

The China factor

- The geopolitical convergence of countering the rise of China particularly in the IndoPacific seems to be a more compelling necessity rather than the ideational and normative aspects of protecting democratic norms and values.
- Engagement with Europe
- India makes it clear that irrespective of its position on a solitary issue of geopolitical relevance, which the former may find difficult to reconcile with, the bilateral engagement with countries such as Germany, France and Denmark remains at the top of its priority
- Towards this direction, the holding of the sixth India-Germany Inter-Governmental Consultations (IGC), a biennial format which India conducts with Germany, assumed critical importance.
- India attaches significant importance to the 'long-standing commercial ties' with Germany, an important pillar of the 'Strategic Partnership',

which the two nations entered into in 2000.

- The idea, therefore, is to highlight a convergence of issues of economics, technology and climate change (low hanging fruits), in spite of the intensifying dissonance on democratic and strategic issues. That remains the crux of the Indian approach.

Room for full ties

- It remains a fact that India-Germany relations have yet to achieve their full potential. One of the factors for that, possibly, is the lack of understanding of each other's strategic cultures and domestic politics and strategic communication.
- Germany has invited Mr. Modi to the G-7 meeting in June this year, construed as a bid to wean India away from its position on Russia.
- However, while the attempt may not be successful, it is certainly a pointer to the emerging multipolarity in the international system, which provides space for major powers such as Germany and India to play a greater role in bringing peace and stability in other theatres, particularly in Afghanistan and the IndoPacific.

THE HINDU

Emigrant bill

- According to the Ministry of External Affairs, there are over 13.4 million Non-Resident Indians worldwide.
- Of them, 64% live in the Gulf Cooperation Council (GCC) countries, the highest being in the United Arab Emirates, followed by Saudi Arabia and Kuwait.
- Almost 90% of the Indian migrants who live in GCC countries are low- and semi-skilled workers, as per International Labour Organization estimates. Other significant countries of destination for overseas Indians are the U.S., the U.K., Australia, and Canada.

High remittances

- Every year, about 2.5 million workers from India move to different parts of the world on employment visas.
- Besides being involved in nation-building of their destination countries, Indian migrant workers also contribute to the homeland's socioeconomic development, through remittances.
- According to a report by the National Statistical Office, urban and rural households receiving remittances (both international and domestic) have approximately 23% and 8% better financial capacity,

respectively, than non-remittance-receiving households.

- As per a World Bank Group report (2021), annual remittances transferred to India are estimated to be \$87 billion, which is the highest in the world, followed by China (\$53 billion), Mexico (\$53 billion), the Philippines (\$36 billion) and Egypt (\$33 billion).
- In 2021, remittances transferred to India had seen an increase of 4.6% compared to 2020.
- Remittances in India have been substantially higher than even Foreign Direct Investment (FDI) and the flow of remittances is much less fluctuating than that of FDI.
- The safety and well-being of migrant labour is of top priority for the government.
- Reducing informal/undocumented migration and formalising all remittances is being given due focus.
- Recruitment agencies should also be regulated leveraging information technology for ensuring protection of migrant workers leaving India.
- An integrated grievance redressal portal, 'Madad', was launched by the government in 2015

Provisions of the Emigration Bill

- The Indian government proposed a new Emigration Bill in 2021 which aims to integrate emigration management and streamline the welfare of emigrant workers.
- It proposes to modify the system of Emigration Check Required (ECR) category of workers applying for migration to 18 notified countries.
- The ECR category mainly comprises those who have not passed Class 10 and face the challenge of risky informal emigration and subsequent hardships abroad.
- The Bill makes it mandatory for all category of workers to register before departure to any country in the world to ensure better protection for them, support and safeguard in case of vulnerabilities.
- The proposed Emigration Management Authority will be the overarching authority to provide policy guidance.
- The number of migrant workers need not go up for remittances to increase if the skill sets of workers are improved.
- Provisions of the Bill such as registration of all emigrants, skill upgradation and training, and pre-departure orientation will enhance protection measures. Besides workers, as about 0.5 million

students also migrate for education from India every year, the Bill also covers such students.

- This will provide a comprehensive data set for the efficient management of Indian migrants.
- Skilling of migrant workers has the potential to boost the domestic economy and low-cost interventions such as foreign language training can be of great help for such workers.

THE HINDU

Search algorithm

- An algorithm, essentially, is a series of instructions.
- Tech giant Alphabet Inc's Google, whose flagship product is the Google search engine, is the dominant player in the search market.
- Algorithms are often built using historical data and for specific functions.
- Once developed, they go through frequent updates from companies for quality enhancement.
- Any changes or updates in their algorithms could also mean that traffic is steered away from certain sites and businesses, which could have a negative effect on their revenue.
- Firms can use these algorithms to change the way they rank products

on websites, prioritising their own products and excluding competitors. Some of these concerns have caught the eye of regulators.

What are the concerns?

- The search giant's trackers have allegedly been found on majority of the top million websites, as per a DuckDuckGo blog post. "This means they are not only tracking what you search for, [but] they're also tracking which websites you visit, and using all your data for ads that follow you around the internet," it added.
- According to a Council of Europe study, the use of data from profiles, including those established based on data collected by search algorithms and search engines, directly affects the right to a person's informational self-determination.
- Most of Google's revenues stem from advertisements, such as those it shows consumers in response to a search query.

THE HINDU

W boson

- On April 7, researchers from Collider Detector at Fermilab (CDF) Collaboration, in the U.S., announced that they have made a precise measurement of the mass of the W boson.

- They stated that this precisely determined value did not match with the estimates from the standard model of particle physics.
- The recent experiment which measured the mass of the W boson as $80,433.5 \pm 9.4 \text{ MeV}/c^2$ is more than what is expected from the standard model.
- The expected value using the standard model is $80,357 \pm 8 \text{ MeV}/c^2$. This implies the incompleteness of the standard model description.
- This mass discrepancy of the W boson needs to be checked and confirmed to the same accuracy by other research facilities.
- About Boson
 - In particle physics, a boson is a subatomic particle whose spin quantum number has an integer value (0,1,2 ...).
 - Bosons form one of the two fundamental classes of subatomic particle, the other being fermions.
 - In particle physics, the W and Z bosons are vector bosons that are together known as the weak bosons or more generally as the intermediate vector bosons. In particle physics, a vector boson is a boson whose spin equals one.

- These elementary particles mediate the weak interaction; the respective symbols are W^+ , W^- , and Z^0
- The W^\pm bosons have either a positive or negative electric charge of 1 elementary charge and are each other's antiparticles. The Z^0 boson is electrically neutral and is its own antiparticle. The three particles each have a spin of 1.
- All three of these particles are very short-lived, with a half-life of about 3×10^{-25} s.
- The W bosons had already been named, and the Z bosons were named for having zero electric charge.

THE HINDU