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07/05/2024 TUESDAY

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DAILY NEWS ANALYSIS

ECOLOGY

POLITY

ECONOMICS

INTERNATIONAL RELATIONS Hamas accepts ceasefire

proposal by Egypt, Qatar

CONTEXT: Hamas accepted an Egyptian-Qatari ceasefire proposal, hours after Israel ordered 1,00,000 Palestinians to evacuate from the southern city of Rafah, signalling an impending ground invasion.



Egyptian and Hamas officials hinted about an impending ceasefire to take place in stages during which Hamas would release Israeli hostages in exchange for withdrawal of Israeli troops from Gaza. The deal will meet Hamas's key demand of bringing about an end to the war and complete Israeli withdrawal.

The proposed Egyptian-Qatari ceasefire is likely to avert an impending Israeli attack over Rafah. Israel's closest allies, including the U.S., have repeatedly reiterated U.S. concerns about an invasion of Rafah. The looming operation has raised global alarm over the fate of around 1.4 million Palestinians sheltering there. Aid agencies have warned that an offensive will worsen Gaza's humanitarian catastrophe and bring a surge of more civilian deaths in an Israeli campaign that in nearly seven months has killed 34,000 people and devastated the territory.

Mr. Netanyahu seeks to seize Rafah, the last significant Hamas stronghold in Gaza as vital to ensure the militants can't rebuild their military capabilities and repeat the October 7 attack on Israel that triggered the war. About 100,000 people were being ordered to move from parts of Rafah to a nearby Israel-declared humanitarian zone called Muwasi, a makeshift camp on the coast. Israel has expanded the size of the zone and that it included tents, food, water and field hospitals. Hamas and Qatar, a key mediator, warned that an invasion of Rafah could disrupt international efforts to negotiate a ceasefire.

Trade-off rejected

TECHNOLOGY

Hamas was reportedly discussing a proposal backed by the U.S. that included ending the war and withdrawing Israeli troops in exchange for releasing all hostages held by Hamas. Israeli officials rejected this proposal, stating they would continue their campaign until Hamas is eliminated.

INTERNATIONAL RELATIONS

India indispensable strategic partner, says Australian envoy

CONTEXT: Philip Green, Australian High Commissioner to India noted the strong strategic, economic, and people to people partnerships of India with Australia.

India is an indispensable part of strategic balancing in the Indian Ocean cannot be fashioned without engagement with India. India is not only a key defence and economic partner, but also a key part of our trade diversification agenda to develop better supply chain resilience.

Defence strategy

On April 17, Australia released its National Defence Strategy 2024 which termed India a "top-tier security partner". Australia seeks to continue prioritising "practical and tangible cooperation" that directly contributes to Indo-Pacific stability through the Comprehensive bilateral Strategic Partnership.

POLITY AND GOVERNANCE

SC to urgently hear petitions on Uttarakhand forest fires

CONTEXT: A Supreme Court Bench headed by Justice B.R. Gavai instructed the petitioners, including senior advocate Rajiv Dutta, to inform the amicus curiae, advocate K. Parameshwar, about the hearing petitions on Uttarakhand Forest fires even as petitioners said 90 % of the blazes were "man-made".



The Uttarakhand government, represented by its Deputy Advocate-General sought permission to file a status report by the next hearing. The Uttarakhand government had actually filed a report in the National Green Tribunal (NGT) claiming the number of incidents of fires was "going down".

900 fires in six months

Over 900 incidents of fires were reported in the past six months, damaging at least 1,100 hectares of forest land in Uttarakhand. About 351 cases related to "man-made" forest fires were registered, implicating 59 named individuals and 290 unidentified suspects. Since November 1, 2023, a total of 575 forest fire incidents across nearly 690 hectares were officially cited in the State.

Strict action

The State government announced stringent measures, including booking people found guilty of setting forests on fire under Uttarakhand Public and Private Property Damage Recovery Act and taking actions under the Gangster Act against those found to be repeatedly setting such fires.

The State Government has deployed the National Disaster Response Force (NDRF) and requested for mobilisation of Indian Air Force choppers to douse the fire in Pauri Garhwal. The state was also coordinating with IIT Roorkee, which has been experimenting with cloud seeding, to use rainfall as a means to control the fires.

POLITY AND GOVERNANCE

A half-hearted climate change verdict

CONTEXT: The Supreme Court of India's extension of the constitutional rights to life and equality, to the right to be free of ill-effects of climate change has significant potential to be converted into actions that can undo, mitigate, or help adaptation to the ill-impacts of the climate crisis.

The flaws in the judgment

Prime Minister, Narendra Modi, at the 26th session of the Conference of the Parties in 2021 include net zero carbon emissions by 2070, generation of 500 GW by non-fossil fuel sources and a 50 % share of total power generation to renewable energy by 2030. The Court has tried to balance the need for land (and airspace) for solar and wind energy production in Rajasthan and Gujarat, with the imperative of protecting the bustard.

Such a 'non-fossil-fuel' and 'renewable' energy-based approach legitimised construction of mega-dams in the Himalaya that has caused destabilisation, biodiversity loss, and displacement of communities. Nuclear power has led to forced displacement, curtailment of democratic rights as it is shrouded in secrecy, and the fear of centuries of contamination by untreatable nuclear wastes.

Pavagada Solar Park in Karnataka, has taken away grazing and agricultural land, and destroyed wildlife. In Changthang, Ladakh, a proposed 13 GW solar project will take up over 20,000 acres of fragile ecosystem, crucial for unique wildlife and nomadic pastoralism that produces the famous Pashmina wool. The proposed over 1,400 acres next to the

Chhari Dhand Conservation Reserve in Kachchh, Gujarat, could destroy an important bird area as also the livelihoods of Maldhari pastoralists. Unfortunately, such renewable energy projects are excluded from environmental impact assessment (EIA) and clearance procedures, so their impacts are not even assessed.

Despite significant investment in renewable energy, the government is not reducing investments in coal. New coal mining blocks continue to be given a green signal, including in some of the country's most biologically diverse and socially sensitive (indigenous/ Adivasi) areas. In many of these, government agencies have enabled corporate entities, especially those closest to New Delhi's power corridors, to sidestep environmental laws.

Alternatives should have been considered

The Court's blanket acceptance of such an energy transition undermines its own assertion regarding a clean and healthy environment being a fundamental human right. Rooftop and other decentralised renewable energy sources alone could yield over 600 GW. Decentralized and distributed solar applications have brought substantial benefits to millions of people in Indian villages, addressing their cooking, lighting, and other energy needs in an environmentally friendly manner."

It is a crucial part of just climate action, especially where led by indigenous peoples and other local communities to safeguard nature, and their habitats for present and future generations. In India, recognition of the rights of the Ganga and Yamuna by the Uttarakhand High Court in 2017 (stayed by the Supreme Court on a plea by Uttarakhand government that the order was not implementable), is also a potential bulwark against climate-damaging actions such as big dams and other mega-projects. Compliance with global treaties on human rights (some of which the Court quotes) and on indigenous people's rights, would require critical appraisal of mega-renewable energy projects as much as of fossil-fuel sources.

The Court could still expand the positive potential of the judgment, by adding these aspects to the mandate of the expert committee it has set up: whether there are alternative, less damaging ways (including decentralised renewable energy) of generating (or obtaining, through reduction of waste and luxury consumption of already available capacity) the power to be produced by mega-projects in Rajasthan and Gujarat, or non-electricity means of meeting the same energy demand.

The problem with the Indian model

India's model of development, heavily focused on mega-industrial, infrastructural and extractive projects that cause deforestation and displacement of communities, is fundamentally violative of constitutional rights.



"Education is the ability to listen to almost anything without losing your temper or your self-confidence." - Robert Frost

ECONOMICS AND DEVELOPMENT

Getting to a new level in India's online gaming sector

CONTEXT: The Prime Minister's engagement with seven of the top gamers in the country discussing the trajectory of the gaming industry sought to understand the challenges they encounter, particularly on the nuanced distinction between skill gaming and gambling (game of chance) — it could pave the way for a more conducive and forward-looking regulatory environment.

Rapid growth

The size of the global gaming industry crossed \$ 300 billion in 2021 — more than the combined markets for the movie and music industry. The online domestic gaming industry that constitutes 1.1 % of the global online gaming revenue has seen a rapid expansion of 28 % CAGR between FY20 and FY23. Projections indicate further growth to ₹ 33,243 Cr by FY28, with a sustained 15 % CAGR. The online gaming industry not only attracts significant foreign and domestic investments but also generates substantial direct and indirect employment.

Not only is online gaming a multi-billion opportunity for Indian start-ups but it can also form an important part of 'India Techade' and the goal of a \$1 trillion digital economy. The sector has witnessed an array of positive developments, including the establishment of the Animation, Visual Effects, Gaming, Comic and Extended Reality taskforce by Ministry of Information and Broadcasting, the identification of the Ministry of Electronics and Information Technology as the nodal ministry, the introduction of a series of regulations through the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, and clarification around the ambiguity concerning tax deduction at source on winnings.

Issues that need scrutiny

Despite the provision of self-regulatory bodies within the IT Rules of 2021 intended to regulate the industry, the effective implementation of these rules is pending, thus nullifying their intended impact. NITI Aayog's discussion paper with draft guiding principles for the online fantasy gaming sector also proposed a self-regulatory model of governance with a self-regulatory organisation at its helm.

During the Goods and Services Tax Council meeting in July 2023, the Council decided to enforce a tax rate of 28 % on the total face value of bets (effective October 1, 2023) regardless of whether the activity is classified as a game of skill or chance. Before this, online gaming firms in India were subjected to an 18 % GST rate since the introduction of the indirect tax system in July 2017. While this measure has resulted in an initial uptick in tax revenue for the government, it raises concerns about the industry's sustainability in the long term and its consequential impact on jobs being created in this sector.

Soft power

By remedying these deficiencies, India stands at a distinctive juncture to emerge as a prominent global gaming hub. Another advantage lies in tapping India's rich cultural heritage (stories, legends, and folklore). With an increasing

number of games inspired by Indian mythology, there is a unique opportunity to cater to domestic and international audiences.

Furthermore, there is a concerted effort to encourage the participation of women in the gaming industry, fostering diversity and inclusivity. As perceptions about gaming as a viable career option evolve, India stands to benefit from a growing pool of talented individuals driving innovation and pushing boundaries in the gaming landscape.

INTERNATIONAL RELATIONS

Macron urges Xi to use clout and halt Ukraine war, agree to fair trade rules

CONTEXT: French President Emmanuel Macron and EU Commission president Ursula von der Leyen pressed Xi Jinping to use Beijing's influence to halt the Russian war against Ukraine, also telling the Chinese leader to accept fair global trade rules.



'Fair rules for all'

French President emphasized the crucial need for coordination with Beijing on "major crises," including the Ukraine war, stating that it was "absolutely decisive." He urged for "fair rules for all" in Europe-China trade, noting that the future of the continent would greatly depend on the ability to develop relations with China in a balanced manner.

Europe is worried that despite its official neutrality in the Ukraine conflict, China is effectively supporting Russia, which is already utilizing Chinese machine tools in arms production.

Ms. von der Leyen stated that France and the European Union also "rely on China to use all its influence on Russia to end Russia's war of aggression against Ukraine." She added that both Europe and China "share an interest in peace and security."

Mr. Xi stated that China and the EU should "remain partners" and "carry out strategic coordination," aiming to "make new contributions to world peace and development."

ECOLOGY AND ENVIRONMENT

What is carbon farming?

CONTEXT: Carbon is found in all living organisms and many minerals. It is fundamental to life on earth and plays a crucial role in various processes, including photosynthesis, respiration, and the carbon cycle. Farming is the practice of cultivating land, raising crops, and/or livestock for food, fibre, fuel, or other resources. It encompasses a wide range of activities, from planting and harvesting crops to managing livestock and maintaining agricultural infrastructure.

The process of emitting and removing greenhouse gas emissions in managed farmland

Source: 'Carbon farming – Making agriculture fit for 2030', a study for the European Parliament's committee on Environment, Public Health and Food Safety

Carbon farming combines these two concepts by implementing regenerative agricultural practices that restore ecosystem health while improving agricultural productivity and soil health, and mitigating climate change by enhancing carbon storage in agricultural landscapes and reducing greenhouse gas emissions. The practice is easy to adopt across various agro-climatic zones. It can also help ameliorate soil degradation, water scarcity, and challenges related to climate variability.

How can carbon farming help?

A simple implementation of carbon farming is rotational grazing. Others include agroforestry, conservation agriculture, integrated nutrient management, agro-ecology, livestock management, and land restoration.

Agroforestry practices — including silvo-pasture and alley cropping — can further diversify farm income by sequestering carbon in trees and shrubs. Conservation agriculture techniques such as zero tillage, crop rotation, cover cropping, and crop residue management (stubble retention and composting) can help minimise soil disturbance and enhance organic content, particularly in places with other intense agricultural activities.

Integrated nutrient management practices promote soil fertility and reduce emissions by using organic fertilizers and compost. Agro-ecological approaches such as crop diversification and intercropping have benefits for ecosystem resilience. Livestock management strategies including rotational grazing, optimising feed quality, and managing animal waste can reduce methane emissions and increase the amount of carbon stored away in pasture lands.

What are the challenges to carbon farming?

The effectiveness of carbon farming varies depending on multiple factors — geographical location, soil type, crop selection, water availability, biodiversity, and farm size and scale. Its usefulness also depends on land management practices, sufficient policy support, and community engagement.

Regions with long growing seasons, sufficient rainfall, and substantial irrigation are best suited to practise carbon farming because they provide the best conditions in which to sequester carbon, through vegetation growth. In regions with adequate rainfall and fertile soil, the potential for carbon sequestration through practices like agroforestry (integrating trees and shrubs with crops) and conservation agriculture (minimising soil disturbance) may be particularly high.

On the other hand, carbon farming can be challenging in hot and dry areas where the availability of water is limited, and prioritised for drinking and washing needs. Limited water availability can hinder the growth of plants, thus restricting the potential for sequestration through photosynthesis. For example, practices like cover cropping, which require additional vegetation between main crop cycles, may not be viable due to the added water demand. Moreover, selecting which plants to grow also becomes crucial because not all species trap and store carbon in the same amounts or in an equally effectively manner. Fast-growing trees and deep-rooted perennial grasses tend to be better at this task — but on the flip side, these types of plants may not be well-suited to arid environments.

Further, the adoption of carbon farming practices may require financial assistance for farmers to overcome the costs of implementing them. In the context of developing countries like India, small-scale farmers may lack the resources to invest in sustainable land management practices and environmental services. In sum, while carbon farming holds promise as a mitigation strategy, addressing these challenges is essential to realise its full potential in combating climate change.

What are some carbon farming schemes worldwide?

In recent years, the practice of carbon trading in the agriculture sector has become important around the world, but especially in the U.S., Australia, New Zealand, and Canada, where voluntary carbon markets have emerged. Initiatives like the Chicago Climate Exchange and the Carbon Farming Initiative in Australia demonstrate efforts to incentivise carbon mitigation activities in agriculture. The processes range from no-till farming (growing crops without disturbing the soil) to reforestation and pollution reduction.

Initiatives like Kenya's Agricultural Carbon Project, which has the World Bank's support, also highlight the potential for carbon farming to address climate mitigation and adaptation and food security challenges in economically developing countries.

The launch of the '4 per 1000' initiative during the COP21 climate talks in 2015 in Paris highlights the particular

role of sinks in mitigating greenhouse-gas emissions. As the oceans and the atmosphere are filled with carbon, and they approach their saturation points, we must manage the remaining carbon budget of 390 billion tonnes or so wisely.

What are the opportunities in India?

As climate change intensifies, climate-resilient and emission-reducing agricultural practices can benefit from adaptation strategies. Agriculture is crucial in this endeavour.

Grassroots initiatives and pioneering agrarian research in India are demonstrating the viability of organic farming to sequester carbon. In this regard, agro-ecological practices in India could yield significant economic benefits, with the potential to generate \$63 billion in value from approximately 170 million hectares of arable land. This estimate includes an annual payment of around ₹5,000-6,000 per acre for farmers to provide climate services by adopting sustainable agricultural practices.

Regions with extensive agricultural land, such as the Indo-Gangetic plains and the Deccan Plateau, are well suited to adopt carbon farming whereas the mountainous terrain of the Himalayan region is less so. Coastal areas are prone to salinisation and have limited access to resources, thus limited the adoption of traditional farming practices.

Further, carbon credit systems can incentivise farmers by providing additional income through environmental services. Studies have shown agricultural soils can absorb 3-8 billion tonnes of CO2-equivalent every year over 20-30 years. This capacity can bridge the gap between feasible emissions reductions and the indispensable stabilisation of the climate. So carbon farming could also be a sustainable strategy to mitigate climate change and enhance food security in India.

But scaling it up requires concerted efforts to address several challenges, including limited awareness, inadequate policy support, technological barriers, and an enabling adoption environment. Yet promoting carbon farming is in India's interests — to mitigate climate change while improving soil health, enhancing biodiversity, and creating economic opportunities for its adopters.

INTERNATIONAL RELATIONS

Sea drone warfare has arrived, but U.S. Navy remains obsessed with megaships

CONTEXT: The U.S. Navy's efforts to build a fleet of unmanned vessels are faltering because the Pentagon remains wedded to big shipbuilding projects, exposing a weakness as sea drones reshape naval warfare.

The lethal effectiveness of sea drones has been demonstrated in the Black Sea where Ukraine has deployed remote-controlled speed boats packed with explosives to sink Russian frigates and minesweepers since late 2022. Yemeni-backed Houthi rebels have employed similar vessels against commercial shipping in the Red Sea in recent months, albeit without success. These tactics have caught the attention of the Pentagon, which is incorporating lessons from Ukraine and the Red Sea into its plans to counter China's rising naval power in the Pacific.

Deputy Secretary of Defence Kathleen Hicks announced an initiative in August — named Replicator the short-term, \$500 million-a-year project is designed to cut through bureaucracy and fast-track the deployment of thousands of cheap aerial and sea drones within the next 18-24 months to match China's growing military threat.

The Navy has a budget of \$172 million this year for small and medium-sized underwater sea drones, falling to \$101.8 million in 2025, a tiny fraction of the \$63 billion Navy procurement budget proposed by President Joe Biden's administration for 2025.

Military sea drones can range from missile-armed speed boats to minehunting miniature submarines and solar-powered sailboats equipped with high-definition spy cameras, underwater sensors and loudspeakers used to holler warnings at enemy ships.

These drones will be used to match China's rapidly-growing air and naval power in the Asia-Pacific region, the Pentagon's Hicks said at the project's launch in August. She said Replicator is being funded mainly by reallocating funds from the existing Pentagon budget.

As part of the initiative, the Pentagon in January issued a solicitation for private companies to deliver small sea drones to the Navy, demanding a production capacity of 120 vessels per year, with deployment beginning in April 2025. At a cost ranging between \$1 million and \$3 million apiece, drones offer a relatively cheap and fast way to expand the Navy's fleet, especially as several large traditional shipbuilding projects are running years behind schedule. Swarms of small sea drones could also act as a shield for valuable crewed assets like aircraft carriers and submarines, and tangle up troop-carrying ships in the event China tries to invade Taiwan.

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Head Office: Vedhik IAS Academy Mercy Estate, MG Road, Ravipuram, Ernakulam-682 015, *Corporate office:* **Vedhik IAS Academy** Samkalp Bhawan, Plot No.15, Sector 4, Rama Krishna Puram, New Delhi,Delhi-110022 *Regional office* **Vedhik IAS Academy** 202, Raheja Chambers, 12, Museum Road. Bangalore -<u>56000</u>1. Karnataka, India. GCC Office:

Bobscoedu, Bobsco Trading & Contracting Co. W. L . L Office 22, Dream Tower 1, Road: 2701, Adliya, Kingdom of Bahrain www.bobscoedu.com