

### NEWSPAPER HIGHLIGHT

As the farmers' protest against the Centre's farm laws on the State borders of Delhi is about to complete a year, a recent socio-economic study by researchers associated with Punjabi University at Patiala says most of those who lost their lives during the movement are "small and marginal farmers" and "landless cultivators". The study titled "Separating wheat from the chaff: farm laws, farmers' protest and outcomes" points out that those who have died cultivated on an average 2.94 acres and if landless farmers who cultivate the contracted land are included, the average size goes down to 2.26 acres. "The region wise distribution shows that the Malwa region has relatively higher average size of cultivated area followed by Doaba and Majha. Hence, the participation in the protest and number of persons who died were also very high from the region — nearly 80%. The Doaba and Majah regions accounted for 12.83% and 7.39%, respectively.

A draft document of the agreement that countries, including India, are negotiating in Glasgow, Scotland underlines that the promised climate finance by the developed countries is "insufficient to respond to the worsening climate change impacts in developing countries" and urges the developed countries to "urgently scale up." The provision of finance for mitigation and adaptation of the impact of global warming is one of the key sticking points. The United States, Canada, several countries of the European Union, the United Kingdom and others have dragged their feet on a commitment to provide \$100 billion annually by 2020. India, along with several other developing countries, has for years pointed out that not providing this money implies that the developed countries' demand to coerce major developing countries into a net zero commitment by mid-century is unjustified. It also violates the core principle of equity and climate justice, they aver.

Citing economic recovery, the Union Cabinet on Wednesday restored the Members of Parliament Local Area Development Scheme (MPLADS) that was suspended in April 2020 subsuming the funds for the scheme in the consolidated fund of India. The scheme was suspended for two financial years (2020-21 and 2021-22) but the Government on Wednesday announced a partial rollback. The MPs will get ₹2 crore instead of the annual approved ₹5

### YAMUNA RIVER FROTHING

1. A layer of froth was seen floating over parts of the Yamuna River near Kalindi Kunj. This has become a repeat occurrence in the city. Froth formation is a phenomenon that takes place on many lakes and streams. The froth is a sign of a polluted river. Foam bubbles are produced when organic matter decomposes. These foam-producing molecules have two ends to repel and attract water, which work to reduce the surface tension on the water surface.

2. These foam bubbles are lighter than water, so they float on the surface as a thin film that gradually accumulates. Causes - Release of untreated or poorly treated effluents, which may contain soap-detergent particles could lead to frothing. Surfactants & phosphates from detergents in households and industrial laundry find their way into the river, as all the sewage is not treated. These Phosphates persist in water, which leads to eutrophication. This lowers the oxygen content, killing off marine life that is essential to maintain the quality of water.

3. Other sources are industrial effluents, organic matter from decomposing vegetation and presence of filamentous bacteria. The pollution from sugar and paper industries also causes pollution. The water falls from a height, so the untreated waste turns into foam.

4. **Health hazards - Short-term exposure can lead to skin irritation and allergies. If ingested, these chemicals may cause gastrointestinal problems and diseases like typhoid.** Long term exposure to heavy metals in industrial pollutants can cause neurological issues and hormonal imbalances.

### INDIA'S SUBMARINE STRENGTH

1. The CBI filed charges against some naval officers for allegedly sharing details of the ongoing modernisation project of India's Kilo Class submarines (imported submarines that are being retrofitted). India has 15 conventional diesel-electric submarines, classified as SSKs, and one nuclear ballistic submarine, classified as SSBN. India is building at least two larger SSBNs that will have bigger missiles, called S4 & S4 projects. The 4 SSBNs may be commissioned before 2030.

2. History - India got its first submarine, INS Kalvari of the Foxtrot Class, from the USSR in December 1967. By 1969, it had four of those. Between 1971 and 1974, India bought 4 more Foxtrot Class submarines. In 1981, it signed a contract to buy two Type 209 submarines from West Germany, while two others were to be assembled at Mazgaon Dock. These formed the Shishumar Class.

3. Parallely, Russia offered India its Kilo Class submarines. Between 1986 and 1992, India got 8 submarines from the USSR and 2 from Germany. India bought 2 more Kilo Class submarines from Russia in 1999 and 2000, taking the total submarine fleet to around 20. Soon after, the older Foxtrots started getting decommissioned. Of the 10 Kilo Class submarines, INS Sindhurakshak sank off Mumbai after explosions caused by fire. India gifted INS Sindhuvir to Myanmar.

4. **30-year Construction Plan-The 30-year plan (2000-30) for indigenous submarine construction envisaged 2 production lines of 6 submarines each, built in India in partnership with a foreign Original Equipment Manufacturer (OEM).** The projects were called P-75 and P-75I. The plan anticipated that India would get 12 new submarines by 2012-15.

5. Subsequently, India would make 12 of its own by 2030, taking the fleet size to 24, with the older submarines getting decommissioned. But the contract for P-75 was signed only by 2005, with France's DCNS, now the Naval Group. INS Kalvari, built in India in partnership with France's Naval Group.

### SUFFERING FROM CLIMATE CHANGE

1. A Canadian woman becomes world's first patient to be diagnosed with breathing trouble as suffering from 'climate change'. She was struggling to breathe after the recent wildfires in Kootenays region in the British Columbia province worsened her asthma.

crore. When the suspension was announced last year, the Government had claimed that ₹8,000 crore that would have otherwise been spent under the scheme will go to the consolidated fund of India and will be used for fighting the pandemic.

After crossing \$30 billion for seven successive months, India's merchandise exports have hit a homegrown stumbling block in the first 10 days of this month — a new system mandating online issuance of Certificates of Origin (CoO) for every outbound consignment from November 1 that has put exporters in a tizzy. Several small exporters are facing challenges in registering on to the Directorate General of Foreign Trade (DGFT) portal which requires high quality digital signature certificates, with many reporting outages on the portal that was earlier used only to issue CoOs for shipments to countries with whom India had a preferential trade pact.

Conservation biologists of the Wildlife Institute of India (WII), Dehradun, will begin collaring 10 fishing cats (*Prionailurus viverrinus*) in the Coringa Wildlife Sanctuary (CWS) in Andhra Pradesh next week. The country's first such project will be led by principal investigator Bilal Habib. In Asia, a similar project had been done in Bangladesh. The project, planned in 2020, had to be postponed due to COVID-19.

Referring to the "volatile situation" on the borders, Defence Minister Rajnath Singh told the IAF brass that the armed forces must be prepared to respond at "short notice for any contingency" while IAF Chief Air Chief Marshal (ACM) V.R. Chaudhari emphasised on development of multi domain capability to give a "swift and befitting response" to any misadventures by adversaries. "The role of IAF in conflicts is crucial and it needs to harness the capabilities and opportunities offered by AI, Big Data Handling and Machine Learning," Mr. Singh said at the second biannual IAF Commanders' Conference being held from November 10 to 12.

In the run up to the first anniversary of protests against three farm reform laws, the Cabinet Committee on Economic Affairs (CCEA) has approved a slew of measures that will support farmers growing sugar cane, cotton and jute. At a meeting on Wednesday, the CCEA increased the price of ethanol extracted from sugar cane juice for blending in petrol to ₹63.45 a litre in the coming sugar marketing season starting December. This is an 80 paise hike from the previous year's. The rate for ethanol extracted from

2. In this diagnosis, the doctor linked mortality or severe illness to heat waves or air pollution. If we're not looking at the underlying cause (climate change), and we're just treating the symptoms, we're just gonna keep falling further behind.

### STUBBLE BURNING AND REDUCED LUNG INFECTION

1. A study, correlating the effect of air pollution on health, says that air pollution from stubble burning significantly reduced lung function and was particularly harmful to women in rural Punjab. The study found that the PM2.5 concentrations was found to increase more than twice between the two phases, from 100 g/m<sup>3</sup> to 250 g/m<sup>3</sup>.

2. [PM2.5 is the category of unburnt carbon particles considered most harmful to respiratory health.] These concentrations are around 10-15 times the WHO prescribed air quality standards though the permissible standards by India's Central Pollution Control Board (CPCB) are higher. More symptoms - During the crop residue burning period, a 2 to 3-fold increase was noted in most of the respiratory symptoms across all age groups (10-60 years).

3. **The highest number of respiratory complaints were reported by the elderly population (>40-60) The lowest number of respiratory complaints were reported in the younger age group (>10-18).** There was decline in lung function with increase in PM2.5 concentration across all age groups even after controlling for several other variables, such as the influence of cooking fuel, ventilation, distance from road etc. The study reported a 10-14% decline in lung function in men and nearly 15-18% decline in women across all age categories.

### REDUCTION IN IMPORT OF NON COKING COAL

1. In the Financial Year 2021-22 (upto August), the import of all varieties of Non-Coking Coal has reduced from 84.44 MT to 70.85 MT during the corresponding months of the FY 2019-20 - a decline of about 16.09%. India has been importing coal to bridge the gap between the requirement of coal and the domestic production in the country. The dependence on imports for Coking Coal mainly used in the steel sector has been predominantly due to very limited domestic availability.

2. **Even though the import of Coking Coal is non-substitutable, the imports of various grades of Non Coking Coal have reduced substantially.** This includes, High calorific value (GCV) thermal coal used for industrial purpose Low GCV that goes for power generation. Reduction of coal import has resulted in huge financial savings in the current FY as coal prices are going up sharply in international market.

3. Total domestic dispatch of coal has gone up by 9.44% to 317.69 MT in the current FY upto August as compared to that of the same period of FY 2019-20. The government is continuing all efforts to further enhance the domestic coal production and dispatch.

### IMF OUTLOOK-INDIA'S CASE

1. The recent edition of World Economic Outlook (half yearly report) has been published by International Monetary Fund (IMF). What has the report projected? For India, the Fund has lowered the real GDP growth rate for 2021-22 to 9.5% from the earlier 12.5%. Its forecast for 2022-23 was 6.9% earlier and has been upgraded to 8.5%. For India, the medium-range forecasts is up to 2026-27.

2. The report has cited that the global economic recovery momentum had weakened due to the pandemic-induced supply disruptions. The dangerous divergence in economic prospects which is due to large disparities in vaccine access, and differences in policy support remains a major concern. The IMF has become relatively more pessimistic on the Indian rupee versus US dollar (USD) in October. It has also noted that the employment growth likely to lag the output recovery.

3. **What explains the IMF's turn for pessimism on the Indian rupee?** The IMF sees the rupee depreciating from Rs.70.9 to Rs.89.4 in 2020-21 against the US dollar by 2026-27. In April, the implied exchange rate forecast for 2026-27 was Rs.85.8. So, the US dollar is stronger by 4.2% at the end of 2026-27 as per the October 2021 forecast. This will lower India's nominal GDP in USD terms in 2026-27 to \$140 billion.

4. **What does the IMF call for?** The top priority is to vaccinate at least 40% of the population of every country by the year-end and 70% by the middle of next year. The IMF called for stronger commitments at the United Nations COP26 in Glasgow and said

**Cheavy molasses has been increased by 97 paise a litre, while that of ethanol extracted from Bheavy molasses is up ₹1.47 as well. Ethanol blending with petrol is expected to reach 10% next year and 20% by 2025. Oil marketing companies buy ethanol from sugar mills and distilleries at the rate set by the Government.**

advanced economies needed to deliver on their \$100-billion-per-year international climate finance pledge to developing countries. It has asked the Group of Twenty (G20) to speed up the restructuring of unsustainable debt of poorer countries. The IMF has earlier cited that there's still room for the Government of India to provide more support without disturbing the fiscal deficit. There need to be a credible medium-term strategy for India to reduce the debt-to-GDP ratio to make room for future development and infrastructure needs.