WEEKLY LIVELIHOODS UPDATE **27 OCTOBER 2020 AGRICULTURE** Why the new farm laws will not level the playing field Contract farming as a means of ushering in corporatisation in agriculture **CLIMATE CHANGE** Internal tide mixing keeps deep Andaman Sea warmer than Bay of **Bengal: Study FOOD** Good food: Seeds of health W. W. 164 27 **EDUCATION** The Age of Ed-tech **India's premier B-Schools POLLUTION** Air Pollution Killed A Newborn Every 5 Minutes In 2019

Weekly Livelihoods Update

27 October 2020

- Why the new farm laws will not level the playing field: More than 86 per cent farmers in India own or cultivate on less than two acres of land and have little surplus to sell. They are the victims of middlemen (arthiya) at the mandis (local exchange markets) and are forced, by circumstances, to sell their produce at very low prices often below their input costs. The perishable nature of their produce also puts pressure on them to sell it off quickly, and which has skewed their bargaining position. Their produce is 'risk-intense' and often a victim of untimely rains, droughts, hail storms, infestation, etc. This often leads to partial or total loss of the farmer's crop and income. They have no meaningful crop insurance: This has been the reason for farmer loan defaults and over three lack farmer deaths over the past two decades. In 2019 alone, over 42,000 farmers and labourers died by suicide. The Economic Survey of India 2018-19 recommended a development strategy based on increasing incomes of this distressed segment. [For further reading: https://www.downtoearth.org.in/blog/agriculture/why-the-new-farm-laws-will-not-level-the-playing-field-73959]
- Contract farming as a means of ushering in corporatisation in agriculture : The most challenging and pertinent questions confronting any state ought to be around the situation of the marginalised and deprived sections of society. Prima facie, the Indian ruling elite since the early 1990s have mouthed their concern for fair price for the labour and produce of farmers, promised doubling of their income and even raised issues of their survival—specially of the small and marginal peasantry that constitutes almost 80 per cent of the farmers. Behind this facade, however, the agrarian policies and resultant structures in the past three decades have consistently served the cause of the big corporates. The three ordinances approved by the Cabinet on June 3, 2020, ostensibly claimed to provide greater freedom to farmers to bargain for better remunerative prices for their produce by removing the restrictions on the movement of foodgrains and other commodities. The conversion of the ordinances into Acts in September 2020 through somewhat questionable means, have, in effect, further intensified the corporatisation of Indian agriculture. The manifestation of this trend is illustrated here with the concrete case of contract farming in India. [For further reading: https://frontline.thehindu.com/the-nation/fast-forward-to-corporatisation/ article32880281.ece?homepage=true]

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- Internal tide mixing keeps deep Andaman Sea warmer than Bay of Bengal Study: The role of oceanic processes in keeping the deep Andaman Sea warm has been a mystery for long. A new study conducted by Indian National Centre for Ocean Information Services (INCOIS) to investigate internal waves, however, has given an answer: Deep waters (below 1,200 metres) in the Andaman Sea are about 2 degrees Celsius warmer than the Bay of Bengal due to internal tide mixing. The study is important to interpret the response of the ocean to climate change by understanding the distribution of temperature, both near the ocean surface and the deep ocean. Internal tide energy dissipation and associated vertical mixing play a major role in maintaining the warmer temperature in the deep Andaman Sea, according to the study. The rate of vertical mixing in the AS is about twice than what is observed in the Bay of Bengal. This elevated internal tide induced vertical mixing results in the efficient transfer of heat into the deeper layers, which keeps the deep Andaman Sea warm. Temperature distribution in the deep ocean plays an important role in regulating the deep ocean circulation, water mass formation, distribution of chemical properties as well as the distribution of marine organisms including invertebrate animals. The researchers noted that in addition to the small exchange of deep waters, higher temperature, which decreases the solubility of gases, also has contributed to the observed difference in the biogeochemical properties between Andaman Sea and Bay of Bengal. [For further reading: https://www.downtoearth.org.in/news/climate-change/ internal-tide-mixing-keeps-deep-andaman-sea-warmer-than-bay-of-bengal-study-73957
- Good food: Seeds of health: Farmers select the best seeds and store them for sowing in coming years, while scientists study them in hope of improving them in terms of taste, yield and disease resistance. The seeds are also preserved in the hope of reintroducing a plant to an area where it goes extinct in the event of a natural calamity, such a disease or climate change, or in the aftermath of a war. One such internationally acclaimed seed bank is the Svalbard Global Seed vault, which is located in the remote snow-packed archipelago, halfway between Norway and the North Pole. The highly secured vault preserves as many as 0.84 million samples of seeds. While such big institutional seed banks are important to protect the gene pool of different species, they often fail to protect the local varieties. And this service is provided by the community-owned seed banks maintained by farmers. Community seed banks are often managed by women self-help groups. And often, taste and culinary significance are stronger driving factors for them to save seeds than natural disasters or global crises.

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Farmers celebrate the arrival of new seeds — be it Baisakhi in north India, Pongal in south India or Nuakhai in western Odisha. During the festival of Holika Dahan, celebrated a day before Holi, ears of wheat are offered to the fire god, and then the roasted seeds are distributed as prasad. These celebrations have a purpose — seeds play a significant role in ensuring food security throughout the year because of their long shelf life. [For further reading: https://www.downtoearth.org.in/news/food/good-food-seeds-of-health-73932]

- The Age of Ed-tech: The economic consequences of the lockdown, imposed to fight a runaway Covid-19 pandemic, are by now well known: the headline statistic being a 23.9 per cent contraction in India's GDP growth for the first quarter of the current fiscal, which underlines how the broad economy has been crippled. India's education sector, estimated at \$91.7 billion (Rs 6.67 lakh crore) in FY18, according to India Brand Equity Foundation, was not spared either. The closure of schools and colleges hit the finances of thousands of educational institutions. However, the constraints of the physical world presented a fortuitous opportunity for educational technology start-ups, which witnessed a big surge in demand for their offerings. India's leading ed-tech app Byju's Classes ranked among the world's top 10 most-downloaded education apps during the lockdown. Current trends indicate that digital learning will be an integral part of educational institutions in the post-Covid world and, taking note of this, investors are making a beeline for this sector. According to media reports, Venture capital in the edtech space increased to \$795 million (Rs 5,803.5 crore) in the first six months of 2020, from \$108 million (Rs 788.4 crore) in the corresponding period last year. [For further reading: https://www.indiatoday.in/magazine/up-front/story/20201102-the-age-of-edtech-1734216-2020-10-23
- India's premier B-Schools: It is not business as usual at India's business schools. The Covid-19 pandemic has left the annual cycle of education and training of India's future management professionals at these institutions massively disrupted, as in other educational sectors. Normally vibrant campuses, which are usually filled with students attending classes and undertaking case studies, and frequently attended by businesses looking to hire, have been closed for months. Learning has become an isolated exercise, conducted online. Instead of on-site internships with market visits and customer interactions, students have had to make do with virtual training, and even that is only being organised by some industrial houses. According to online training and internship platform Internshala, before Covid-19, 35 per cent of employers hired in-office interns, 39 per cent hired virtual interns, while the remaining 26 per cent hired a mix of both in-

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office and virtual interns. Since the pandemic hit, those numbers have changed to 22 per cent, 63 per cent and 15 per cent, respectively. [For further reading: https://www.indiatoday.in/magazine/india-s-best-b-schools/story/20201102-india-rsquo-s-premier-b-schools-1734184-2020-10-23]

• Air Pollution Killed A Newborn Every 5 Minutes In 2019: Air pollution killed about 116,000 infants in India within the first month of being born, found a new global study into air pollution's burden on health worldwide. More than half of the infant deaths were due to PM 2.5 (particulate matter 30 times finer than human hair than enters the bloodstream and causes severe health risks) in outdoor air and the rest were linked to household air pollution due to use of solid fuels such as charcoal, wood and animal dung for cooking, found the State of Global Air 2020 report (SoGA 2020) released on October 21. The report published by the US-based think-tank, Health Effects Institute, claims to be the first-ever comprehensive analysis of air pollution's global impact on newborns. [For further reading: https://www.indiaspend.com/air-pollution-killed-a-newborn-every-5-minutes-in-2019/]

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