

Down To Earth (December 2018)

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NEWS

HP to set up land bank -

- In yet another move to undermine traditional rights of local people over forests and divert them for projects, the Centre has approved Himachal Pradesh's request to put degraded forests in the land bank for compensatory afforestation.
- It says government wastelands, categorised as protected forests under a 1952 state notification, are to be added to the bank.

Prosecute local agencies, send them to jail - SC on air pollution measures -

- As air quality in the national capital continues to be "poor", the Supreme Court has reprimanded the Centre and civic agencies for lack of action in pollution-related complaints.
- "Prosecute the local agencies. Send them to jail. That is the only option left," the court said while responding to the Centre's statement that 749 complaints were received through social media and 3,000 through "Sameer", a mobile application of the Central Pollution Control Board that enables people in Delhi to register their complaints.

Katowice offers last chance

The report by the Intergovernmental Panel on Climate Change (IPCC) warns about the catastrophic impacts of climate change if global warming exceeds 2°C above pre-industrial levels, and makes the strongest case to limit it below 1.5°C. But nothing remarkable seems to have happened since.

Paris Agreement pledge -

- The Agreement seeks to hold the rise in the global temperature to well below 2°C and pursue efforts to limit the rise to 1.5°C.
- To help achieve the target, countries in the lead up to the Paris Agreement had declared their Nationally Determined Contributions (NDCS), or domestic action plans to address climate change.
- The IPCC report says current NDCS would result in 3.5°C rise by the end of the century.

What needs to be done?

To stay on the right side of the threshold—IPCC estimates the world has only 12 years before it runs over the 1.5°C carbon budget—we need a 45 per cent reduction of global anthropogenic carbon dioxide emissions by 2030 and a further reduction to net zero emissions in 2050 (both targets take 2010 emission levels as a baseline).

Time to raise ambition -

- Currently, countries are required to update their NDCS in 2020. Analysts say revision of NDCS needs to start at Katowice if the world is serious about staying below the 1.5°C target.
- Civil society pressure to make the 1.5°C target priority is increasing, particularly in developed countries. This pressure needs to translate into increased ambition in NDCS in Katowice.
- Talanoa Dialogue, initiated at COP23 in 2017, is a year-long consultative process to take stock of the collective efforts to reduce emissions. It will culminate in Katowice with countries pledging to raise the ambition of their respective NDCS.
- As Benjamin Schachter, Focal Point, Climate Change and Environment, at the Office of the UN High Commissioner for Human Rights (OHCHR) says, there is a link between climate action and the success of Sustainable Development Goals, which is why the international community must take the most ambitious climate action to protect human rights, health and welfare. "Failure to take urgent action now clearly breaches human rights obligations," Schachter adds.

What India should do?

- India requires better frameworks aimed at deep decarbonisation in energy and other sectors.
- Though decarbonising the power sector is easier than other sectors, this has limits; variable renewable energy needs large-scale storage solutions.

- India should thus employ integrated strategies around urban development and land-use, preserve and enhance carbon sinks, and implement sustainable transportation systems.
- India also needs to find strategies to neutralise opposition from those actors most dependent on fossil fuels. This requires both pressure to show them the status quo cannot last, and engagement, to help them find a new low-carbon future.

Beware of Japan's trade ambitions

FTA with Japan - Concerns -

- Japan is pushing a higher standard of IPR protection in FTAs like US and EU. The biggest concern is the impact such provisions will have on access to affordable medicines. The TRIPS plus regime will restrict the early entry of generic medicines while high-cost branded medicines will remain out of the reach of millions of patients in India and other developing countries.
- In Regional Comprehensive and Economic Partnership (RCEP) too, backed by South Korea, Japan is insisting on a series of trips-plus provisions—from extension of the patent term by as much as 10 to 30 years to stiff enforcement measures.

What is driving Japan on this IPR trajectory?

A recent research paper says Japan's newfound role as IPR champion in the region "reflects a strategic shift since 2013" when the government of Shinzo Abe made pharmaceuticals a key driver of export growth. Apparently Japan aims to capture five trillion yen of the global pharmaceutical market by 2020 and as such it "includes an explicit focus on expanding IP protection" with its trading partners.

Conclusion -

Known as the pharmacy of the world, India is the biggest source of low-cost generics for not just low and middle income countries, but also for Japan, Europe and the US. With increased focus on pharmaceuticals sector, Japan is going the US way. For all those concerned about public health, this is bad news.

A deal for farmers

The Union government, with its ambitious and untenable plan of doubling farmers' income by 2022, has embarked on reforms in the farming sector, one of which is the formulation of a law on contract farming.

Background -

- At present, contract farming is regulated under the Agricultural Produce Market Committees (Development and Regulation) (APMC) Act of 2003. This is the law that legalises contract farming.
- It mandates that private companies (sponsors) must register themselves as well as the farming contract agreements with the market committees created under the Act.

Concern with APMC Act, 2003-

- The Act provides that the sponsor cannot, at any time, lay claim to the land title of the farmer, thereby giving farmers some protection. However, the provisions are woefully inadequate.
- The Act does not provide for an effective monitoring mechanism, capacity building programmes or a robust dispute settlement system.

Proposed legislation -

The NITI Aayog recently circulated a draft model contract farming law titled Agricultural Produce and Livestock Contract Farming (Promotion and Facilitation) Act, 2018, which proposes a comprehensive legal regime to enable contract farming.

Concerns with proposed legislation -

- The draft law too suffers from some of the same deficiencies as the APMC Act.
- The draft says, "Contract farming is a pre-production seasonal arrangement between farmers and sponsors which transfers post-harvest market unpredictability from farmers to sponsors."

- In theory, contract farming seeks to combine agriculture with corporate efficiency while ensuring the provision of inputs such as seeds and technology to the farmers.
- Sponsoring entities typically rely on economies of scale to achieve profit maximisation and therefore often exclude small-scale farmers. This would be untenable in the Indian context as this would exclude a majority of Indian farmers, who are small farmers.
- Though the draft Act, in its preamble, recognises the precarious position of the India's small and marginal farmers and also accepts that some form of non-coercive pooling of resources would be necessary, the draft Act itself provides no guidance on how this can be done.
- India also has no concrete law on land pooling that would be necessary to make this law a success.
- Contract farming is also known to lead to an increase in monoculture farming and a loss of crop diversity, making crops more vulnerable to destructive pests and crop diseases.
- Although the Model Contract Farming Act provides for the setting up of "Registering and Agreement Recording Committees" where the contracts are to be registered, it does not make provisions to ensure that these committees must be staffed with legally-trained persons who must vet the contracts to ensure that no dubious or unfair clauses have been included

What must be done?

- The new law must find a way to address the additional risks that contract farmers have to confront and find a way to ensure protection to farms through better fertilisers, pesticides and incentivisation.
- It becomes imperative that the government promotes risk sharing between the contracting parties and farmers and provide easy access to non-exploitative crop insurance schemes.
- It is necessary that state governments do not adopt a one-size-fits-all approach, and rather promote crops that are uniquely suited to the state's own unique soil, weather and technological conditions.

Conclusion -

While contract farming, if implemented wisely, does have the potential to alleviate the suffering of India's farmers, it is imperative that the government takes a cautious, research-backed approach rather than imposing another hasty, ill-thought-out decision that will cause more harm than good.

Zika's unborn victims

India is in the middle of its first major Zika outbreak. Between September 22 and November 27, a total of 289 people have been found Zika positive in Madhya Pradesh (130) and Rajasthan (159)—the only two states with confirmed cases. Since fatality in Zika is just 8.3 per cent, as per a 2017 paper in the *Pediatric Infectious Disease Journal*, governments have not taken steps to deal with the virus.

About Zika -

- It was always known to cause mild fever, and was less dangerous than even dengue and chikungunya viruses, which are also carried by the same *Aedes aegypti* mosquito that carries Zika. But during the 2015 outbreak in Brazil, it became evident that Zika can deform foetuses.
- As per a report, 10-15 percent of Zika positive pregnant women have babies with microcephaly, or underdeveloped head and brain.
- The virus could also lead to delayed developments in children born to Zika-affected mothers.
- The Zika virus has two lineages — Asian and African. The African strain was discovered in a monkey in Uganda in 1947. Over time, the virus mutated to a more dangerous strain, which spreads easily, known as Asian strain in the 2000s. It broke out in the Yap islands (2007), French polynesia (2013-14) and Brazil (2016). The strain in Rajasthan was of Asian lineage.

Scope of expansion in India -

- India has Asia's most Zika-exposed population. A 2017 paper in *BMJ Global Health* says that 465.7 million people could become infected by the virus in an outbreak under circumstances which led to the outbreak in the Americas.
- India could also be a breeding ground for Zika virus. The environment in India is conducive for ZIKA because of preponderance of the *Ae. aegypti* mosquitoes. Though these mosquitoes breed throughout the year in and around the houses in potable water sources, the density is

extremely high during monsoon since more number of breeding sites becomes available. High humidity and optimal temperature support their survival for many days.

Government's response -

The Union government issued a press communiqué on November 3, quoting ICMR experts, which says that the “known” mutations of the virus do not cause microcephaly.

What should be done?

- All the experts agree that vector control is key to control Zika.
- ICMR has advised the health ministry to identify the foci areas of vector breeding before the breeding season and start robust surveillance.
- The government must also conduct research on Zika and teach it in medical colleges. It is yet to be introduced by the Medical Council of India in its curriculum.

Rise of lookalikes

The Indian milk sector, which surpassed the European Union to become the world's biggest producer in 2017-18 is growing like never before. A recent report by global analytical company CRISIL forecasts a steady growth in milk sales in coming years and a 50 per cent faster growth in the value-added dairy products sector. This is good news for 73 million small and marginal dairy farmers of India.

Concerns -

A few of the dairies supplying cheaper alternatives actually sell soya milk mixed with dairy.

- Most of the dairy farms mix vegetable oil, such as palm oil, with milk fat to produce cheese and butter.
- They push the products by using distorted logos or brand names of established companies, and their consumer base ranges from individuals to restaurants and confectionery shops. Even big players are using this practice.
- The nutrition level of most alternative milks, such as those derived from almond, soyabean and grains, are low when compared with dairy milk.
- Cases of adulteration are mostly reported from states like Uttar Pradesh and Madhya Pradesh where cooperatives are weak, and private players control the procurement network and dictate milk price.

A safe alternative?

Alternative milks provide safer alternatives for those who are averse to milk; the lactose intolerant; those who are allergic to milk protein casein; those who follow veganism; or those who follow dairy-free diet due to calorie or cholesterol restriction.

Way forward -

- The absence of labelling regulations that can differentiate dairy analogues from pure dairy products are missing.
- There is a argument that non-dairy products should be named just beverages or sold under some other name.

Land acquisition law - Legal deceit

States are on an overdrive to fill land banks as acquisition is difficult under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, or RFCTLARR Act, 2013.

What is RFCTLARR, 2013?

- Ushering the biggest reform in land governance, RFCTLARR Act replaces the colonial Land Acquisition Act, 1894.
- It gives people a say in land acquisition and makes the process participative, humane and transparent.

- The Act promises to put an end to forcible acquisitions, enhances compensation to landowners, resettles and rehabilitates families displaced by land acquisition and gives the gram sabha decision-making powers in land acquisition.
- It is not applicable to the state of Jammu and Kashmir.

About RFCTLARR -

RFCTLARR Act rests on five pillars -

1. Social impact assessment (SIA),
2. People's consent,
3. Compensation,
4. Resettlement and rehabilitation (R&R) and
5. Downsizes eminent domain, the government's power to take private property for public use.

Procedures under RFCTLARR -

- The Act puts a check on the government from indiscriminately acquiring land for uncertain public purposes.
- It ensures greater public participation by seeking consent from 70 per cent of the people affected by land acquisition in public-private partnership projects and from 80 per cent people in private projects.
- As per its compensation formula, landowners get four times the market value of rural land and twice of urban land. It is mandatory to resettle and rehabilitate title holders and livelihood losers.

Advantages -

- The 119-year-old law's urgency clause allowed the government to acquire land for any public purpose. RFCTLARR Act narrows down the scope of the clause.
- The government can now take land under the urgency clause only for national security, in natural calamity, or in any other emergency approved by Parliament. Acquisitions under these three categories do not require people's consent or social impact assessment.
- If such acquisitions take place in the Fifth and Sixth Scheduled Areas, as identified in the Constitution, they require the consent of the gram sabha or an autonomous council.
- The new Act also forbids acquisition of irrigated multi-cropped land. In special circumstances, the government will have to develop an equivalent area of cultivable wasteland.
- Overturning the 1894 land acquisition law, which gave civil courts the power to settle land disputes, the Act directs setting up of a separate judicial court in each district.
- To reduce the arbitrary powers of the district collector, the Act directs setting up of independent expert groups and social impact assessment units to assess if the project for which the land is acquired, serves a public purpose.
- In a way, the Act took away the government's powers and gave them to landowners.

Concerns with RFCTLARR Act -

- RFCTLARR Act is procedure-heavy, and therefore, leads to delays. The entire acquisition process can take four-and-a-half years to complete and involves multiple steps.
- The Act curtails government's powers to acquire land under the principle of eminent domain. At the same time, it dilutes its effect. The Act does not make binding the recommendations of the expert group, decides if there is a bonafide public purpose. The government can proceed with the acquisition process even if the recommendations suggest otherwise.
- The five-year development plan for people belonging to Scheduled Castes and Scheduled Tribes returns the rights due to people who lose their land, but a big drawback is that the Act does not specify that a monitoring body should watch its implementation.
- Lands are still being forcefully taken, and farmers still do not get their due for the land they lose. The lackadaisical approach shown by the State governments confirms that the states are in no mood yet to implement the robust Act.
- The NDA government tried to dilute the provisions of the Act through an ordinance saying that the new Act was cumbersome, time-consuming and cost-escalating, making its implementation difficult.
- The most debated provision of RFCTLARR Act is the retrospective clause. It states that a land acquisition proceeding will be deemed lapsed in case of a pending process where the compensation award was declared at least five years before 2013, but physical possession of the land was not taken and compensation not paid. This land will either be given back to the land loser, or fresh proceedings under the new Act will commence.

- States have also disarmed the Act, as in Andhra Pradesh, the Act lays down provisions for voluntary acquisition or private negotiations, and reduces the gram sabha's role to giving advice.

Way forward -

- A good land acquisition legislation should strike a balance between direct and indirect costs. Direct cost is what developers pay to land losers as compensation for the land acquired and to resettle and rehabilitate them. Indirect cost is what developers pay to carry out the procedures, manage multi-layered bureaucracy, as well as the revenue foregone due to the time taken to acquire land.
- NITI Aayog has lauded land pooling as a model for the nation to emulate. The Delhi Development Authority (DDA) notified Land Pooling Regulations which allows DDA to use consolidated land for development projects. The land loser will get a part of the developed land back. If the objective of the Act was to minimise acquisition and promote purchase, then the Act has made a headway.

Custom-made babies

Today, genetically modified (GM) children seem to be the next step towards transforming family structures across the globe. Recently, a scientist in China has claimed to have created the world's first genetically-edited babies. The cost of human gene sequencing too is dropping—from \$1,000 today, it could drop to below \$100 over the next few years.

About designer babies -

In simple terms, a designer baby is a GM human embryo with appropriate qualities which have been shaped as per the instructions received from the parents. The process through which designer babies are produced is known as gene editing.

Background -

- Specifically, designer babies were conceived so that children would be free from any life-threatening disease. For instance, if either of the parent has a history of a terminally ill disease in their family, the GM baby will be immune to that disease.
- Through in vitro fertilisation (IVF) and pre-genetic testing, the doctor will be able to identify the genes which could carry the potential danger of that disease. Those genes will be muted before the fertilisation of the egg and the foetus produced will be devoid of any anomaly.

Ethical Concerns -

- In addition to parents succumbing to technology to satisfy their needs, there are several ethical challenges involved with designer babies.
- Given the newness of the technology, it is difficult to predict how the designer baby will grow up to be.
- It is also too early to calculate the side effects of this kind of technology.
- The unborn child's consent is not taken before the process of gene editing. This is a huge ethical challenge.
- GM babies are bound to create more inequality in society. This technology is expensive and only a certain section of society will be able to access it.
- The designer babies will mostly be born with fair skin and skills which will result in securing lucrative jobs.
- The technology will be used to perfect the body and the mind of the unborn baby and will result in the growth of homogeneous individuals.

Gender factor -

- In India, this technology will be used in sex selection as well. One of the features of this technology is that it can scan the sperms of the male partner.
- Given India's history of preference for the male child, there are fears that the sperm with the male gene will be injected and more male children will be born.
- Genetically engineered babies will also expand the gap between the West and the Third World. Since, this form of technology will be expensive in countries such as the US and countries of

Europe, a large number of foreigners will travel to various Third World countries such as India, Bangladesh and Nepal and avail the technology at much cheaper rates.

Way forward -

It is important for international bodies such as the World Health Organisation to set guidelines and regulatory measures at the very onset.