Opinion

SATURDAY, NOVEMBER 2, 2019

BREATHING DIFFICULTIES

Delhi chief minister Arvind Kejriwal

Delhi has turned into a gas chamber due to smoke from crop burning in neighbouring states. It is very important that we protect ourselves from this toxic air

Don't underestimate climate change costs

Lawmakers must pay heed to Nicholas Stern and others warning that existing estimates could be just a fraction of actual costs

A STUDY BY Climate Central, a US-based climate news organisation, warns that many millions more will be affected by rising sea levels because of climate change than previously estimated. Published in *Nature Communications*, the findings are based on correction of biases in elevation (from the sea level) datasets that were previously used to estimate how far inland the coastline will shift. For instance, the dataset generated by the orbiter Endeavour's radar that mapped heights across the globe is widely-used. But, Climate Central researchers posit that this data suffers from biases—in areas with thick vegetation, the radar has picked up the canopy, rather than the ground, as the surface —that make the land look higher than it actually is. The revised elevation data finds that, even with moderate reductions in greenhouse gases' emissions, six Asian nations, including India, could face annual coastal flooding by 2050; 36 million Indians risk loss of home and livelihood by 2050, compared with 5 million estimated earlier.

Given our limited understanding of climate change and its physical impacts, it is difficult to predict its economic impact. But, as eminent researchers—including economist Nicholas Stern, who, in 2006, came up with one of the most widely-cited estimate of the economic costs of climate change—state in a paper brought out recently by the Grantham Rsearch Institute of Climate Change, The Earth Institute at Columbia University, and Potsdam Institute for Climate Impact Research, existing estimates of the economic impact of climate change don't account for many risks; thus, the fallout could, in fact, be much higher. In 2015, Stern had said that even the assessments and estimations by the Intergovernmental Panel on Climate Change (IPCC) fall way short of the accurate estimate given they "simply do not reflect current knowledge about climate change and its potential impacts on the economy." Now, in the Grantham-Earth Institute-Potsdam paper, the authors say that "economic assessments of the potential future risks ... have been omitting or grossly underestimating many of the most serious consequences for lives and livelihoods". There are many uncertainties plaguing estimation of economic costs, from cascading effects of one or more major impact, some of which could be irreversible or unstoppable, to the potential inability of humans to adapat to certain impacts. These will undoubtedly undermine growth and development, fundametnally setting back remediation. Economic assessments, the researchers say, "fail to take account of the potential for large concurrent impacts across the world that would cause mass migration, displacement and conflict, with huge loss of life", and often "use inappropriate discounting". Moreover, there could be unanticipated risks because scientists may not have even detected their possibility.

In his 2006 paper, Stern had claimed that unabated climate change could cost at least 5% of the GDP annually, and the costs of reducing emissions could be limited to 1% of global GDP. He had estimated that 200 million people globally would likely be permanently displaced by the mid-21st century. The Climate Central research now claims that by that time, coastal floods could expose nearly 237 million people from just six Asian countries to this threat. In 2016, Stern had told *The Guardian* that he had "underestimated the risks" in his 2006 report, and "should have been much stronger ... about the costs of inaction". Policymakers and business leaders can now ill-afford an ostrich-like attitude towards climate change. They must pay heed to Sterns' warning that models that assume catastrophic damages are not possible, or underplay their chances of occurring, "fail to take account of the implications of the science."

Draft Seeds Bill sows crisis

Provides for price-control that will discourage seed-tech firms

GIVEN THE DRAFT Seeds Bill, on which the government has invited public feedback, contains provisions for the Centre and states to introduce capping of prices, it would seem the government is willfully ignoring the lessons of the recent Shetkari Sanghatana (SS) 'civil disobedience' protest, and Monsanto withdrawing one of its most advanced GM offerings from approval. While earlier this year, the SS farmers planted the banned herbicide-tolerant Bt cotton as well as Bt brinjal—farmers' experience with Bt cotton in terms of increased yields and profits guided their defiance of the law—Monsanto withdrew its Bollgard II Roundup Ready Flex (herbicide-tolerant Bt cotton, or HTBT) seeds from the approval in protest of the government's price control policy. The government went after Monsanto, the primary supplier of GM technology seeds in the country, first putting a cap on the price of Bt cotton seeds, and then putting a cap on the royalties it could charge seed suppliers that had licensed its technology. Farmers being charged high prices was proffered as the reason. To add insult to injury, then additional solicitor general Tushar Mehta even told the court, in a case where the government was not even a party, that the patent issued to Monsanto by India was illegal.

It soon emerged that farmers had taken to HTBT seeds in a big way despite it being illegal—nearly a fifth of the seeds sold are illegal HT seeds—and they were willing to pay much higher prices than what was mandated for seeds with older generation technology under the government's price capping policy, since they found them highly beneficial. It would seem easy to blame Monsanto for introducing illegal seeds, but a government panel had opined that it was local seed firms that were responsible for bringing the seeds to the market. As the Shetkari Sanghatana protest shows, the fact is that the farmers are aware of the benefits of GM technology, and are even willing to pay a premium as long as the GM seeds deliver the promised increase in yields, which translates into profits. Any move to, thus, discourage seed-tech, especially by companies such as Monsanto that invest heavily in R&D to develop products that can not only drive up farm profits but also are fast emerging as a key need as climate change effects threaten agriculture, will be anti-farmer. So, it is difficult to understand why the government has made price capping in "emergent situations"—such as "scarcity of seeds, abnormal rise in prices, monopolistic pricing or profiteering in respect of a particular variety"—a part of the proposed Seeds Bill. The fact that illegal seeds are selling at much higher prices than the government-set caps for legal ones means farmer see enough value in GM technology that a Monsanto's R&D churns out to be willing to pay a premium. This would suggest that even at higher mark-ups by seed companies, farmers are not sensing any price-gouging. Disincentivising seed-tech companies in the manner the government proposes to do will have the same effect that the price-caps in pharma and medical devices have had—with companies keeping their latest offerings out of the market, the Indian farmer will suffer, quite like the Indian patient. Given the efficacy of each iteration of GM technology tapers off with the years, losing access to advanced GM tech could seriously undermine Indian agriculture.

CardCHECK

The latest data leak episode exposes the vulnerability of the Indian system

THE GOVERNMENT MAY be hardselling Digital India based on a robust digital payment infrastructure, but the fact is, without commensurate security, it will be hard to sustain. CERT-In has been advising bodies on security threats, and banks have taken due care. Yet, data breaches of Indian users have increased over the last few years. The newest leak pertains to the information of 1.3 million bank cards that is available for sale on the dark web. Reports indicate 98% pertain to Indian banks—of this, 18% is of one banking entity. Although RBI has swung into action, asking banks to replace all cards and look into the matter, Indian banks need a more proactive approach to security given that this is the third big breach in as many years. In October 2016, 3.2 million cards getting compromised in a similar breach had been reported.

It would be best, from the users' perspective, to migrate to online systems and payment options. A virtual card or a QR code are much more difficult to decode, but banks also need to push for end-to-end encryption for PoS terminals. As most thefts occur at PoS and ATM terminals, banks need to develop a system where only certain information is exposed and, that too, in encrypted form. More important, cyber checks need to be de rigeur every quarter, not post-crisis. With UPI hitting a billion transactions, and overtaking debit/credit cards, and AEPS becoming a convenient mode, government is moving towards safer modules. But, until a full switch happens, security needs to be top priority.

EoDB RANKINGS

FOLLOWING THE WORLD BANK FORMULA SHOULD NOT END IN JUST BETTERING THE RANK BUT ALSO ENSURE THAT THIS IS TRANSLATED ACROSS ALL STATES AND CITIES

Rising through the ranks

MADAN SABNAVIS

Chief economist, CARE Ratings

Views are personal

IMPROVEMENT IN WORLD Bank Doing Business ranking has been one of our stated goals. Against this background, the advancement to rank 63 is satisfying. The objective is to improve this rank further to under-50—this will be commendable when reached. The broader question is whether this has really helped to increase investment flows, and if not, does it serve any purpose?

The Economist has always maintained that India, China, and Russia have made this achievement their sole goal, putting in all efforts to work on the formula that goes into giving this rank, and is, hence, against its spirit. However, a better rank, just like an improvement in the sovereign credit rating, enhances the stature of the country in the global arena. Is there anything wrong in this approach? Probably not, because as the World Bank uses a common yardstick for evaluating countries on their ability to improve the doing business climate, any work done should be welcomed. Hence, if we have moved up from rank 130 in 2015 to 63 in 2020, it is certainly something to be proud of. Besides, it also needs to be accepted that high ranks in doing business cannot be the preserve of developed economies alone.

The score looks at 10 essential indicators when ranking a country, and includes parameters such as starting a business, getting necessary permits, credit, protecting investors, taxes, foreign trade, insolvency, etc. Contracting with the government is a new variable mentioned this time and will get included in subsequent surveys. While individual ranks are provided for each parameter, the consolidated rank is based on the weighted average score.

Our rank today is very good when it comes to protecting minority investors (13), getting electricity (22), getting credit (25), and construction permits (27). There is work to be done in case of enforcing contracts (163), registering property (154), and starting business (136). With the IBC progressively catching on, and GST getting into place, there is evidently reason to believe that the target of 50 should be achieved in the next couple of years.

The World Bank admits that there are limits to this methodology because it covers limited cities in a country, and, hence, cannot capture all aspects of regulation in federal structures. Therefore, if Mumbai and Delhi are the cities chosen, things could be very different in the rest of the country—the primary cities or centres are taken to be representative of the entire country.

There are two aspects to this rank change. First, targeting the World Bank rank is a very good guide on what governments should do to ease the business environment. It actually sets a template to be pursued so that policies are focused, and effective. Very often, due to legacy issues, one may not be aware that there are, say, 50 permits needed for getting a construction go-ahead. Once the template is used, the government can consciously remove those that make little sense, and, hence, improve the environment for entrepreneurs. In the absence of such a tested template, governments may often skip certain steps due to ignorance.

The second aspect is the impact of the same. It has been observed that the overall investment rate in the country has been virtually stagnant at 28-29% after being at a level of 34-35% before the slump began. Hence, if one juxtaposes the continuous improvement in ranking on this scale to the actual investment taking place at the macro level, there is not much of a correlation. This is not surprising because the decision to invest depends on several practical factors, which cannot be part of any formula. Even if demand conditions are set aside, for example, while India scores well on the parameter of getting credit, which is based on the institutional set-up for the same, banks may not be willing to lend for investment due to the NPA issue, or the ALM mismatch, or higher risk perception. Therefore, even though there are no physical barriers to borrow money, the willingness to lend is missing. Also, while a doing business formula captures the banking set-up for investment, the bond market, which is still not evolved to cover sub-investment grade projects, matters.

> **Targeting the World Bank rank sets a template to be pursued so that policies are focused, and effective in easing the business environment**

Similar parallels can be witnessed in other parameters, too. Our rank in terms of resolving insolvency has improved manifold to 52 due to the implementation of the IBC. The World Bank scale would look at the structure put in, which is fairly comprehensive, and covers all aspects in terms of having a process in place, including time taken for resolution, and addressing insolvency at the limit. However, at the practical level, if cases exceed the 270 days limit, or get stuck in the litigation process, or the realisation rate falls sharply, the success of resolving insolvency would be low relative to the structure created. But, the ease of doing business score does not capture this aspect.

From a global perspective, it has been observed that India has had a very steady flow of foreign investment—both FDI, and FPI. Improvement in overall rank does matter as these investors are constantly assessing the environment, and any investment in a company that has plans involving permits is of high priority for them. Similarly, investors would also be looking at the issues of enforcing contracts, and resolving insolvency. FPIs would be interested in the issue of protection for minority investors as this is an indicator of how markets are governed. Therefore, the individual scores and ranking of these parameters will be studied closely.

Hence, the process of cleansing the system of unnecessary hurdles is essential, and does help in the long run. It does lower the cost of doing business, and would, hence, make projects more profitable, especially as a number of these investments involve both time, and costs. Following the World Bank formula should, however, not end in just bettering the rank but also ensuring that the same is translated across all states and cities, so that investment gets fair treatment everywhere.

Two things need to be persevered with. The central government has already got into the act of getting states to improve their own business environment. This removes disparities, and, in a way, the business arbitrage that exists, where some provinces are more open to investment than others. Bringing about competitiveness among states is a good idea so that they clean up their houses to attract private investment. Second, the government can now target bringing about changes in the policies/regulation regarding those parameters where we do not do well. This will help lubricate the environment that supports future investment.

Where are agro-derivatives headed?

The derivative market is on the cusp of transformation where synergies could be well brought through a combination of infrastructure and technology

SUROBHI MUKHERJEE

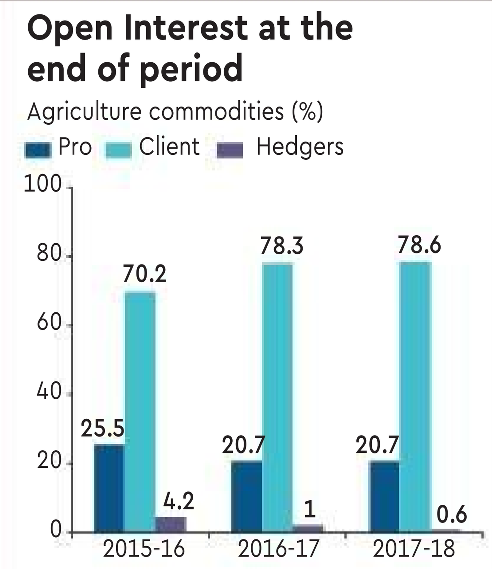
Assistant Director, Ministry of Finance. *Views are personal*

THE NATURE OF online trading, and marketing for agricultural commodities has witnessed some changes in the last two decades, post-removal of prohibition on forward trading and demutualisation of exchanges by the government of India in 2000. The budget of 2015 announced Securities Exchange Board of India (Sebi) as the new regulator of the Indian commodity futures market, replacing the erstwhile Forwards Market Commission, and, from 2016 onwards, Sebi permitted options trading in commodity derivative market. Union Budget 2019 was also favourable to the option class of derivatives by simplifying the Securities Transaction Tax (STT). This is a major push to deepen the commodity derivative market in India, especially as a financial segment, but the primary objective of price discovery and reduction of volatility in the market should transcend other motives.

The idea behind the introduction of agricultural derivatives is to encourage cost-effective hedging for participants like farmers as well as broad-based participation, and enhancing liquidity in the market. A reduction in volatility is conditioned on the presence of hedgers in the market, who takes an offsetting position contrary to what an investor currently has. In a futures market, hedgers are usually protected from any losses, but are also restricted from any extra gains—a case of symmetric risk compared with options market, wherein the nature of risk is asymmetric. Data shows more presence of proprietors and clients (non-hedgers) than that of hedgers, as is evident from the open interest during the years 2015-16, 2016-17, and 2017-18 in agricultural commodity futures. This defeats one of the primary objectives of introducing agricultural derivatives.

Open Interest at the end of period

Agriculture commodities (%)



Source: SEBI, Monthly Bulletin

Often, unidirectional causality exist in price discovery, making the market efficient. But, a lot depends on the genre of the commodity, like food or non-food crop, India's position as consumer of the commodity or exporter in the market, and seasons during which respective commodity contracts are floated, i.e., lean or peak, which determines the volume and value of the commodity futures.

Commodities like guar seed, soya bean, rapeseed/mustard seed are some examples of highly traded commodities in terms of both volume, and value from 2016-17, 2017-18, and 2018-19 in NCDEX platform. Interestingly, within MSP crops, wheat is less traded in the derivative market, compared with *chana* (another MSP crop), which is high on volume.

Although there exist some synonymity between agricultural commodities in terms of maintaining their ranking, both in volume and value, in the futures market, the same could not be said for metal commodities. Gold and silver futures are high on value, but not on volume, while zinc is highly traded in the MCX market.

Forbye, functioning of futures market is largely dependent on the nature of commodity, and thus, liquidity position (presence of non-hedgers), and market risk is commodity dependent. Guar seed is relevant for the international market, for shale gas extraction; castor seed is used in bio-diesel industries, and the high demand of zinc from Chinese market makes these commodities lucrative to be traded on the platforms.

The flow of information between spot and future market also depends on perishability or storage of product. A situation of contango (or backwardation) might develop if storage cost is higher (lower). Hence, physical market infrastructure is extremely important, along with transportation, and handling of commodity.

In order to push the option market, Sebi permitted trading in agricultural commodities. At present, only few commodities, like guar gum, guar seed, chana, soya bean, and refined soya oil, are traded in NCDEX platform. A gradual opening of market under option derivative would deepen the market, and has the potential to reduce post-harvest losses if adequate physical infrastructure is built.

The derivative market is on the cusp of transformation, where synergies could be well brought through a combination of infrastructure and technology. It has the potential to enhance transparency, and efficiency given that existing APMC in states dictates the regulation and fee structures.

Looking ahead, it appears that agro-commodities derivative market is headed for a shift with the introduction of options trading. Though, in advanced countries, growth of commodity derivatives is seen as a portfolio diversification, for a country like India—where close to half of the workforce still depends on agriculture, and price increases have adverse implications for the poor—commodity derivatives should not be viewed only as a segment of financialisation, but a mechanism to mitigate/reduce risk which farmers face from the time of sowing till the sale of the produce.

LETTERS TO THE EDITOR

Breach of privacy

The startling claim made by WhatsApp that several Indian activists and journalists were among those snooped upon by Israeli spyware Pegasus, sold only to official agencies, has raised eyebrows. The spyware can turn the phone into a spy device by switching on the camera or microphone. The development has triggered a blame game between the BJP and the Congress and brings into sharp focus the credibility of deploying such software. Though the government has asked the messaging platform to explain the breach of privacy, it is another case of closing the stable door after the horse had bolted.
— NJ Ravi Chander, Bengaluru

Quantum computing

The concept of advanced-computing, defined in terms of multi-processing capabilities and memory-support, is gradually being over-shadowed by quantum-computing. While simulating quantum physics, de-crypting security-keys across the internet or solving random-circuit sampling problems are far from viable-applications, the breakthrough could optimise the production of batteries, fertilisers and lifesaving drugs. Risk to information-security due to misuse of the supremacy and the impediment of a huge-size, must be mitigated. A self-proclaimed Quantum-Supremacy is seemingly a misnomer, as the field is in a nascent stage and more R&D is required before the machines can find a wider-application. While it is tough to replace the traditional computers for good in near-future, the underlying quantum-architecture offers immense potential as Qubits can represent multiple/complex states at a time and leverage quantum-phenomena like entanglement, superposition & interference to improve accuracy and render higher-throughput.
— Girish Lalwani, Delhi

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GRAIN CONTROL

Clearing up the FCI mess

Govt needs to implement the recommendations of Shanta Kumar committee to reorient the role of FCI

THE UNPAID AND BALLOONING food subsidy is in the news because its funding is not fully included while calculating the fiscal deficit. The question is, was that always the case?

From 2001-02, the percentage of subsidy released, in the year in which it was incurred exceeded 74%, barring 60% in 2011-12. Things changed when The National Food Security Act (NFSA) was introduced in September 2013. Its full impact was felt starting 2014-15. The accompanying table shows subsidy amount leapfrogged. It went up 92% between 2011-12, and 2018-19RE. However, the gap between the subsidy burden of FCI and the amount reimbursed by the government has increased starting 2014-15.

It is pertinent to ask if the then government followed Nobel Laureate Abhijit Banerjee's experimental approach to poverty alleviation. Were "randomised trials of this intervention among the poor with control groups set up for the sake of comparison to draw evidence directly from the actual people who were expected to benefit?"

Realistically, can any finance minister budget for food subsidy of ₹1,84,220 crore without exceeding the fiscal deficit target by a mile?

NFSA guarantees 5 kg of food grains per person per month to entitled beneficiaries. The Antyodaya Anna Yojana households, which constitutes the poorest of the poor, guarantees 35kg per household per month. The Act mandates that 67% of the population (75% in rural areas and 50% in urban areas) must receive highly subsidised food grains? Allocation of food grain is skewed in favour of wheat and rice.

According to PRS India report, the expenditure on food subsidy is increasing while the ratio of people below the poverty line is falling. The ratio was 21.9% and the number of poor 26.9 crore in 2011-12. "A similar trend can also be seen in the proportion of undernourished person in India, which reduced from 24% in 1990 to 15% in 2014."

This begs the question as to why the subsidy has gone up substantially? NDA-2 inherited NFSA. However, it has kept the per kg rates unchanged since 2014, i.e., rice ₹3, wheat ₹2 and coarse grains ₹1, while cost of procurement and storage have increased. If prices were increased regularly, the subsidy bill would have been much lower.

Two, the number of beneficiaries stood at 81.3 crore according to a July 2019 Press Information Bureau release, as against about 35 crore prior to introduction of NFSA.

Three, 'open ended' purchase has led to excess grains stocks being held by Food Corporation of India (FCI). According to a *Business Standard* report, stocks held by FCI as on Sept 1, 2019 were wheat 41.49 mt against a buffer of 20.52 mt, and for rice, 26.14 mt against 10.52 mt. Stocking norms were laid down on January 22, 2015, and have not been revised thereafter.

Four, it seems that despite a decline in poverty rate, the non-poor are still identified as poor by the government.

Five, according to a 2011 report, leakages in PDS were estimated to be 46.7%. Ashok Gulati wrote that, "Later on, the Modi government introduced PoS machines and weeded out some fake ration cards. But, still, leakages continue, and rough estimates range from 30-40%. Leakages can be reduced if issue price is linked to, say, 50-75% of MSP."

Borrowings from the National Savings Fund and increase in short-term borrowings helped FCI meet its liabilities.

Note that NSS borrowing started in 2016-17, when the Central government had to fund pay-outs on account of the 7th Pay Commission, whose annual outflows were estimated at ₹1,02,100 crore in 2016-17. As food and salary pay-outs increased so did NSS borrowing.

Despite the Centre spending over ₹4 lakh crore, excluding what the state governments spend, the cries of farmer distress are only getting shriller. Is the shortage of funds cause for distress or is there another reason?

We forget that agriculture is a State subject, and a legacy of the Government of India Act 1935, but we relentlessly expect the Centre to reduce farmer distress.

Instead of scrapping the APMC Act (Agriculture Produce Marketing Act), introducing laws for contract farming and agricultural land lease, promoting drip irrigation, States have been writing off farmer loans, and providing free or subsidised power. States have not agreed to an even Mandi Tax Rate for e.g. "a company procuring grain had to pay 6% tax in Punjab, 4% in Haryana and 0.2% in Madhya Pradesh. For pulses, mandi tax in UP is 2.5%, in MP it is 2.2% while in Gujarat it is 0.6%."

Subsidy ensures the vicious cycle of farm distress continues and leaves the states with lesser resources for investment in agriculture R&D and water management (excluding national waterways)-again a responsibility of the State government-benefits of which shall accrue to farmers in the long-term.

Having said that, the Centre must launch a communication campaign with these objectives. One, a change in the mindset, i.e. from being a food-deficient to a food-surplus nation. Two, educate people on what the state and Central governments are responsible for accountability is known. Three, enlighten people of the benefits from consuming millets, whose production fell post the Green Revolution (Area under millets cultivation was at 14.72 million hectares in 2015-16 as against 37 million hectares in 1965-66), and traditional rice varieties.

Set up in 1965, FCI best symbolises the shortages mindset. Modi had set up the Shanta Kumar Committee. The brief was how to make the entire food grain management system more efficient by reorienting the role of FCI in MSP operations, procurement, storage and distribution of grains under Targeted Public Distribution System (TPDS). Some recommendations, made in the January 2015 report, are worth revisiting.

One, "the FCI hand over all procurement operations of wheat, paddy and rice to states (Andhra Pradesh, Chhattisgarh, Haryana, Madhya Pradesh, Odisha and Punjab) that have gained sufficient experience in this regard and have created reasonable infrastructure for procurement."

Two, FCI should accept only the surplus grain (after deducting the needs of the states under NFSA) from these state governments (not millers) to be moved to deficit states. "As on December 2017, only 17 states have adopted decentralised procurement."

Three, "the statutory levies including commissions, which vary from less than 2% in Gujarat and West Bengal to 14.5% in Punjab, need to be brought down uniformly to 3%, or at most 4% of MSP, and this should be included in MSP itself."

Four, "GoI needs to revisit its MSP policy. Currently, MSPs are announced for 23 commodities, but effectively price support operates primarily in wheat and rice and that too in selected states." Importantly, if subsidised wheat and rice are partially replaced by high protein pulses it would discourage their production and save water-subsidy too.

Five, committee findings "reveals that 67% coverage of population is on much higher side, and should be brought down to around 40%, which will comfortably cover BPL families and some even above that." Compare list of beneficiaries with other government databases to weed out the non-poor.

Six, to reduce excess stocks "A transparent liquidation policy, which should automatically kick-in when FCI is faced with surplus stocks than buffer norms" is required.

Also, the Centre must use the PM-KISAN scheme to get the states to hasten the process of digitisation of land records and collect farmer data. Once done, the reliability of farmer details would increase allowing government to explore payment of subsidy via DBT and providing farmers in real-time.

By nature, most Indians are resistant to change. They accept change when a crisis erupts like it did in 1991. Are we waiting for crisis in agricultural to reform?

The author does not claim to be an expert on agriculture.

ILLUSTRATIONS: ROHNIT PHORE

Subsidy incurred by FCI, 2011-12 to 2018-19

Year	Subsidy	Year	Subsidy
2011-12	68,697	2014-15	1,05,007
2012-13	80,563	2015-16	102,425
2013-14	89,492	2016-17	109,135
		2017-18	116,281
		2018-19 R/E	131,787
		2019-20	1,84,220*

Source - http://fci.gov.in/finances.php?view=22
*Food subsidy bill per Budget July 2019

Subsidy and Grants FY20

Subsidy	(₹ crore)
Food Subsidy	184,220
Income transfer scheme	75,000
NREGA	60,000
Fertilizer Subsidy	79,996
Interest Subvention	HELP
Total Subsidy by Centre	**3,99,216**

FCI borrowings (Published Annual Accounts)

Borrowings (₹ crore)	2014-15	2015-16	2016-17	2017-18	2018-19
Long-term	13,050	13,039	13,000	13,000	—
Short-term	78,353	76,978	57,367	82,376	—
NSS	0	0	56,000	94,000	—
Other liabilities	0	0	57	—	—
Total	**91,403**	**90,017**	**1,26,424**	**1,89,376**	**2,65,000**

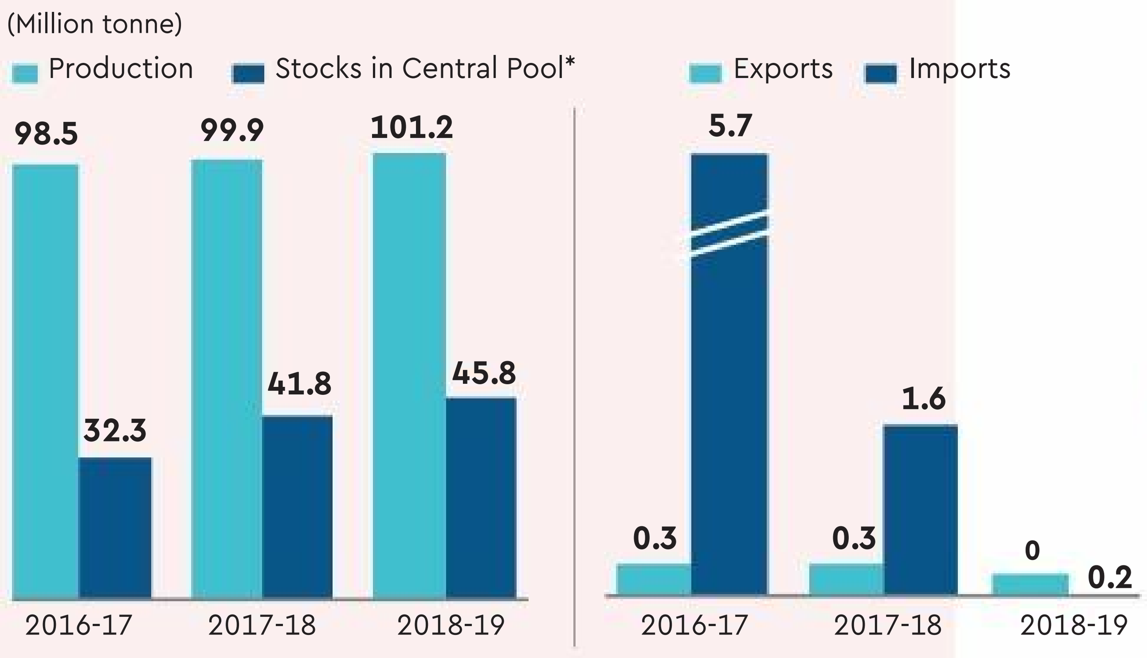
Data 2018-19 from ThePrint, accounts not published yet

DATA DRIVE

Weighed down by grains

THE COMMISSION OF Agricultural Costs and Prices (CACP), in its report for the rabi 2020-21 season has raised an alarm over Food Corporation of India's open-ended policy. The report highlights that foodgrain stocks, till October 1, in the central pool—at 64.2 million tonnes—were 109% more than the buffer requirement. While India has been recording higher output each year (2018-19 is the third year of bumper output) stocks in central pool have also been increasing. This has contributed to additional burden for the Food Corporation of India as economic costs of procurement and distribution have been increasing as well. More important, Minimum Support Price (MSP), in certain years, trending above the market price has led to the burden on Food Corporation of India growing manifold. However, this is not the case for this year, data for pulses indicates prices dipping much below the MSP. Thus, the Commission of Agricultural Costs and Prices is right in suggesting a review of the open-ended procurement. But the government also needs to review its MSP policy. With the subsidy bill doubling from ₹92,000 crore in FY14 to ₹1,71,298 crore in FY19, and Food Corporation of India debt at ₹200,000 crore, with an additional ₹80,000 crore of short-term debt, there is very little wiggle room for the government and Food Corporation of India.

Domestic supply situation of wheat

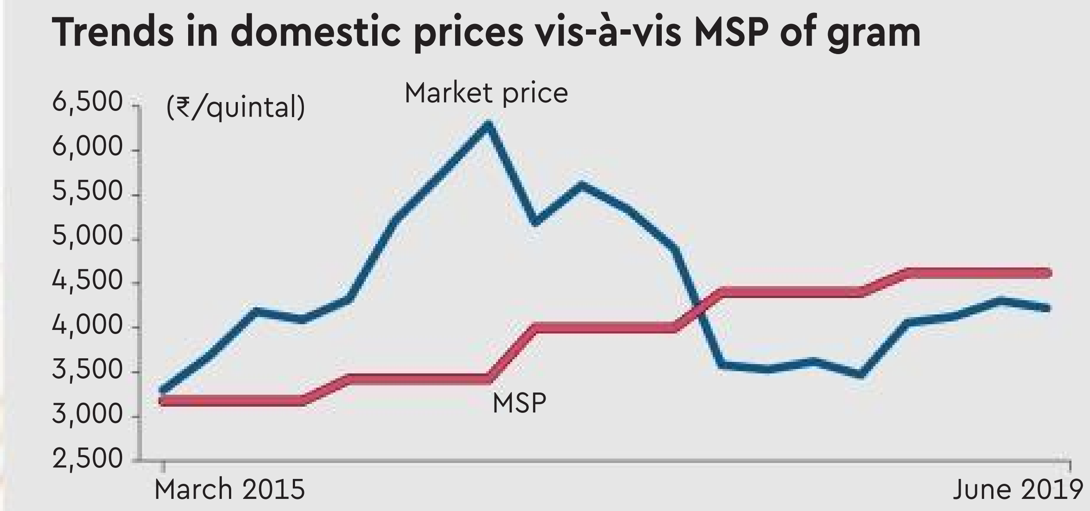


Note: *as on July 1, 2017, 2018 and 2019
Sources: FCI, DGCIS and DES, MoA&FW

Trends in domestic market prices vis-à-vis MSP of wheat

Note: Weighted modal prices of Haryana, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh, which covers 86 percent of wheat production in India

Trends in domestic prices vis-à-vis MSP of gram

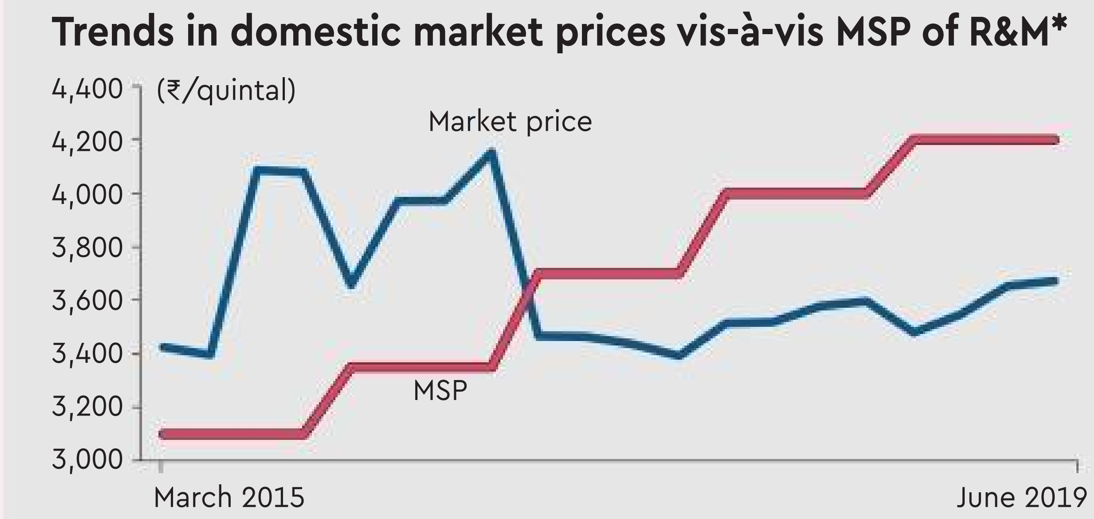


Note: 1. Weighted wholesale modal price of Andhra Pradesh, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Uttar Pradesh, which covers 93.2 percent of India's total production. 2. MSP is inclusive of bonus.

Trends in domestic market prices vis-à-vis MSP of lentil

Note: 1. Weighted wholesale price of Chhattisgarh, Jharkhand, Madhya Pradesh, Uttar Pradesh and West Bengal, which cover 71.8 percent of total production. 2. MSP is inclusive of bonus.

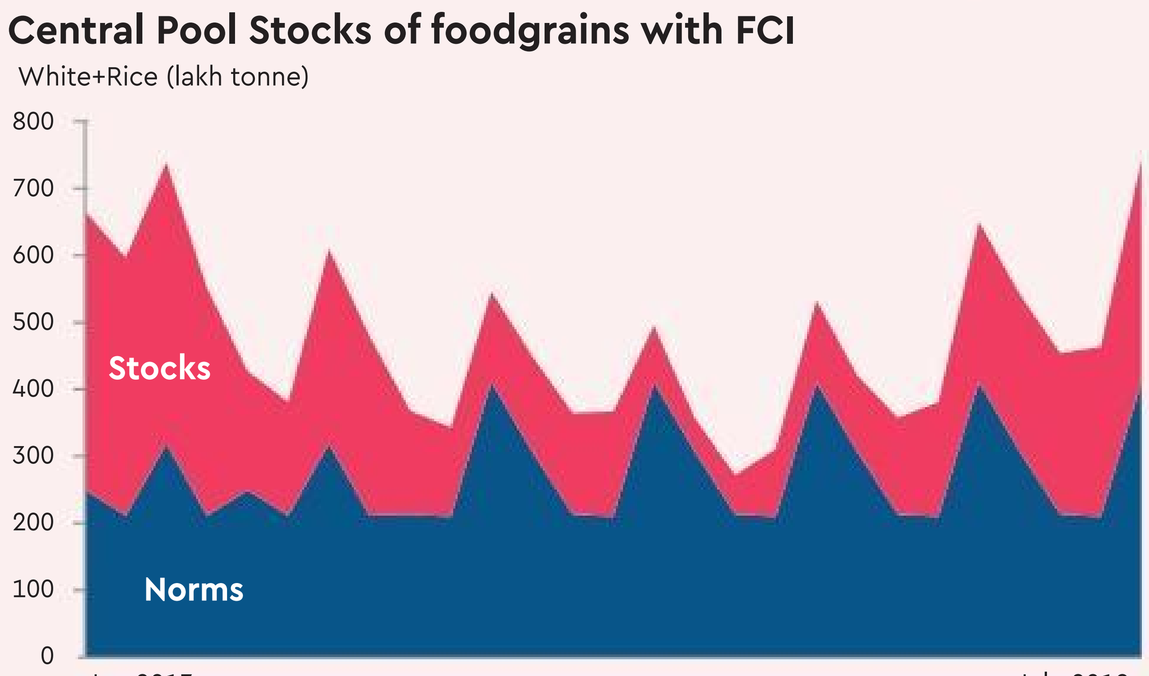
Trends in domestic market prices vis-à-vis MSP of R&M*



Note: 1. Chhattisgarh, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal, which cover 90.7 percent of India's total production.
2. MSP is inclusive of bonus.

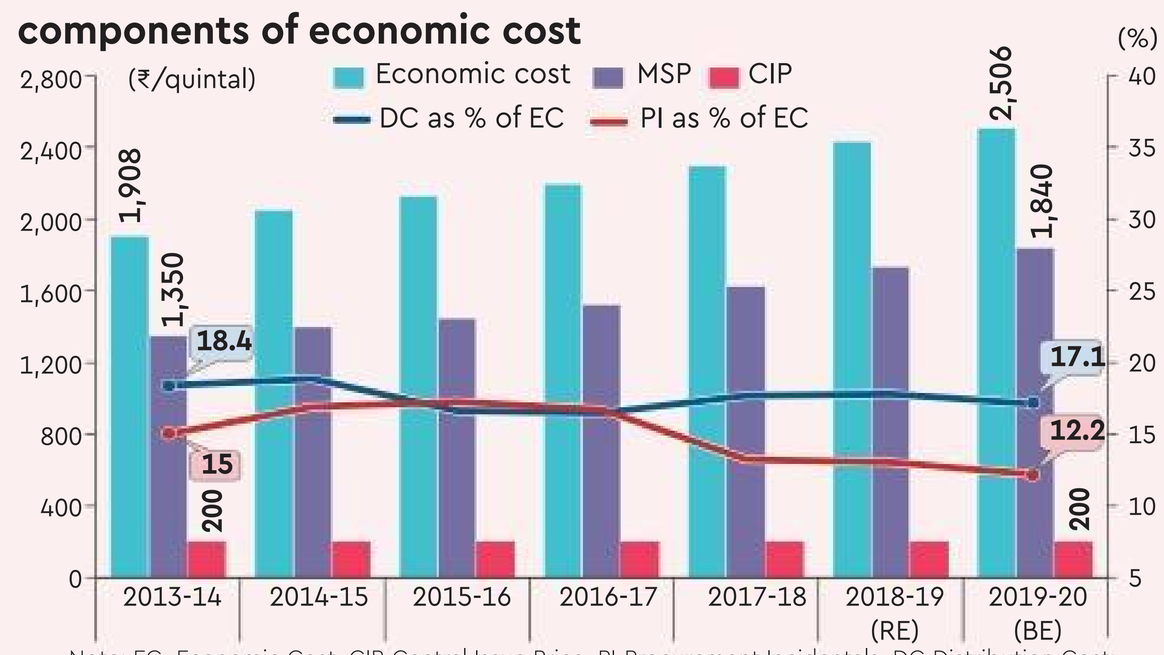
Sources: AGMARKNET and DES, MoA&FW
* Raisin and mustard

Central Pool Stocks of foodgrains with FCI



Source: Department of Food and Public Distribution

Economic cost of wheat and share of different components of economic cost



Note: EC- Economic Cost, CIP-Central Issue Price, PI-Procurement Incidentals, DC-Distribution Cost; Source: FCI