

Agriculture distress – Working towards a Sustainable Solution

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The farmer in India continues to struggle and today faces a strange situation where on one hand, we have unprecedented inflation and on the other low returns on farm investments. More than 300 districts, mostly in the Central Indian plateau have had drought like conditions for two years running. Our subsistence farming allows the farmer to somehow manage one year of drought. Twice in a row and he is close to starvation. The agriculture minister informed the parliament that 100 farmers from Wardha district in Maharashtra has sought government permission to commit suicide. 3228 farmers in Maharashtra alone committed suicide, at the rate of nine a day. The crisis is severe.

Public Policy in India wanted to rationalize subsidies, and focus on manufacturing, urban infrastructure and skill development. However, with Chattisgarh, Maharashtra, Karnataka, Andhra Pradesh, Jharkhand, Uttar Pradesh, Odisha and Madhya Pradesh reeling under drought related stress, the strategy had to change. The Union Finance Minister had in 2017 announced that the biggest challenge to the Indian economy is agrarian distress. The Prime Minister hailed that year's budget as being pro village, pro farmer and pro poor budget. The late M S Swaminathan too underlined the importance of retaining youth in farming and giving agriculture an income orientation.

All this because the numbers in Bharat are mindboggling even today. The Socio Economic and Caste Census of 2011 says that 73 per cent of the population lives in villages. Agriculture is the primary source of income for 179 million rural households or 30% of the population. 51% depend on manual labour for a living. 56% of rural households do not own land. With such a large proportion of the work force dependent on agriculture, farming better not fail, certainly not for two successive years. But growth was frugal at 0.2 per cent in one year and 1.1 per cent the next. Crop failure hurts the rural poor the most, leading to utter misery.

Reports of large numbers eating grass in Bundelkhand and roots and dried kernels in Odisha only underline these vulnerabilities.

The farmer therefore is left with little choice. Traditionally rustic, usually illiterate, the linguistically challenged migrant worker with no skills. He could only work in the construction sector, but business activity there has all but stopped on account of low credit offtake, stalled projects, debt pile up and slowing demand. The only option available for most farm labour is the government sponsored employment guarantees through the much-discussed Mahatma Gandhi National Employment Guarantee Act.

Interventions in the agri sector

Why does the government need such large scale intervention in the agri sector? Agriculture in most of India is antiquated. The centuries old picture of a farmer who toils away with a couple of bulls on parched brown soil still holds true. Early in June, the family looks expectantly at the sky, and hopefully looks for clouds to form, the sky to darken and raindrops to fall. With poor quality seeds, fertilizer use that is usually unscientific, pest attacks and unreliable rains, productivity in India is among the lowest in the world. Only 6 per cent of farmers in Bihar and West Bengal own any irrigation equipment. Even lesser have tractors or tillers. According to the SECC, 3.6% of rural households in India have a Kisan Credit Card (KCC) for farm loans with a credit limit of more than 700 dollars. Post harvest, the farmer, usually with no access to storage facilities, stands at the mercy of collusive price fixing by government regulated wholesale markets called mandis. The notion of price discovery does not exist in a monopsonic market.

The policy approach to all these problems has been to increase production by subsidizing input costs. Power was given free of cost in most places, fertilizer companies were heavily subsidized, canal water was supplied without meters and minimum support prices announced whenever politically expedient. As a result, production shifted from low cost to high cost regions, production costs increased and so did regional imbalances in food availability. Public investment in research on seeds, drought resistant varieties, high yield technologies went

down. Warehousing and logistics were ignored leading to significant losses in storage and transportation. And of course, all investment in irrigation projects, rain water harvesting, river management, restoration of ponds and lakes simply disappeared.

Why are rains so important for India? Monsoon failure or climate change is the excuse used to explain away drought and starvation. Bluntly put, it is poor agri policy that allows a large farm sector to remain so dependent on rain even now. The numbers tell the story. It is at best 46 per cent according to the government and most probably only 27 per cent of land according to other estimates that is irrigated. In the best farming states of Punjab and Haryana, about 50 per cent land can grow two crops a year while in Odisha 20%, and Jharkhand 25% and in Chhattisgarh only 13% land has access to irrigation.

Like with labour markets, India's agriculture sector too has been shackled by rigid and archaic regulations. Both these sectors also are state subjects and therefore we also have differing rules that come in the way of any scaling up that any firm would want. Again, like in the case of labour, the government has used the pandemic to issue some quick ordinances to replace existing statutes. The COVID-19 pandemic has changed everything in many ways. Besides impacting the way we live and work, it has also severely affected the economy. Countries have been compelled to take a relook at various sectors and salvage them from the impact of the crisis.

For India, agriculture is in many ways the backbone of economic activity. It still hires nearly 50 percent of the workforce and it is growth in agriculture that catalyzes growth in the manufacturing and the services sector too. Given the discussions that have been going on for decades now, on Agricultural Mandis and on Essential Commodities, it was just a matter of time before some big changes were effected. Therefore, it was not surprising that some big amendments to the Essential Commodities Act, 1955, Agriculture Produce Marketing Committee (APMC) jurisdiction and laws on inter-state trading were announced recently. Besides ensuring better prices for farmers and improving their livelihoods, these reforms have also paved the way for further streamlining of the otherwise unorganized farming sector

of the country. For example, it would enable a harmonization of the various taxes that farmers pay to the Agricultural Committee, ranging from 1% in Rajasthan to 8.5% in Punjab.

Technology adoption

Such a scenario could prove to be an opportune time for technology adoption. The reforms spearheaded by the government when clubbed with digitization led by e-commerce could benefit the sector at large. In fact, it could go a long way in making agriculture in India a globally competitive sector. Just like how technology has helped identify gaps and find solutions in sectors such as manufacturing, healthcare and finance, the time is ripe for agriculture to make the most of it. Promising digital solutions such as e-commerce can address pressing challenges, posed mainly by the pandemic in the present time. Let's look at how it can prove to be a key enabler for enhancing the existing agri linkages.

Key benefits of e-commerce

Of the several issues faced by the agriculture sector, e-commerce can solve problems such as high level of fragmentation in the supply chain, large volumes of produce traded, and quality and costs of products. Given their access to adoption and assimilation of new technologies in the supply chain, these companies can go a long way in helping to reduce costs. An indirect advantage of this would be empowering farmers, especially those who are not in a position to negotiate better prices for their produce. This will give them access to capital for adopting technology suitable for enhancing agricultural practices. Speed of the produce reaching from farm to table is also an immense challenge for several farmers in India. E-commerce can help fill in the bottlenecks along the way by setting up an entire channel of the supply chain. This way, they can procure easily from farmers leading to the agriculture market gaining immense speed.

Farmers in India are often exploited by middlemen, which leads to excess inventory, leading to loss of their rightful earnings. The transparency and efficiency followed by e-commerce companies will help eliminate at least some of the unnecessary middlemen resulting in inventory reduction, which makes it easier for a farmer to sell their produce to consumers at

competitive prices. Besides easing of processes, it can also ensure effective checks to ensure that quality is not compromised in any way.

A farmer puts in tremendous efforts in harvesting the crop and is entitled to reap the monetary outcomes of the hard work. Tech adoption can help with optimum utilization of produce. If deployed thoroughly, it can help in reducing post-harvest wastage by improving market efficiency; give a boost to agricultural content development and its upgradations. Moreover, it can significantly amplify the reach of agricultural products thus leading to increased cross-boundary selling; produce can be delivered beyond boundaries.

Even today, a lot of farmers face constraints when it comes to selling their produce to a larger customer base. E-commerce can solve this issue with their capacity to bringing niche agricultural products to nationwide markets. A NASSCOM study of 2019 has suggested that Indian farmers face post-harvest losses amounting to a whopping ₹93,000 crore.¹ While a slew of agritech start-ups are trying their best to bridge the gap, adding e-commerce to the mix can further accelerate their work toward boosting farmer income. This will happen when grading of products is enabled, product tracing happens easily and labelling becomes a reality. Digital inclusion therefore would enable most farmers to access a new supply chain that reduces leakages and losses during transportation and allows for a far more efficient supply chain linking the producer to the plate.

Challenges in the rural sector

The challenges of course are formidable. The social sector especially in Rural India suffers from years of neglect and a large gap between demand and supply. Inefficient public sector delivery has resulted in unequal access to health and education services. Poverty is still widely prevalent and inequalities are rising. The judiciary is strongly rooted in a rule of law but is agonizingly slow. The political process is firmly democratic, but caste divisions still decide winners in electoral battles. The work force is large, but is unskilled and untrained.

¹ <https://www.pressreader.com/india/the-hindu/20190816/281861530145806>

Bureaucratic processes can be complex, corrupt and frustrating especially where jurisdictions between the center and the state are blurred. Agriculture remains a fragmented sector, with enormous controls and state intervention, and manufacturing is riddled with state taxes, regulation and infrastructure bottlenecks. It is the services sector that grows leaps and bounds.

Banking, telecom, Insurance and the capital markets in India are now a unified and a common market. In addition, India's free labour market allows skilled workers to move freely across the rural urban divide in the country. These advantages work well when we look at the sunrise sectors of healthcare and education where the gap between supply and demand is huge. India also is uniquely situated in being able to provide high quality services to foreign customers in these sectors.

Failures in rural development

The failures we see are very often due to poor recruitment and understaffing. It is critical to invest in public health, primary care and preventive care. There is indeed enough criticism of the manner in which education has been imparted especially in the rural development sector.

The problems are systemic:

- mismatch of competencies;
- poor teamwork;
- persistent gender stratification;
- narrow technical focus without broader contextual understanding;
- episodic encounters rather than continuous investments;
- weak leadership to improve performance.
- Inability to look at Universal coverage

There is the question of whether the public sector can be replaced by the private in providing essential services like primary education, family health and immunization. Also on whether we need more of social businesses and civil society intervention for improving access. The role of technology of course would play an important role.

To address all these issues and the vexatious nature of farm sector reforms, it is indeed important that we tackle the various problems that India's agriculture sector faces. It needs a sustainable development view and should look at how markets can be leveraged to provide high returns to farmers and lower the risk due to price fluctuations.