

## TOP NEWS

Post harvesting challenges in India and how agri tech enables solutions

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## Sandeep Sabharwal

Agriculture has always been one of the major contributors to the Indian economy. While it constituted nearly half of the country's GDP post independence, it continues to add significantly despite the industrial growth over the decades, making India one of the largest food producers in the world. According to a report by McKinsey, by 2030 agriculture could contribute about \$600 billion to the country's GDP, if the untapped potential is utilised. While it will certainly be shot in the arm for the India's economic growth, it will ultimately lead to an increase in income for farmers, helping them lead a better life

In this stead, research and work has been done to improve harvest quality, but innovation in technology has been limited to the farming process. Half of India's poor farmers lack basic farming equipment. Infact, three of every four farms in India are at an increased risk of damage from pests, weather and other unforeseen events. This implies that a lot needs to be done in terms of finding solutions that cater to post harvesting challenges. Introduction of agritech in the past few years has proved immensely beneficial to the farmers.

AI and ML based modern warehouses for crop storage has emerged as a boon for the farmers. Earlier there was a 10% grain loss as crop in traditional warehouses were susceptible to malpractices and mismanagement. Smart management has brought this figure down to 0.5% and the agri sector has the potential to save Rs 87,000 crore annually by using innovative Warehouse Management techniques. Such smart warehouses are secured by 24x7 by solar-powered cameras that ensure 24x7 supervision, and centrally-controlled AI-based systems. Now, it is possible to supervise the grains going in and going out, with time stamps through smart entry cards. Farmers can access their crop at any point of time, without the need for human intervention, enabling them to work as per their convenience and needs. When replicated across the country, this solution will change the way farmers are always worried about their crops. Predictive Analytics of crop management is the future from where we see it.

Quality check of the crop is another pain point as farmers often need to travel across cities, spending time as well as money to get it done at accredited labs. An innovation in this stead is the widely available QC app for crops that directly connects the farmer to Central AI systems accredited with National Accreditation Board for Testing and Calibration Laboratories (NABL), the apex accreditation body for Quality testing.

After downloading the app, a farmer needs to upload a picture of his produce and will get a certificate within 5 minutes. Powered by AI, such an app automates the testing process, ensures precise and quick Quality Assessment through a mobile phone. The first ever such app has successfully facilitated 1,41,060 inspections in about 20 states, and about 6.5 million Metric tonnes of food grain.

However, there are only early adapters adopting this product, whereas this technology can be beneficial to many more. The farmers need this tech at the mandis the most, as the right valuation of their crop can result in better price for it. Setting up centres on the lines of Suvidha Kendras will empower and enable the farmer to reap the benefits of latest technology. A facilitator can do the handholding for these farmers, making the process easier for them. While there have been only a few NABL accredited labs in the entire country till date ,this technology amalgamated with physical presence has enabled 30 such kendrasto be set up in just last few months alone, with plans of 500 more in the coming months. Blurring the digital divide, these kendras truly epitomise a phygital world, something that is a necessity as we are on the cusp of a major change.

Another problem hampering the agri industry is the lack of financing options. As many as 50 percent of farmers are not able to avail them, while those who get it pay inflated interest rates, almost 10 to 25 percent above the bank rates. While the crop has been harvested, the farmer needs money to sow the next crop, before the first one has been sold out. There is a need for agri-focused NBFC entities that can empower the farmers by giving them timely loans when they need it the most. A recent scheme by such NBFCs has benefitted at least 25, 200 female agricultural and allied entrepreneurs, and disbursed loans to the tune of about Rs 2813.8 crore.

Agritech imbibing this Phygital concept has the power to empowers Indian farmers, allowing them to leverage it for storage, QC, finance, which ultimately helps them boost their agricultural prowess. This eco system has the power and leverage to scale the Indian Agri Industry to a new realm and make India as an Agri powerhouse for the World population.

(The author is CEO of SLCM)







