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HOW AGRICULTURE INDUSTRY IS ADDRESSING THE CHALLENGE OF MODERN WAREHOUSES

There is an imperative need for inclusive and holistic development in agriculture warehousing for economic growth, food security of the nation, and substantial export





Outlook Start-Up Desk

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India being an agrarian economy has about 54 per cent of land classified as arable. A major chunk of the citizens is involved in the agriculture industry since their livelihoods rely on it. According to data shared by scientists from the Indian Council of Agricultural Research (ICAR) during the recently concluded International Workshop on Food Loss and Waste Prevention in the South Asian Region, the country faces the loss of approximately 74 million tonnes of food every year or about 22 per cent of total foodgrain output.

Dependent on old methods of farming, the agri industry is in desperate need of innovative solutions. The post-harvest food grain loss can be curtailed by creating a network of warehouses, equipped with modern technology. As a matter of fact, the agriculture industry is rising to the challenge and addressing this pertinent concern with the help of innovative tech-based solutions.

As per an estimate, the warehouse industry is expected to reach Rs 2821 billion by the end of 2024 while it was almost half of it in 2019 at Rs 1501.2 billion. Expanding at a CAGR of approximately 13.57 per cent in the 2020-2024 period, it can be inferred that this industry will play a key role in driving the economy.

India being an agrarian economy sees a major chunk of this warehouse industry catering to the storage of cereals, sugar, oilseeds, spices, fruits, vegetables, pulses, and food grains. The agricultural warehousing industry in India was valued at R 145.82 billion in 2019 and is expected to double up and reach Rs 365.75 billion by the end of 2024.

Tech-driven Solutions for Agricultural Advancement

There is an imperative need for inclusive and holistic development in the agriculture warehouse industry as it ensures economic growth and food security of the nation and forms a major chunk of exports too. For this, technology must be utilised to create innovative solutions that can help the farmers in mitigating their job of producing food crops, storing them till the right time, and finally reaching the market.

State-of-the-art warehouses that store these commodities are the need of the hour, and technology must be utilised to its full potential to create innovative solutions for any problem that may arise.

The agriculture industry needs tech-based solutions for storage, fumigation of crops, quality assessment, crop valuation as well as risk management. App-based solutions that use AI/ML and the latest technology have become the foundation for the 4th wave of revolution that the industry is currently undergoing. Algorithm-driven engines have ensured that food grain losses decrease from 10 per cent to 0.5 per cent in dry Grains. This is only possible due to the unique management system. This small step itself can save up to Rs 87,000 crore annually, which can be used to further improve the industry and the entire food supply chain. Keeping long-term and short-term goals in mind, technical advancement in the industry can further help in advancing the agri industry.

Enhanced Safety and Security

Over the years it has been seen that warehouses often require CCTV monitoring. However, the requirement is to have a self-sustaining unit with a well-trained qualified staff for supervision. Solar-powered CCTVs can easily monitor warehouses 24x7, without depending on electricity, which is often erratic in remote parts of the country.

It can be centrally controlled and monitored and thus keep a check on transactions and monitor the health of the commodity when it is stored. It significantly reduces malpractices at absolutely no cost to customers.

Such commodities stored in warehouses are acknowledged by multiple financial institutes. They agree to loan depositors against collateral, thereby helping depositors financially and enabling them to hold commodities for larger periods while helping reduce post-harvest losses. Technology has been a major factor in the success of preventing such losses.

Quality Check Solutions

Another major problem impacting the farmers is the quality check of wheat crops. Traditionally it has been a long process where the farmer needs to visit the authorising and testing labs, and then wait some more to get the certificate. Today one can get the quality check of crops done at the click of a button on their mobile phones.

All one needs to do is click a photo and upload it, and the accredited wheat testing lab will generate a detailed report analysing the type and quality of the crop. This saves time and money that would have been otherwise spent on logistics.

To date, 1,30,457 inspections have been carried out and 5.9 Million Metric tonnes of food grains have been tested across 20 states from one central source. The reduced turnaround time has saved ample time and effort for the farmers.

We understand that farmers need a steady flow of cash so that they can prepare for the next season well in advance, even before the current crop has reached the market, and is yet to be sold. Agri Loans disbursed to the Farmer Producer Organisation and ultimately to the farmer based on their current crop enable them to work on time and strengthen the supply chain as well. Liability lines are also offered to Agri Enterprises, Arhtiya's, Traders, and MSMEs. At the end of the funnel, women too benefit and become an equal partners in the growth of their farms, and the nation.

The physical reach of such facilities must be increased by creating a digital footprint. A listing platform can become the perfect solution. When it has all the stakeholders of agriculture on one platform, the 'Phygital' ecosystem becomes a reality. As the physical centers collaborate with farmers and their service providers on digital medium, the agri industry is moving in the right direction.

There is sustained growth in the dry storage warehouses, while cold storage expansion is rapidly on the rise. This way the warehouses will be able to cater to not just dry food grains but horticulture products too and impact more farmers.

-Sandeep Sabharwal, CEO of SLCM

