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THE HINDU BusinessLine

A cool solution for farmers

In Nigeria, ColdHubs' solar-powered walk-in fridges are helping to reduce farm produce waste

For millions of Nigerians in rural Kaduna state, a trip to an outdoor food market provides cheap and ready access to the staples of a traditional diet. In a normal week, dozens of wicker baskets overflow with ripe tomatoes, an essential ingredient in the rich stews favoured by locals.

Yet, over the summer, market-goers were dismayed by the spiralling costs of a fruit that has come to be seen as a national necessity. After a moth epidemic ravaged some 80 per cent of the region's tomato farms in May, sending the price of a basket zooming from $1.20 to more than $40, Kaduna's authorities were forced to declare a state of emergency.

Kaduna's 'tomato emergency' was triggered in part by a national dip in food production that has Nigeria's food security experts very concerned. In the north-east, production in large parts has been all but abandoned in the face of continued attacks by Boko Haram militants, putting millions at risk of famine.

Yet, even in areas where food production remains strong, poor handling, storage and delivery methods mean that much of Nigeria's food is spoiled before reaching those in need. In a bid to minimise post-harvest losses — which the government estimates could be higher than 50 pre cent for some fruits and vegetables — businesses are beginning to develop new technologies to assist farmers.

Enter ColdHubs

For one entrepreneur, the causes of post-harvest losses are obvious. "Most of the spoilage starts on the farms because delivery trucks don't visit farmers every day," said Nnaemeka Ikegwuonu, Chief Executive of ColdHubs, a cold storage company.

"Sometimes it takes three or four days for trucks to get to the farm. So, these farmers keep the food in a shed or try and cover it, but by the time the truck comes in, the food is already spoiled. The trucks take a long trip to the market, and the spoilage accelerates."

That's a problem common to farms across the continent. In 2011, the UN World Food Programme estimated that annual food losses in Sub-Saharan Africa exceeded 30 per cent of the total crop production and cost farmers some $4 billion in value every year.

ColdHubs offers a simple solution. It installs walk-in refrigeration units near farms and markets in an effort to preserve valuable crops in the crucial period before they reach consumers. Tomatoes, which would have rotted near the vine, are swiftly dispatched to a nearby unit, where farmers are charged around 50¢ per crate per day to cool the produce.

ColdHubs abides by a pay-as-you-go model, which allows farmers to dodge pricey storage agreements that tie them to excessive payments regardless of production.

Expanding the network

What's more striking is that in a country where 95 million people are estimated to have no access to electricity, ColdHub refrigeration units are entirely solar-powered. Whether the units are installed in remote rural villages or bustling urban markets, the power of the sun can be harvested to save, rather than spoil, produce.

It's an affordable and eco-friendly model that does not need expensive infrastructure; it's a model that the company believes can be quickly rolled out across the continent, beginning with further expansion in Nigeria and a potential franchising scheme in Kenya.

"In five years, we want to have 1,000 units installed in Nigeria, and in the future, there could be 1 million units all over Africa," said Ikegwuonu.

"We're very ambitious because there's lots of market opportunity. You can use them in schools, hospitals, airports — anywhere you need to store food."

For hawkers and worried consumers in Kaduna, it may be the first step towards ensuring that 2016's tomato emergency remains little more than an unpleasant memory.

Oil palm industry for long-term strategy to build local supply

HYDERABAD, NOVEMBER 1:
India imports edible oils worth ☐70,000 crore every year. As much as 90 per cent of this is palm oil. This statistic is not something new for those following the edible oil industry. But the industry now worries that the number could swell if the country fails to take a long-term strategy to encourage oil palm plantations wherever possible.

It wanted the Central government to come out with a separate board, separate import policy to protect the domestic industry.

"We must have a long-term strategy and a separate import policy, it is very difficult to protect the local farmers and local producers. You need to have a 25-year policy to develop the domestic industry," Sanjay Goenka, President of the Oil Palm Developers and Processors Association, told *BusinessLine.*

Goenka quotes numbers to build an argument. He says palm oil is the cheapest oil in terms of price but nutritionally as good as other edible oils. "If you grow soya, you get 750 kg of oil a hectare. And if you go for sunflower, you will get 800 kg of oil. Compare this with 4.5 tonnes of palm oil a hectare," he explains.

He, however, says the oil palm area is abysmally low in the country. The total acreage is put at two lakh ha, churning out 1.80 lakh tonnes of oil a year. “This is negligible. India consumes 19.40 million tonnes a year, while we are producing only 8 million tonnes of edible oil,” he points out.

This, he warns, could turn worse if the per capita consumption of edible oil goes up from the present levels of 13-14 kg. “The global per capita consumption is 26 kg and that of the developed countries is up to 40 kg. Even Pakistan consumes more oil (20 kg per capita). If this increases, our requirement would go up sharply,” he points out.

How to plug the gap

Goenka says the present growth rate in acreage is very slow. “Under the present environment, we are adding only 25,000 hectares a year. Compare this with the potential of 25 lakh hectares that country has. We need to recognise the crop as a plantation crop,” he asserts.

What happens if it is declared as a plantation crop? “Companies will be able to aggregate lands suitable for the crop in certain pockets in each State. If it is a plantation crop, it will attract global investors,” he points out.

There, however, is some realisation. Karnataka has declared it as a plantation crop. “Arunachal Pradesh is in the process of doing that. All States must take a cue from this,” he observes.

He appreciates the need for tweaking in the import policy (for the oil from countries like Malasyia). “I agree that you have to keep the interests of the consumers as well. But what the government can do is, it can help out the farmers when the price comes down. Farmers must be protected from the vagaries of the price changes,” he pointed out.

Business Standard

Centre unveils faster-maturing pulses variety

The central government unveiled a new, early maturing variety of arhar (red gram). It apparently gives a yield of 20 quintals, the same as many existing varieties but maturing in 120 days, instead of the usual 170-180 days.

Called PUSA Arhar-16, it might even be issued for commercial use in January itself, so that farmers could plant by the next kharif season.

The new variety gives an average yield of 20 quintals, which though is same as many existing varieties, but more crucially take lesser time to mature making it suitable for northern plains.

It would give farmers ample time to grow potato, mustardor wheat in the rabi season thereby making this arharvariety suitable for northern plains.

About the new arhar variety
Name: Pusa Arhar-16
Yield per hectare: 20 quintals
Maturity: 120 days
Plant size: Semi-dwarf (95-120 cm)
Suitable regions: Punjab, Haryana, Uttar Pradesh, Madhya Pradesh
Other specialities: High density, synchronised maturity, facilitates use of combined harvesters, allows effective spraying of pesticide, requires less manpower, allows cultivation of other crops such as wheat etc because of short-duration

An early release by next January bypassing he mandatory three years multi-field testing parameters would enable the country achieve self-sufficiency inpulses by in the next 3-4 years.

"We will put this new arhar variety (Pusa 16) for commercial use soon. Once we put for commercial use, certainly it will have great impact," Finance Minister Arun Jaitley told reporters after visiting the experimental plot of new arhar variety in the IARI complex here.

Jaitley was accompanied byagriculture ministry Radha Mohan Singh, Chief Economic Advisor Arvind Subramanian, secretary in the department of agriculture S Pattanayak and other top officials from Indian Council of AgricultureResearch (ICAR) and others.

Pulses production in India is lower than the demand of 23-24 million tonne (MT).

The output had fallen in the last two years due to the drought which sent the prices through the roof, forcing the government to take several measures to check inflation in pulses.

Arhar prices in some retail markets had touched to Rs 200 per quintal last year due to supply shortage.

India usually produces around 2-3 tonnes of arhar annually, which this year is expected to reach an all-time high 4.29 million tonnes due to record rise in area.

The country's pulses output is estimated to increase to 20 MT in 2016-17 crop year (July-June) on account of good monsoon after two drought years.

But the production is still lower than domestic demand of 23-24 MT.

Pulse production fell to 16.47 MT in 2015-16 crop year from 17.15 MT in the previous year.

The new pulses variety not only matures earlier than others but also does not grow as tall as current arhar types.

Its height is less than 2 meters making it suitable for mechanized harvesting by mechanized combine harvesters. The size is around 90 centimeters to 120 centimeters, that is semi-dwarf.

The present arhar varieties available in the market are all grown in plants which are more than 2 meters tall which has to manually thrashed thereby need labour at multiple stages.

However, the new variety 'PUSA Arhar-16' does not grow tall hence can be harvested in bunch.

"The new variety is short duration, synchronized maturity and amiable to combine harvesters," Dr A.K. Singh from the Division of Genetics in IARI said and one the main drivers behind the project said.

He said at present multi-location tests are being conducted at 10 states including Kolkata, Hisar, Delhi, Pant Nagar etc, but it can be sacrificed to enable early commercial release of the variety.

"In wheat and rice we have done away with mandatory multi-centre testing for early release," Singh said.

The new variety meant to replace the water-guzzling paddy in northern plains of Punjab, Haryana and western Uttar Pradesh could be a real game-changer if pursued effectively.

Rebooting agriculture: Govt must look at holistic reforms in farm sector

The thinking in the National Institution for Transforming India (NITI) Aayog that agricultural growth and a spurt in farmers' incomes is not feasible without radical farm sector reforms and that the state governments are doing little on this count has come rather belatedly. The economic reforms carried out since 1991 have either bypassed the farm sector or touched only its fringes, thus, restraining this sector from growing to its full potential. Even now the NITI Aayog has picked up only three areas for immediate action whereas the need is for a comprehensive, all-embracing ...

NITI Aayog ranks Maharashtra most farmer-friendly state

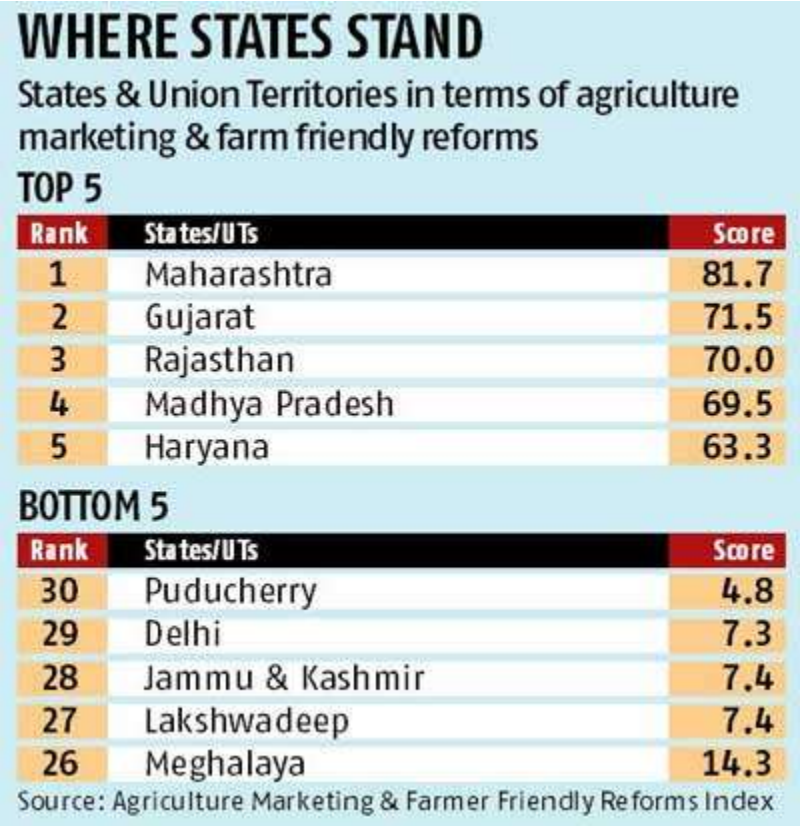
Maharashtra has been ranked first state in the country on reforms in agricultural marketing, followed by Gujarat and Rajasthan, by the NITI Aayog.

Its first-ever index on reforms in the farm sector was issued on Monday. Uttar Pradesh, Punjab, West Bengal, Assam, Jharkhand and Tamil Nadu performed poorly, not even reaching the halfway mark of 50.

Termed the Agricultural Marketing and Farmer Friendly Reforms Index, it ranks states on three major parameters — reforms in agricultural marketing, land lease and forestry on private land. The minimum score of zero implies no reforms at all; a score of 100 would mean the opposite and the friendliest to farmers.

Maharashtra got 81.7 and Gujarat was second at 71.5, Puducherry, Delhi and Jammu & Kashmir got the lowest three grades, of 4.8, 7.3 and 7.4, respectively.

Three states and four Union Territories — including Bihar and Kerala — did not figure in the list, as these do not have any Agricultural Produce Marketing Committee Act.



WHERE STATES STAND

States & Union Territories in terms of agriculture marketing & farm friendly reforms

TOP 5

Rank	States/UTs	Score
1	Maharashtra	81.7
2	Gujarat	71.5
3	Rajasthan	70.0
4	Madhya Pradesh	69.5
5	Haryana	63.3

BOTTOM 5

Rank	States/UTs	Score
30	Puducherry	4.8
29	Delhi	7.3
28	Jammu & Kashmir	7.4
27	Lakshwadeep	7.4
26	Meghalaya	14.3

Source: Agriculture Marketing & Farmer Friendly Reforms Index

"The state of Maharashtra achieves first rank in implementation of various reforms. The state has implemented most of the marketing reforms and offers the best environment for doing agribusiness among all states and UTs," went an official statement.

Madhya Pradesh was ranked fourth, followed by Haryana, Himachal Pradesh, Andhra Pradesh, Karnataka, Telangana, Goa and Chhattisgarh.

The index is aimed at helping states identify and address problems in the farm sector, which suffers from low growth, low incomes and agrarian distress.

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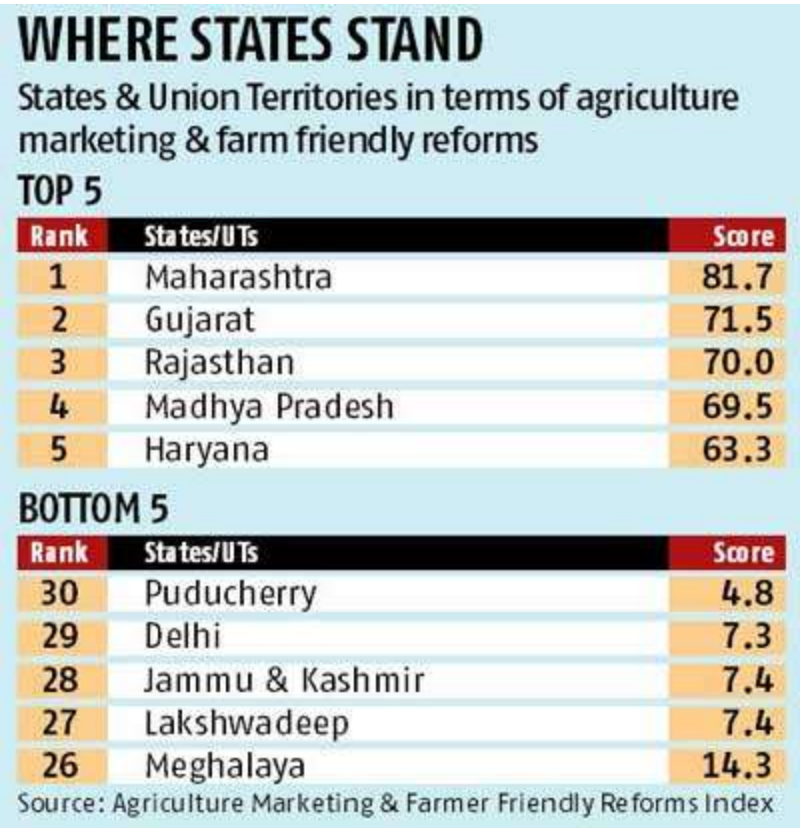

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