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‘Expertise hunting’ on in Rajasthan for farm sector

Jaipur, November 9:

Rajasthan is reaching out to countries across the globe such as Israel, Australia, New Zealand and Serbia, to gain from expertise in all facets of agriculture — from seed technology to post-production.

“A farm product which perishes in two days in India stays fresh for up to ten days in Israel. We need to adopt such technologies to increase the shelf life of our food items so that they can be sent to far-off markets,” Rajasthan Chief Minister Vasundhara Raje said speaking at the inauguration of the three-day Global Rajasthan Agriculture Meet (GRAM) meet in Jaipur on Wednesday.

At the global meet, an expert from Serbia will share expertise on seed technology, while another from the Netherlands will talk about climate change issues and solutions in agriculture. An olive expert from Israel will speak on technologies related to olive cultivation and an Australian expert will give a presentation on dairy and animal husbandry. The event is jointly organised by the Rajasthan government together with industry body FICCI.

Israel, which has already assisted Rajasthan in excelling in a number of farm produce including horticulture, is ready to take the partnership further. “The President of Israel is visiting India next week and the two main fields in which he wants more engagement are agriculture and water,” pointed out Daniel Carmon, Israel’s Ambassador to India, speaking at the event.

“Improving shelf-life of horticulture products, modern warehousing, cold-chain management, agri-logistics and easy access to national and international markets are issues that concern us,” Raje said.

“We have tried to get the best countries in various farm technologies, innovations and know-how in the on-going global agriculture meet so that they can share their know-how with us and our farmers can benefit,” she added.

Despite focusing on technology and growth, the fate of a farmer in Rajasthan still depends on the mercy of nature, like in many other parts of the country. For instance, last year due to untimely hail, a number of farmers in the State suffered huge damages

leading to alleged suicides. The Prime Minister's crop insurance scheme launched this year is expected to provide better risk coverage, but it has to be put to test.

Rajasthan already leads in production of more than ten items in India such as barley, maize and seed spices. It was ranked third in the 'Agricultural Marketing and Farmer Friendly Reforms Index' of the Niti Aayog this year.

"The Centre will assist Rajasthan in whatever it aspires to do," promised Parshottam Rupala, Minister of State for Agriculture.

Raje already held meetings with the Ambassadors of Israel, Australia and New Zealand in New Delhi discussing with them the kind of co-operation in the area of farm technology she envisaged with the countries.



Agriculture and Pollution: Tackling a burning problem with technology

The poor adoption of a machine that can help avoid paddy stubble burning is an example of policy failure.



There is virtual unanimity — at least among scientists and aware farmers — that the ultimate solution to the recurrent problem of paddy stubble burning at this time of the year lies in the ‘Happy Seeder’ developed by the Punjab Agricultural University (PAU) in 2002. But more than a decade later, the tractor-operated machine, which allows wheat seeds to be directly drilled in fields even with standing stubble or loose straw from combine-harvested paddy, is yet to find broad acceptance among farmers.

“The adoption of the Happy Seeder is low and farmers are not adopting this technology on a large scale,” a recent research proposal note from the PAU seeking funds for undertaking more field-level demonstrations has admitted. According to Gursahib Singh Manes, head of the Ludhiana-based varsity’s department of farm machinery and power engineering, only around 6,400 hectares out of the total 35 lakh hectares area under wheat in Punjab last year was sown using Happy Seeder. Also, just 620 such machines are operating in the state, despite a government subsidy of Rs 48,000 against its purchase cost of around Rs 1.30 lakh.

“The issue isn’t of price alone. Why should anybody, especially a small farmer, buy a machine for use just for a single crop once a year? This is unlike, say, a rotavator that is used in field preparation for all types of crops,” says Rajmohan Singh Kaleka, a 20-acre PAU award-winning farmer from Bishanpur Chhana village in Patiala.

“When we started selling it in 2006, the cost was Rs 90,000, which has since gone up Rs 1.30 lakh. Ironically even after a decade, farmers do not know what Happy Seeder really is. We ourselves have sold a mere 500 units all these years,” says Joginder Singh of the Ajnala (Amritsar)-based Kamboj Mechanical Works, the largest manufacturer of the machine and a research partner of PAU in the project. “The state government has done little to promote it. Even the subsidy isn’t paid on time and that further discourages the farmer who, in any case, has the option to simply burn the left-over paddy stubble in his field. Why should we produce and stock the machines if there’s no demand?” he asks.

Harvesting paddy using combines leaves behind 14-15 inch long stalks, which farmers find uneconomical. With a Happy Seeder, the farmer can actually harvest paddy and plant wheat the same day, without the need for clearing the left-over stubble. There have been issues relating to uniform spreading of loose straw, which is a precondition for the machine’s smooth operation. To solve this, PAU developed a separate straw management system (SMS) as an attachment to the combine harvesters: As the combine harvests and threshes the paddy, the attached machine behind it evenly distributes the crop residue in the field. The university has recently also modified the Happy Seeder itself by attaching a ‘press-wheel’ to the machine, which again helps in formation of uniform rows as the stubble gets settled and enabling the wheat seeds to be neatly sown.

“When you sow wheat directly in paddy stubble, the germinated plants aren’t visible for a few days. As a result, farmers get worried and they develop a misconception that the seeds haven’t been sown properly. But that again calls for creating awareness, which is the job of the government”, notes a PAU scientist who does not want to be identified.

Navdeep Singh, a farmer from Samrai village in Gurdaspur’s Fatehgarh Churian tehsil, has been sowing wheat with Happy Seeder on his 35-acre land for the past four years. He is literally ‘happy’ with the results. “I paid Rs 55,000 for this machine then, after availing

the Punjab government's 50 per cent subsidy. After my paddy is combine-harvested, I use a straw reaper to cut and spread the left-over stubble. Once that is done, I go for direct sowing of wheat with my Happy Seeder", he explains. The biggest advantage here this is the saving in field preparation, as in the traditional method the farmer has to undertake at least a couple of tillages, disc plough operations and plankings. In addition, the field has to be irrigated once and left for ten days for the seed bed to have optimum moisture. "The Happy Seeder does away with all these operations and I save up to Rs 2,000 in production costs per acre", he adds.

Amrik Singh from Kalanaur, also in Gurdaspur district, claims that the Happy Seeder has helped in improving the soil fertility of his field. "This has happened because of incorporation of the paddy straw residue in the land, which isn't possible through burning. I am today getting 26-27 quintals per acre wheat yields, which is, in fact, a little higher than from the traditional wheat sowing method. Moreover, my production costs are low and there is no pollution caused by burning of straw", he claims.

But these farmers obviously represent a tiny minority.

HS Sidhu, senior research engineer with the Borlaug Institute for South Asia at Ludhiana, feels that the adoption of Happy Seeder is low only because of poor enforcement of the ban on burning paddy stubble. "The benefits, in terms of better yield and improved soil fertility, take time to show up. A way to force farmers to think long term is through effective implementation of the law against crop residue burning", he observes.

Sidhu, who was earlier with PAU and involved in developing the Happy Seeder, also believes that there is no necessity for the farmer himself to invest in the machine: "We already have the model of custom hiring in combine harvesters. What stops the combine owner to also have an SMS attachment along Happy Seeders? Just as farmers are now paying Rs 1,200 per acre for getting their paddy harvesting and threshed, the combine owner can charge a similar amount for also doing the job of wheat sowing using two tractor-mounted Happy Seeders," he says.

Four-day Agrovison summit to begin on Friday

Spread in 25000 sq mt, there will be eight big hemispherical dome are erected on the ground, while workshops would be conducted in four halls.

Preparations are nearing completion for the Central India's biggest agriculture expo- 'Agrovison', commencing from November 11 to 14 in Nagpur. The annual summit, which come with more diversification in farming with new techniques and advance technology will be held at Reshimbagh ground. Maharashtra Chief Minister Devendra Fadnavis will inaugurate the summit at 4 pm while Agrovison Chief Patron and Union Minister Nitin Gadkari will preside the function, a release from organisers said.

Spread in 25000 sq mt, there will be eight big hemispherical dome are erected on the ground, while workshops would be conducted in four halls. There will be approximately 3500 sq ft open space for the display of big machinery, tractors etc, Krishi Vikas Vibhag, Madhya Pradesh, Gujrat Agro Industries corp Ltd, Indian Agro Research, CSIR, Maharashtra, State Agriculture Marketing Board (MSAMB), Agro Industrial

Development Corporation, RCF, Mahindra Rise, Sonalika, Apollo tyres, KVIC, Khadi Gramodyog, and many more companies will participate.

Minister for Chemical and Fertilizer, Ananth Kumar and MoS for Home Hansraj Ahir besides state Agriculture minister Pandurang Fundkar, co-operation minister Subhash Deshmukh and Finance minister Sudhir Mungantiwar will also be present on the inaugural day.