

India, Russia to set up agro irradiation centres

Subjecting food products to a low dosage of radiation helps mitigatepost-harvest losses

: Expanding their cooperation in civil nuclear energy, India and Russia are collaborating to set up integrated irradiation centres in India to reduce agricultural losses.

A bilateral agreement for cooperation in the development of a network of integrated infrastructure irradiation centres was signed between the Indian Agricultural Association, Hindustan Agro Co-Op Ltd (HACL) and United Innovation Corporation (UIC), a subsidiary of ROSATOM State Atomic Energy Corporation of Russia, on the sidelines of the BRICS Business Forum in the national capital.

The agreement is to be implemented through a Joint Venture and aims to set up 25 integrated irradiation centres. It was signed by Bharat Dhokane Pandurang, Chairman of HACL, and Denis Cherednichenko, CEO of UIC.

In irradiation, food products are subjected to a low dosage of radiation to treat them for germs and insects, increasing their longevity and shelf life.

In India, according to estimates, post-harvest losses in food and food grains are around 40-50 per cent, primarily due to insect infestation, microbiological contamination, physiological changes due to sprouting and ripening, and poor shelf life.

"The wastage of fruits and vegetables alone is about Rs. 60,000 crore annually. Including cereals, meat, pulses and flowers, the annual loss is estimated to be Rs. 2,50,000 crores," Mr. Pandurang added.

He said that there were a few low level irradiation plants in the country, which are not adequate.

"The use of irradiation will make it possible to reduce the loss of onions in India, which currently go bad because of germination and inadequate storage, by 42,000 tonnes per year on average, as well as to reduce grain losses from [the current] 15 per cent to 3-5 per cent per year," Mr. Cherednichenko said after the signing.

In the first phase, seven centres will be set up in Maharashtra, which will begin with the upgradation of the current centre at Rahuri in Ahmednagar district.

They added that the irradiation doses are recommended by the International Atomic Energy Agency (IAEA) and the final product is absolutely safe.

Water level in Hemavati reservoir drops

With the water level in Hemavati reservoir at Gorur in Hassan taluk receding, the outflow has also reduced.

Water release from the Left Bank Canal has been stopped. As a result, farmers dependent on the canals have suffered. The Left Bank takes water to parts of Tumakuru and Mandya, besides Hassan.

Losing hope

The left bank canal provides water for nearly 5.79 lakh acres of agriculture land. As the outflow through this canal has been stopped, farmers are losing hope of a good return on their crop.

The inflow to the reservoir this year has been less compared to previous years. The least amount of inflow was recorded this year since 2011. The cumulative inflow this monsoon was 33,425 mcft and the outflow so far has been 29,666 mcft.

As on Wednesday, the water available in the reservoir was 6.682 tmcft. Of this, live storage is only 2.310 tmcft. The reservoir has to fulfil the drinking water needs of towns and villages in Hassan taluk. The water level in the reservoir stands at 2,871.39 ft against the capacity of 2,922 ft. The inflow as recorded at 6 a.m. on Wednesday was at the rate of 806 cusecs and the total outflow was at the rate of 1,979 cusecs.

Kerala govt to expand organic vegetable cultivation

With the objective of attaining self-sufficiency in terms of vegetables, Kerala government is planning to bring in additional 50,000 hectares of land under organic vegetable cultivation. Addressing a press meet here, state Agriculture Minister V S Sunil Kumar said the LDF government's plan is to expand farming by bringing in people of all sectors. "The government's effort is to bring in additional 50,000 hectares of land under organic vegetable cultivation. Our aim is to attain self-sufficiency in terms of vegetables in the next three years," he said.

As part of the plan, the number of eco-shops selling organic farm products under the agriculture department would be increased, he said.



Nutrient paradox

Sales of fertilisers have dipped, despite Krishi Bhawan's claim of a record kharif harvest this year on the back of a decent monsoon and also a decline in retail prices of decontrolled phosphatic, potassic and other complex nutrients. This could be a reflection of two things. The first is that the agriculture ministry's production estimates are themselves exaggerated. That possibility is, however, discounted by the fact that kharif acreages have gone up significantly over last year; the fact of a production increase is undeniable, even if the extent of it as per the official numbers can be questioned. It leaves a second possibility — of farmers actually applying less fertiliser. But even that may not be as straightforward. If farmers and dealers had stocks from the previous year's purchases — which couldn't get used because of drought — that pipeline material may well have got consumed this time. In other words, even if sales of fertiliser firms have fallen, farmers' consumption needn't have. As of now, we don't have data for the latter.

But even assuming farmers have, indeed, cut back on consumption — for lack of money or access to credit owing to consecutive drought years — this can only be a temporary phenomenon. Sooner rather than later, they are bound to purchase more nutrients without which sustaining, leave alone improving, crop yields isn't possible. From a policy perspective, what matters is how to boost fertiliser usage efficiency by farmers that is both in their own interest and long-term soil health. The last one year has seen a crash in international prices of fertilisers. Much of it has to do with China turning from an importer to an exporter of urea and di-ammonium phosphate. China is, in fact, India's biggest supplier of these two key nutrients today. That, in combination with new capacities coming up in Saudi Arabia, Africa and North America, has made the global fertiliser market into one for buyers.

The government should seize this moment to decontrol fertilisers as it has already done in petro-products. Just as for LPG cylinders, let there be a fixed nutrient-based subsidy on every fertiliser, including urea, which is transferred directly to farmers' bank accounts after the purchase is made at market prices. Farmers will, then, buy the fertiliser that isn't the cheapest — subsidy should be only incidental to making such choices — but the best suited for their soils or crops. And let companies compete in offering such customised products.

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Why the Central government should go all out to expand oil palm cultivation

It will increase domestic supplies, lower the edible oil import bill and save foreign exchange



The Indian edible oil sector is the world's fourth-largest after the US, China and Brazil and accounts for around 9 per cent of the world's oilseed production.

An irony of this industry is its heavy dependence on imports. Cooking oil imports are all set to touch a record 15 million tonnes (mt) in the current, 2015-16 Oil Year, ending October. Out of the 15 mt, palm oil imports alone account for 9 mt or 60 per cent.

The reason for palm oil occupying the lion's share of the total consumption is because palm is generally the cheapest commodity vegetable oil and also the cheapest oil to produce and refine globally. Therefore, focussed palm oil cultivation will undoubtedly play a key role in addressing the domestic shortfall in edible oil consumption and lowering India's edible oil import bill and saving foreign exchange.

Highest-yielding crop

A distinct advantage that palm enjoys is that it is the highest-yielding perennial edible oil crop and needs a fraction of the area used to grow in comparison to other oilseeds. This is indeed potentially attractive in a country like India, where land is increasingly scarce as the population rockets.

On a per-hectare basis, oil palm trees are 6-10 times more efficient at producing oil than temperate oilseed crops such as rapeseed, soyabean, sunflower or ground nut. For example, while a hectare of land can yield 300-400 kg of groundnut oil, nearly 4 tonnes of palm oil can be produced from a hectare of land.

The case for palm oil

P Rethinam, a plantation crop management specialist, in his detailed report titled 'Increasing Vegetable Oil Production through Oil Palm Cultivation in India' observes: "27 million hectares of nine oilseed crops produce about 9 million tonnes of oil per year but 2 million hectares of oil palm could produce 8 million tonnes of crude palm oil, 0.8 million tonnes of palm kernel oil, palm kernel cake, bio mass for bio energy, eco-friendly bio-diesel, etc." There is a big potential to raise the acreage of palm, which is currently cultivated on about 200,000 hectares. According to OPDPA, India has the potential to expand the acreage to 20 lakh hectares, keeping in view the demand. If this is done, the palm oil industry, which provides employment to 20,000 people, can create two lakh additional jobs.

Indian palm oil production is estimated at 1.7 lakh tonnes for 2014-15, up from 0.6 lakh tonnes in 2010-11. Palm oil cultivation has grown from zero to 2,00,000 hectares in the past two decades.

The Central government has been trying, for many years now, to reduce its dependence on imported edible oils by encouraging farmers to take up palm cultivation. In an encouraging move, the current government has announced a package of Rs. 10,000 crore over three years, which is intended to support farmers until the trees begin to yield (it takes three to five years for the palm tree to start yielding fruit).

The government has identified nine States with suitable climatic conditions. In November 2015, the government has also allowed 100 per cent FDI in palm oil plantations, a move the industry believes will boost domestic production, bring in more funds and newer technologies into the sector.

Industry challenges

However, there are several road blocks for India preventing it from successfully expanding on its domestic palm oil cultivation. First and foremost, lack of large land tracts is a major constraint.

The industry wants the government to declare palm oil as a plantation crop to move it out of the Land Ceiling Act. Moreover, the current import duty is not supportive of oil palm farmers and the industry.

Secondly, the Indian edible oil industry has been urging the government to maintain a duty differential of at least 15 per cent on crude and refined oil to protect the interests of refineries. Domestic edible oil refiners are facing a surge of imports of refined oil over the last few months, reducing their capacity utilisation to 30-40 per cent from 55-60 per cent a year ago.

Last month, the Centre lowered the import duty on crude palm oil from 12.5 per cent to 7.5 per cent and on refined oil from 20 per cent to 15 per cent. Hence, there was no change at all in the duty differential and the move is not expected to have any impact on either the industry or farmers.

The government needs to provide a level playing field to the domestic refining industry. Otherwise, Indian edible oil importers will be perpetually fighting a losing battle with cheap rival palm oil from top producers Malaysia and Indonesia.

Conclusion

A focus on palm oil cultivation is key to India's goal of attaining self-sufficiency in vegetable oils over the next decade. The palm oil industry deserves the highest priority and encouragement from the government to meet the internal demand of edible oil, resulting in a strong imprint on savings of foreign exchange, employment generation and boosting India's food security.

The writer is Founder & Managing Director, Ruchi Soya Industries Limited. Views are personal