THEMOMENTU

TV channels urged to promote agriculture

Union Urban Development Minister M. Venkaiah Naidu has urged private TV channels not to devote their entire airtime to news, but allot some time for development of agriculture and farmers. Giving away 12 anniversary awards of Rytu Nestam journal for progressive farmers here on Sunday, the Union Minister reminded them of the Centre's initiative of starting Kisan channel to provide credible information to farmers and updating their knowledge about agriculture.

He deplored lack of cold storages that fetched farmers remunerative prices for their produce. Mr. Naidu presented lifetime achievement award in agriculture to former Rajya Sabha member Yelamanchili Shivaji and outstanding performance award to former MLA M. Kodanda Reddy. Farmers, officials and journalists who made significant contribution to the sector were also presented awards.

14 check dams to be constructed



The Public Works Department is in the process of establishing 14 check dams across certain tributaries of the Cauvery.

The dams are being put in place across the district at an estimate of a little over Rs. 20 crore with funds from the State government and the National Bank for Agriculture and Rural Development's Rural Infrastructure Development Fund.

The dams were being established across Kothamangalam Vari at Alundur in Srirangam taluk; Nandiyar in Vandalai – Gudalur of Lalgudi taluk; Maanodai at Melarasoor of Lalgudi taluk; Uppar at Devimangalam of Manachanallur taluk; Shanmughanadhi at Thirupattur of Manachanallur taluk; Vellar at Vembanur of Marungapuri taluk; Kannuthu Odai at Kumaravadi of Manapparai taluk; Mamundiyar at Samudram of Manapparai taluk; Koraiyur at Karuppur in Manapparai taluk; Uppar Vari at K. Periyapatty of Manapparai taluk; Ponnaniyar in Manapparai taluk; Ayyar at Thandalaiputhur of Musiri taluk; Kattaru at Kumbakudi of Tiruverambur taluk and Panguni Vaikkal at Sirumarudhur in Lalgudi taluk.

The Planning and Design wing of the PWD identified the spots based on inputs from farmers and public, say sources.

The dams would essentially serve as an artificial recharge structure preventing water from going waste during sudden downpour. It would hold water thereby augmenting groundwater table and providing water for livestock and villagers, says an official.

The PWD has planned to complete the work before the onset of the North East monsoon. Checks dam works had been completed at nine places while works in the remaining spots were expected to be over by next month.

The dams were constructed in such way that its height was 1.2 metres from the bed level. Water passing through the tributaries goes waste in the event of a sudden downpour.

Agriculture museum to be opened today

An agriculture museum will be inaugurated at Indira Gandhi Krishi Vishwavidyalaya (IGKV) here on Monday and it is touted as the first of its kind in any agriculture university in the country.

"Well-equipped with the latest information and communication techniques, it is the country's biggest modern agriculture museum set up in an agriculture university," IGKV's Vice-Chancellor Dr. S. K. Patil said on Sunday.

Chhattisgarh Governor Balramji Das Tandon, Union Agriculture Minister Radha Mohan Singh, Chief Minister Raman Singh and state agriculture minister Brijmohan Agrawal will be present at the inauguration ceremony.

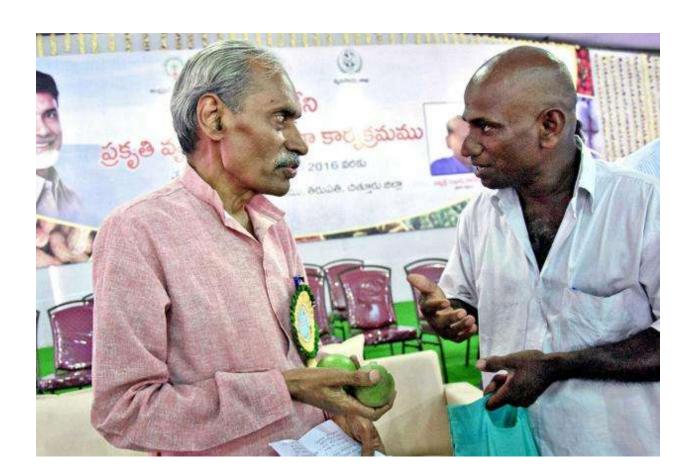
Set up at a cost of Rs. 4.92 crore, the museum aims to provide information about special agricultural techniques, agriculture-related problems and their solution, villagers' lifestyles, Dr. Patil said.

It also displays the agriculture and tribal culture of Chhattisgarh. Modern techniques of farming are displayed in an interactive manner, he said.

At least 12 touch screens have been installed in the museum which provides information on subjects like climatic conditions, soil quality, rainfall variations. A mobile application 'Crop Doctor', designed by the university for the farmers, will also be launched, the Vice-Chancellor said.

The new Agriculture Science Centre for Raipur district will also be inaugurated on the occasion. - PTI

Go for natural farming for less cost, more yield, expert tells ryots



Agriculture second most pollutant due to use of chemicals, says Palekar

Agriculture had never been at loggerheads with the environment and eco-friendly farm practices were the order of the day in the past. Trouble started the day cow dung was replaced by chemicals, said natural farming expert Subhash Palekar.

He was addressing farmers at a four-day training programme on 'Zero-based natural farming' organised by the Department of Agriculture. The event was inaugurated by Minister for Environment and Forest Bojjala Gopalakrishna Reddy here on Sunday.

While industry has long been blamed as a 'pollutant', agriculture was no better as it occupied the second place, Mr. Palekar rued, explaining that the production of food grains using chemicals was causing a serious hazard to the environment as well as public health.

'Shun western practices'

"Where is the 'Sujalam, Suphalam' (pure water, pure food) mentioned in the Vande Mataram song? Neither the water nor the food is pure today," he remarked. While usage of natural fertilisers like cow dung had a history of 10,000 years, the western practices entered India with the British regime that opened the floodgates for indiscriminate use of chemical ingredients, thus causing irreparable damage to the environment as well as the eatables, he said.

"Natural farming requires just 10 per cent of water and power, compared to the existing practices and is hence dubbed 'zero investment' farming," he said.

Mr. Palekar pointed out that farmers in Himachal Pradesh, who had adopted this practice, were earning up to Rs.12 lakh per acre. "Let bygones be bygones and put an end to green revolution, chemical usage and organic farming. Let's go for natural farming," was his clarion call.

Rain guns for Rayalaseema

Mr. Gopalakrishna Reddy maintained that the State government was keen on saving the standing crop from withering by providing rain guns to the farmers of the Rayalaseema districts. Zilla Parishad chairperson R. Geervani advised the farmers to adopt natural practices, while Collector Siddharth Jain saw the need for 'young blood' in agriculture to replace the existing systems with new practices with a missionary zeal.

MLC G. Srinivasulu, MLA M. Sugunamma, Special Chief Secretary (Agriculture) T. Vijay Kumar and Director Dhanunjaya Reddy participated in the programme which was attended by farmers, officials and agriculture students from 13 districts of the state.

Farmers in Himachal Pradesh are earning up to

Rs. 12 lakh per acre using natural farming practices

Subhash Palekar

Natural farming expert

78,669 farmers to benefit from crop loan waiver

As many as 78,669 farmers would benefit from waiver of crop loans, totalling Rs. 251 crore, extended by cooperative societies in the district, said A. Vijaya Kumar, Rajya Sabha MP, here on Sunday.

Participating in a function organised at Maravankudiyiruppu Primary Agriculture Cooperative Society to distribute loan waiver certificates to the farmers, Mr. Vijayakumar said crop loans outstanding as on June 30, 2016, would be waived as promised by Chief Minister Jayalalithaa during the 2016 Assembly election.

Inaugurating the distribution of certificates, Collector Sajjansingh R. Chavan said 221 small and marginal farmers who had availed themselves of short and medium-term crop loans in the society would benefit. Loan amounts, along with interest, totalling Rs. 2.20 crore, were waived at the PACS.

Joint Registrar of Cooperative Societies Rajendran, Nagercoil Revenue Divisional Officer R. Rajkumar and Marvankudiyiruppu PACS president Sahaya Vennis participated.

Horticorp intervention keeps veggie prices low



The State government's market intervention in time for Onam has brought some respite to the people from the rising prices of vegetables.

Horticorp Managing Director Ranjan S. Karippai says while not the only reason, the Corporation's intervention in the market has helped to keep prices down. "It was decided to procure all produce grown within the State, and ensure a fair price to farmers so that they do not move away from agriculture. This will also benefit consumers."

Besides 30 per cent subsidy on produce only for Onam, price support in the market was extended to vegetables such as onion, greens, big lime, and ginger. "When there is proper procurement and adequate produce is available, prices will not go up," he says.

Similarly, efforts to get farmers growing cool climes vegetables in Idukki to sell their produce to Horticorp directly succeeded this Onam.

In the months to come, Horticorp will focus on promoting cultivation, not just commercially but also with the aim of self-reliance. There are also plans to go in for micro-level production plans.

"Horticorp will hold a workshop in October so as to draw up a crop production plan for the State," Mr. Karippai says.

At Chala market

As the Horticorp outlets see heavy footfall in the days leading up to Thiruvonam, in the Chala market it is business as usual on Sunday evening.

As truckloads of plantains arrive, Rajan who manages a wholesale shop at Chala says vegetable prices are in fact down because of excess stock. He, however, admits that sales have taken a slight hit as compared to the Onam period last year.

"Those looking to buy in bulk such as caterers go to the Horticorp outlets and then come to us to buy whatever they do not get there."

The Chala market receives some 20-25 truckloads of vegetables every day, most of it from other States. "Only a few vegetables such as Indian cucumber, snake gourd, pumpkin are grown in the State, that too during the season. What about a couple of months from now when the prices will go up, as they did some time ago?" asks L. Sivan, vegetable commission agent. He says Indian cucumber, which was being sold for Rs.15 a day before, would fetch the farmer only Rs.10. "The farmer's return on the investment is meagre."

Labour cost

A farmer at the market says the labour cost in other States is much less than in Kerala. "If vegetables grown at such low cost flood the markets here, how will we sell our produce? Also, our crops should fetch more money in the market."

Mr. Sivan points to less insurance and tax, and welfare fund and other such benefits enjoyed by farmers in States such as Tamil Nadu.

Subsidy to cover 173 acres under precision irrigation

A sum of Rs. 47.70-lakh has been allocated to bring 173 acres of land under the Precision Irrigation System in Kanniyakumari district under the 'Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)' during the current financial year (2016-17), said Collector Sajjansingh R. Chayan.

A release issued by Mr. Chavan said that the scheme has been implemented in the district with a view to improve on-farm water use efficiency to reduce wastage of water and enhance adoption of precision-irrigation system. The precision-irrigation system was being implemented by the State government. As the water resources were depleting, this system of irrigation would help in conservation of water by 40 to 60 per cent.

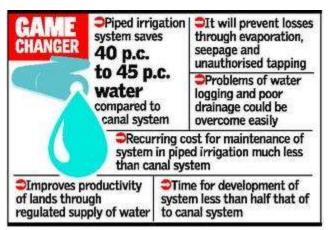
Tamilnadu was in the forefront in implementing the scheme by providing 100 per subsidy with a cap of Rs. 1 lakh per hectare for small and marginal farmers.

Small and marginal farmers who were taking up vegetable cultivation in 2.5 acres and those who cultivated other crops in lands upto 5 acres could avail a maximum subsidy of Rs. 1 lakh.

Those with a land holding of above 5 acres could avail the scheme with a 75 per cent subsidy. Though the union government was providing 35 to 45 per cent subsidy for marginal farmers, the State government was offering 100 per cent subsidy.

The State government was mulling over implementing the scheme in 46,099 hectares of land across the State. A subsidy of Rs. 245.56-crore has been allocated for general category farmers and Rs. 69.26-crore for farmers in the Adi Dravidar and Tribals category. The subsidy would be extended over on the first-in-first-out (FIFO) basis, said Mr. Chavan.

Piped irrigation on pilot basis soon



The government is planning to introduce piped irrigation system on pilot basis in one of the packages of Kaleshwaram lift irrigation project to study the impact of water conservation compared to the conventional canal irrigation method.

Pipes will replace distributaries, minor and sub-minor channels that take water to farm fields in the new system, although main canals would remain as open canals, as they are now. The decision has been taken after studying the system being implemented in two lift irrigation projects in Madhya Pradesh in December last, when a team led by Irrigation Minister T. Harish Rao went there.

"Supply of water through pressurised pipes system will not only help overcome the issue of water not reaching the tail-end ayacut in assured quantity but will do away with land acquisition, which is cumbersome and complex process often leading to socio-economic issues, for distributaries. Besides, the cost of maintenance of the system will also come down considerably," Special Chief Secretary S.K. Joshi said here on Saturday.

It would be like use of energy from electrical lines, wherein one could use it according to necessity and stop it if not required. Water supply till a particular field-level valve (outlet) will automatically stop once the quota for that particular command area unit (e.g.

fields of a farmer at one location) is exhausted/consumed since the quantity for every unit of ayacut will be calculated and decided in advance, officials of the Irrigation Department explained.

According to officials, the piped irrigation system would be introduced in Package-21 of Kaleshwaram project, which would have about 1.7 lakh acres ayacut in Nizamabad district. They explained that project cost is estimated to be Rs.1,780 crore in the new system against Rs.1,022 crore for the open canal system. However, the allocation of 13.5 TMC ft water would irrigate 3 lakh acres through piped irrigation.

As water from pipes would be supplied by maintaining certain pressure, the intensity of flow of water in the beginning of the ayacut as well as in the tail-end would be same, the Special Chief Secretary said. The cost of constructing structures such as passages every 100 meters to 200 meters would also be saved in the system as pipes of distributaries run underground and the farmers could raise crops without any problem on the surface.

Mr. Harish Rao, during an interaction with intellectuals, said here on Saturday that piped irrigation is being implemented successfully under Omkareshwar Right Bank Lift Canal and Punasa Lift irrigation projects in Madhya Pradesh.

"Maharashtra Cabinet has also decided recently that supply of water from all new irrigation projects would be done through pipes," he stated.

Move to ensure water to tail-end ayacut

Showcasing the wonders of millets

Cultivation of millets like ragi and jowar has increased substantially over the years owing to increased awareness and demand. "But only an increase in minimum support price (MSP) will enthuse farmers to continue millet cultivation," Krishna Byre Gowda, Minister of State for Agriculture, told *The Hindu* on the sidelines of the two-day Organic and Millet Mela.

The mela has been organised for the first time by the Department of Agriculture at Cubbon Park in association with Jaivik Krishik Society, Horticulture Department, HOPCOMS and Nurserymen's Cooperative.

Karnataka grows nearly 10 millets, second only to Andhra Pradesh. "Millets are not just power-packed with nutrients, but consume just one-fourth of water and soil nutrients when compared to paddy. They require only two rainfalls in the sowing and flowering stages. They are, by default, majorly organic, and their maximum fodder value suits our parched soil conditions while in distress," he added. The event has 72 stalls showcasing products from 25 well-known names among organic millet dealers, societies and trusts.

Experts will throw light on the overall value addition these organic crops bring about while the best of chefs will demonstrate cooking techniques using millets, he said.

Creating awareness on millets is all about speaking about its economic, social, environmental and nutritional value benefits, says the Minister. "It's not easy to make people lap up more ragi and jowar without food specialists pitching in with items beyond Jolada Roti and Ragi Mudde. To cater to the urban lifestyle, they have come up with millet pasta, millet ice-cream, millet cakes and bakery products, instant food items, apart from a host of traditional preparations. This is what visitors can see at the mela," he said.

TGB to reach agri loan target in Adilabad

Amid a gloomy situation in terms of institutional crop loaning, Telangana Grameena Bank (TGB), Adilabad region is likely to achieve its annual agriculture loan target of Rs. 715 crore by the end of this month. Bank's Adilabad Regional Manager P.R.V. Ramchander Rao told *The Hindu* on Friday that it had taken measures to help the farmers tide over difficulties this season, which will help it in achieving its yearly target.

Buying seeds made easy



Those in need of seeds of horticultural crops for raising kitchen garden or rooftop garden in urban areas can get quality seeds, that too at an affordable price, from a machine now.

The Tamil Nadu Agricultural University has installed an automatic seed vending machine at the entrance to the Anbil Dharmalingam Agricultural College and Research Institute at Navalurkuttapattu on the outskirts of the city. One can just insert Rs.10 note and choose a

code number for the specific seed and collect the seed packet dropped into a box. A salient feature of the facility is that one can even get minimum quantity of seeds required as people are forced to buy at least half a kg of seeds - over and above their requirement, according to Dean P. Pandiyarajan.

The university has introduced the vending machine for supply of quality seeds produced by it in major towns and cities in the State. The first machine was commissioned on its campus in Coimbatore. The machine has a capacity to stock 1,800 packets of seeds and the university, to start with, has stocked 460 packets.

The seeds dispensed by the machine included tomato (PKM); tomato hybrid (CO3); brinjal (CO2); Amaranthus; Bindi hybrid (OBhH1); cluster beans (PNB); chillies hybrid (CO1); and bitter gourd (CO1).

The machine will update details of sale of seeds to the Seed Centre unit of the university. In case of demand for a particular seed, the machine would immediately alert the TNAU authorities through an SMS. Also, in case of any attempt to damage it, the machine would alert the police and TNAU authorities.

The machine has a video screen through which farmers and members of the public are informed about latest research and development activities of the university. "The service will facilitate residents in urban areas to buy quality seeds throughout the year," he said. The machine is refrigerated and maintained at 4 degrees Centigrade to preserve the seeds.

Minister for Agriculture R. Duraikannu inaugurated the machine during his recent visit to the institute.

Expert calls for concrete steps to help farmers

Telangana Suicides Prevention Committee convenor and a leading psychiatrist in the State B. Kesavulu opined that the steps initiated by the Governments were not instilling confidence among farmers who have been in the crisis due to recurrent droughts, crop failures and increasing debts.

Addressing the meeting organised in connection with the World Suicides (Prevention) Day, here on Saturday, he described the rescue operations from the Government end as a drop of water to quench a great thirst. The previous Governments adopted anti-farmer policies and the present Governments in the State and the Centre should have corrected them.

At present prices of all essential commodities and food grains in the market have been skyrocketing but there was no profitable price for farm produce of farmers, he said adding that tenant farmers were being ignored and farm loan waiver was not being taken up in the right earnest. He was of the opinion that there was no encouragement to the agri

and allied industries. If the Governments failed to take these issues seriously farmers' suicides would continues, he said. Those who spoke at the meeting appealed to the Government to take care of the welfare of all bereaved families of the Telangana martyrs. A noted physician J. Bapu Reddy, a social worker Meka Ramaswami and committee member D. Mahipal also spoke.

Natural dyes add colour to organic cotton sarees at Co-optex



Co-optex procures the Indigo dyes, which are from the Indigofera Tinctoria plant and give a rich blue shade, from Tindivanam and supplies it to a processing unit at Gobichettipalayam for processing the yarn.

Co-optex outlets in Coimbatore, Chennai, Pune, Madurai, Mumbai and Bengaluru will soon have a special range of organic cotton sarees – those processed using Indigo dyes.

Co-optex launched organic cotton sarees in February last year and sold about 4,700 sarees till March this year across the country and through online sales. This year, it has already sold 1,200 sarees. These are woven in five major clusters — Dindigul, Vadambacherry, Paramakudi, Salem, and Kanchipuram. The Indigo-dye sarees are a range in the organic cotton saree collection, says the Managing Director of Co-optex T.N. Venkatesh.

Currently, weavers at Vadambacherry (Coimbatore District) and Paramakudi (Ramanathapuram district) are involved in the Indigo-dye organic cotton saree production. They are expected to deliver about 300 sarees in the first month, jointly. If the response is good, it will be expanded to other clusters such as Chettinad, Rasipuram, and Kanchipuram.

Co-optex procures the Indigo dyes, which are from the Indigofera Tinctoria plant and give a rich blue shade, from Tindivanam and supplies it to a processing unit at Gobichettipalayam for processing the yarn. There is a huge demand for the Indigo-dye used textile products in the market, especially from young customers. Co-optex will soon expand it to home furnishing (curtains, bed spreads, and pillow covers) and to dress materials, he told *The Hindu* here on Sunday.

Production of organic cotton sarees and use of natural dyes has benefited the weavers largely as they find it remunerative to continue weaving cotton sarees, he says.

Co-optex sold 34,000 cotton sarees between April and July this year as against 27,000 last year. It conducted "Paruthi" exhibitions and Aadi Adhishtam sales. It sells products through three e-commerce portals and its website too. "We get 15 to 20 orders a day on our portal," says Mr. Venkatesh.



Agrium, Potash say to merge into \$36-bn crop fertiliser giant

NEW YORK, SEPT 12:

Canadian-based rivals Agrium Inc and Potash Corp today said they had agreed to merge to create a USD 36-billion global crop fertiliser behemoth.

The new company will combine potash, nitrogen and phosphate production with a global distribution network, employing just under 20,000 people, and is to generate USD 500 million in annual savings from their combined operations, a joint statement said.

The new company, which has not yet been named, will be based in Saskatoon, in Canada's Saskatchewan province, and be 52-per cent owned by Potash Shareholders, with Agrium owners holding 48 per cent.

The merger will happen entirely through a stock swap with no cash changing hands.

The tie-up, which the companies called "a merger of equals", was unanimously approved by their respective boards, but still needs the green light from shareholders and regulators.

"This is a transformational merger that creates benefits and growth opportunities that neither company could achieve alone," Agrium CEO Chuck Magro said in the statement.

Saskatoon-based Potash Corporation is the world's top producer of a potassium compound used in agriculture as a fertilizer.

The Calgary, Alberta-based Agrium, also produces potash in addition to having an extensive distribution network of chemical fertilisers in the United States.

The merger comes as the global demand for fertilisers is down sharply in emerging countries like Brazil due to the economic downturn.

The new company will have close to 20,000 employees, and operations and investments in 18 countries.

PotashCorp President and CEO Jochen Tilk said that the new company intends "to carry forward best practices from both companies in corporate social responsibility, including commitments to employees, operating communities and the environment."

Kharif sowing up 4.2%

Better monsoon rains lift acreage of rice, pulses, cereals and oilseeds

New Delhi, September 9:

At 1,054.49 lakh hectares (lh), the acreage of the six kharif crops in the ongoing sowing season, till date, is about 4.2 per cent more than in the same period last year due to better monsoon rains.

The total acreage till September 9, as per figures released by the Agriculture Ministry on Friday, is just a little short of the five-year average of total kharif acreage of 1,062.50 lh annually. The acreage under rice, pulses, coarse cereals and oilseeds continues to be higher than the sowing in the same period last year.

Sowing of rice at 380.28 lh is higher than the 370.04 lh sown in the comparable period last year. Acreage in all major rice growing States such as Odisha, Chattishgarh, Punjab, Bihar Uttar Pradesh and West Bengal posted a rise.

The acreage under pulses stood at 143.95 lh ((111.48 lh), which is more than the last five years' average normal area of 108.69 lh.

Sowing of coarse cereals, at 187.86 lh in the ongoing kharif season, is higher than last year's 177.05 lh. Oilseeds acreage is at 186.95 lh (181.70 lh).

With farmers switching to other crops following crop destruction last year by whiteflies in Punjab and Haryana, sowing of cotton declined to 102.13 lh (114.75 lh). Sugarcane sowing declined slightly to 45.77 lh (49.60 lh).

Kisan at the blackboard



In Bundelkhand, a school run by a farmer helps his peers reap success and joy from their work on the land

For over a decade, Prem Singh was more scientist than farmer. It wasn't easy battling nature in what is one of India's most challenging regions for farming. But he persisted, and is today one of the more successful farmers in Bundelkhand. Now he has set up the Kisan Vidyapeeth, or farmers' school, so that others too can reap success and joy from their work on the land and more youngsters are drawn to farming.

Barely a few months old, the school is located at Singh's farmhouse in Badokhar Khurd, about six km from Banda town in Uttar Pradesh. A philosophy graduate, Singh joined his family's farming profession in 1987 only to realise that the output fell way short of the input in that region.

"I dabbled in different things and suffered losses for three years. My grandfather thought I was going to ruin the family tradition," he says with a smile, as he settles down comfortably on a *charpoy* (string cot), with a cup of *chai* in hand. "I realised that natural resources were running dry due to bad farming practices. Around 40 years ago, we used to have three crops a year in the Bundelkhand region, while today we just about manage

one. We were giving up our traditional practices, and the water problem we face today is a direct consequence of that," he says.

The past decade has seen Bundelkhand grapple with droughts in the summer, delayed monsoons followed by inadequate rainfall and, to make things worse, unseasonal rain and hailstorm in the winter, which affected the rabi crop.

Singh advocates theaavartansheel kheti, or periodic proportionate farming, based on the principles of the periodic ratio-based economics conceptualised by the late A Nagraj, a resident of Amarkantak in Madhya Pradesh. It essentially involves using a cyclic agricultural process, one that maintains nature's equilibrium.

The main features of this method are: Allocating one-third of the landholding for a forest or a garden, which will not only provide produce at a fraction of cost and labour, but will also generate dry wood for fuel and act as a catalyst for rainfall; cow breeding — the dung and urine will supplant artificial fertilisers in the farm; a part of the land must be set aside as grazing ground for the cows; over the years, the land used to grow crops must be rotated with that used for grazing, to help maintain soil fertility; and, lastly, the use of local seeds must be encouraged. The idea is to customise farm practices to suit local conditions.

"Machinery and artificial fertilisers and seeds eat up almost 60 per cent of the profits. Additionally, they harm the soil. We must stick to the basics. The cow, which was once integral to farming, has lost its importance due to a scarcity of grazing grounds. A lot of people are quitting farming for these reasons," Singh says. He hopes to use his school to share whatever he's learnt over the years and enthuse other people to return to farming.

So far, around 300 people have visited the Humane Agrarian Centre — a classroom-cumfarmers' museum at the school, which explains the philosophy and practical aspects of farming. Singh insists that the focus is on learning, rather than teaching.

Most of the school's visitors are farmers from the surrounding regions, but there is also a large number of youngsters — either students of agriculture or those hoping to take up farming in the future. Finding the classroom teaching outdated elsewhere, they head to Singh's farm to gain practical insights about various techniques.

"We want to see if natural farming can be viable in the long run, especially if we blend traditional techniques with modern tools. Visiting the school helps us understand some of the things we read in books," says Vivek Singh, a student of the Banda Agriculture University. The two-year course at Kisan Vidyapeeth will include theoretical and practical sessions. For a whole year, students will practise their classroom learning on a farm under the guidance of a farmer.

During the second year, they will work on individual projects in addition to taking part in a group project to analyse the costs involved in setting up a virtual farm using avartansheel kheti. The next step for Singh is an online curriculum to make the course freely available to farmers anywhere in the world. Meanwhile, the first batch at his school started classes in the first week of May.

Singh and Johan D'Hulster, a Belgian farmer from Schriek and the founder-director of the biodynamic farm Akelei, will be available to chat online at designated times to take questions from students.

Singh is aware that apart from lessons, what farmers need during the crucial fledgling years is a financial support system.

"We need to start off with making farming sustainable, instead of chasing big profits and competition... we need a shift in thinking. I hope this school can make a difference in the future," he says.

shail desaiis a Mumbai-based writer

Mixed trend in soyabean, oil

Indore, September 12:

Amid subdued demand and buying soya refined traded marginally lower with soya refined was atRs. 645-48, while soya solvent ruled at Rs. 615-20 per 10 kg.

Soyabean ruled stable at Rs. 3,400 a quintal . Plant deliveries were quoted lower at Rs. 3,425-50 a quintal.

Soyameal ruled stable at Rs. 32,000-32,500 a quintal.

With expected rise in arrival of new crop in the coming days, future appears bearish.

Cotton trades flat on limited buying

Rajkot, September 12:

Cotton prices remained unchanged as demand was limited.

Traders said that buyers are waiting for some more downfall in the price. Moreover, new cotton crop will come in the market which restricted demand from mills.

Gujarat Sankar-6 cotton traded at Rs. 42,000-43,000 per candy of 356 kg.

About 900 bales of 170 kg each cotton arrived in India and 200 bales arrived in Gujarat.

According to traders, new crop will arrive by end of this month.

Though much fall in price is not expected as supply is tight due to short crop.

Kapas or raw cotton traded flat at Rs. 1,050-1,150 per 20 kg and cottonseed stood at Rs. 550-595 per 20 kg.

Cardamom prices in see-saw mode

Kochi, September 12:

Small cardamom markets were seen fluctuating last week with prices slipping mid-week only to move up later on bullish sentiments at auctions held in Kerala and Tamil Nadu.

The individual auction average, which had slipped to below Rs. 900 a kg on Tuesday and Wednesday moved up above Rs. 945 from Thursday.

Arrivals at the auctions last week declined to around 500 tonnes from 526 tonnes the previous week.

About 75 per cent of the arrivals were from the new crop, PC Punnoose, General Manager, CPMC, told *BusinessLine*. He said the trend clearly indicates a poor crop this season.

Availability of exportable grade 7-8mm capsules prompted exporters to buy last week. They bought an estimated 20 tonnes at prices ranging between Rs. 1,000 and Rs. 1,050 a kg, trade sources in Bodinayakannur said.

The individual auction average was dwindling between Rs. 860 and Rs. 950 a kg last week, they said.

Total arrivals during the season were at around 2,610 tonnes and sales were at 2,385 tonnes. The individual auction average for the season, as on September 10, stood at around Rs. 917/kg.

Prices in Rs. /kg: 8mm bold good colour: 1,300-50; 7-8 mm: 1,100-1,050; 6-7 mm: 800-900; and below 6 mm: 780-800.

Bharti Foundation teams up with Cambridge University for crop research

New Delhi, September 12:

The University of Cambridge and Bharti Foundation — the philanthropic arm of Bharti Enterprises — on Monday signed an MoU to conduct research to improve the yield of corn in India. The research will aim to develop a production system that is more resilient and helps reduce production costs and improve farmer incomes.

The Rs. 5-crore grant by Bharti Foundation will support a three-year research programme carried out between Cambridge's Department of Plant Sciences and the Cambridge Centre for Crop Science (3CS), Punjab Agricultural University (PAU) and FieldFresh Foods (the joint venture between Bharti Enterprises and Del Monte Pacific Ltd).

"The grant will be in two phases. The funding to Cambridge will be sent directly by Bharti Foundation in a phased manner in the next three years and for the Indian side, the cost will be met here," Rakesh Bharti Mittal, Vice-Chairman, Bharti Enterprises and Co-Founder, Bharti Foundation, told *Business Line*.

Field trials

The field trials will be conducted at FieldFresh's Agri Centre of Excellence in Ladhowal in Ludhiana (Punjab), where the company is currently running various crop management trials and partners with farmers to improve overall crop economics.

The research outcomes will be shared with the State Agriculture Department, agricultural universities and other statutory/ non-statutory bodies. The Bharti Foundation, in partnership with IFFCO Kisan Sanchar Ltd (a subsidiary of Indian Farmers Fertiliser Cooperative Ltd), will disseminate the findings through digital tools to farmers across India.

Commenting on the initiative, Howard Griffiths, Director of Studies in Plant Sciences, Professor of Plant Ecology, University of Cambridge, said: "The goal of this programme is to generate simple means by which we can communicate with farmers ... how best to improve their agri practices, the timing of when they add their fertiliser, the spacing needed to put between crops to maximise productivity. We hope to develop the models that will allow local climatic conditions to be taken into account."

Researchers from PAU will also be closely working on this project. "For this programme, they've identified two post doctoral research associates who will work with the team of FieldFresh and the team from Cambridge," Mittal added.

Boon for farmers as crop insurance to go hitech with drones, apps

Hyderabad, September 12:

Farmers may soon expect some help from the skies for speedy settlement of claims in crop insurance, thanks to drones.

Insurers are working on deployment of drones besides a real time mobile application to address issues in claim settlement.

As part of the Pradhan Mantri Fasal Bima Yojana (PMFBY), deployment of drones has been permitted to estimate crop losses in localised calamities and also map productivity.

Talks with tech providers

"We are in talks with technology providers and other stakeholders for using drones to estimate seasonal impact on crops and localised calamities which is vital for claim settlement," Ashish Agarwal, Head-Agricultural Business, Bajaj Allianz General Insurance, told *BusinessLine*.

Bajaj Allianz is implementing new crop insurance scheme in four states of Bihar, Haryana, Telangana and Andhra Pradesh.

According to sources, other major general insurers are also conducting research on use of drones though some are yet to spell out progress officially.

Data synchronisation

"We are working on using drones in yield assessment and to exactly find out crop signatures by synchronising data collected by drones with satellite images", said a top executive of a private general insurance company which is a major player in implementation of PMFBY.

According to industry estimates, the prices of a drone with a high end camera range from approximately Rs. 7,000 to Rs. 25,000. However, its depends on the nature of use, area to be covered and accompanying technology solutions required.

Insurers generally lease drones to survey a cluster and it may cost around Rs. 1 lakh for a cluster of areas/district.

According to a senior govt official, a real time mobile application has also been readied to be piloted by state government officials and insurers.

"One of the challenges in agri insurance is the time taken to settle claims as the traditional crop cutting experiment is a long process," Agarwal said.

To assess productivity

This experiment is done in select areas by the department of agriculture and insurance company officials to arrive at crop productivity. This would be used as a benchmark to arrive at any decision on crop failure to enable payment claims.

The new app will allow the officials to upload data directly to a central server which makes the process speedier, he added.

Training sessions

The government has made it mandatory for all state government officials to use the app and is currently conducting training sessions for officials of different states.

Launched in Jan 2016, PMFBY is now on in all states except in Punjab and four north-eastern states for Kharif and Rabi seasons. At present, it is being executed by 11 public and private sector insurers.

The total premium to be generated is estimated at Rs. 18,000 crore for the year.

Edible oils slip on weak cues



MUMBAI, SEPTEMBER 12:

Edible oils ruled weak on back of bearish futures amid slack physical demand. Possibilities of reduction in import duty also weighed. Arrivals of new crop in producing centres kept the indigenous oils under pressure. Stockists stayed away from fresh bulk bets. Liberty reduced its rates for palmolein to $\Box 633$, super palmolein $\Box 645$, soyabean refined oil $\Box 660$. Ruchi's rates:palmolein $\Box 640$, soyabean refined oil $\Box 650$. Allana

traded palmolein for $\square 635$, soya refined oil $\square 658$ and sunflower refined oil $\square 730$. At
Rajkot, groundnut oil telia tin was flat at $\Box 1,860$ and loose (10 kg) at $\Box 1,200$. BCE spot
rates ($\Box/10 \text{ kg}$): groundnut oil 1,240 (1,250), soya ref. 650 (653), sunflower exp. ref. 660
(660), sunflower ref. 725 (725), rapeseed ref. 890 (890), rapeseed exp. ref. 860 (860),
cottonseed ref. 705 (710) and palmolein 625 (626).

HDFC ERGO expects rich harvest from PM's crop insurance scheme

New Delhi, September 11:

HDFC ERGO General Insurance (HDFC ERGO) is hopeful of outpacing industry in revenue growth terms this fiscal too, a top company official said.

The private general insurer, which has recorded 22 per cent growth in revenues till August this fiscal, sees crop insurance as significant growth driver this year.

"This year our significant growth driver will be crop insurance given that the new scheme is in place. We have been a meaningful player (in crop insurance) already in last four years and operating in eight States," Ritesh Kumar, Managing Director & CEO, HDFC ERGO, told *Business Line* here.

HDFC ERGO plans to scale up its operations on the crop insurance front.

It is widely expected that crop insurance portfolio of general insurers will record a three-fold increase this fiscal and HDFC ERGO is looking to ride on this opportunity thrown up by Pradhan Mantri Fasal Bima Yojana.

Kumar expects the general insurance industry to grow at least 25 per cent this fiscal, noting that industry will this year see its highest growth rate ever.

"This year too, we will grow faster than industry", he said.

Listing plans

Kumar also said that HDFC ERGO was not immediately looking at any listing, even while noting that it was a shareholders' call.

On capital raising for business growth, Kumar said the company may have to look at it this fiscal.

Already, HDFC ERGO was raising capital to fund the Rs. 551 crore acquisition of L&T General Insurance, which has just been completed.

"We are raising capital for the recent acquisition. There could potentially be need for more. We will decide on an optimal route", he said.

More acquisitions

Kumar said HDFC ERGO may also examine the subordinate bonds route now that the insurance regulator has permitted it.

Asked if HDFC ERGO plans to go in for more acquisitions, Kumar pointed out that the company had only recently closed its Rs. 551 crore deal to acquire L&T General Insurance.

"First we need to integrate this entity (L&T Insurance). If good opportunities presents itself before us, we will certainly look at more. Never say never. As such, there is no reason to close the door (for inorganic growth)," he said.

Balanced growth

While HDFC ERGO expects crop insurance to be a significant growth driver, the company sees continued growth in other segments, such as motor and health insurance.

"If you look at our past, we had grown across all segments. So we see a balanced growth this year, too", Kumar said.